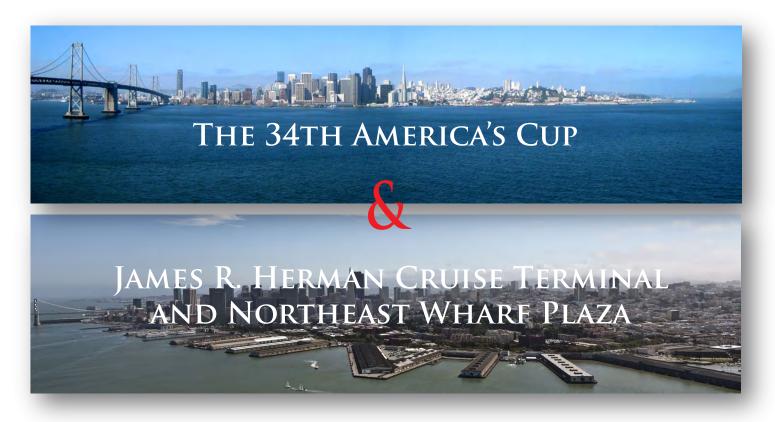
VOLUME 4 DRAFT ENVIRONMENTAL IMPACT REPORT



SAN FRANCISCO PLANNING DEPARTMENT CASE NO. 2010.0493E STATE CLEARINGHOUSE NO. 2011022040

DRAFT EIR PUBLICATION DATE: JULY 11, 2011

DRAFT EIR PUBLIC HEARING DATE: AUGUST 11, 2011

DRAFT EIR PUBLIC COMMENT PERIOD: JULY 11, 2011 – AUGUST 25, 2011

WRITTEN COMMENTS SHOULD BE SENT TO THE ENVIRONMENTAL REVIEW OFFICER
1650 MISSION STREET, SUITE 400
SAN FRANCISCO, CA 94103



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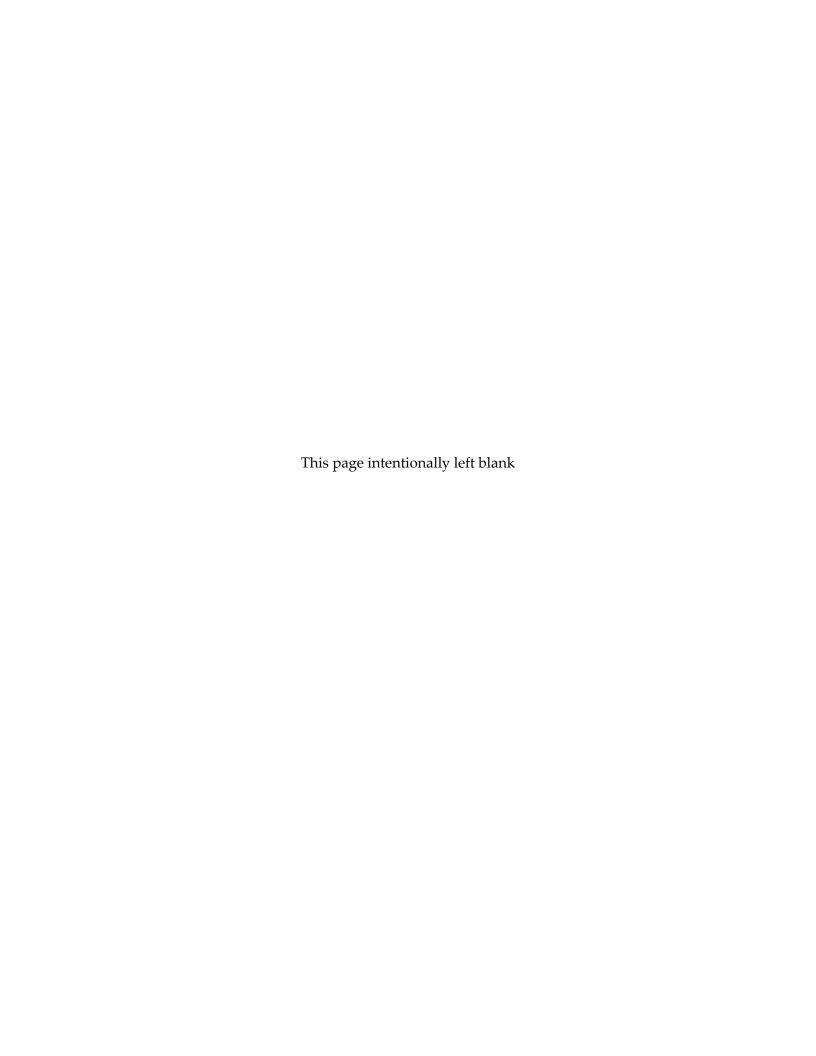
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SECTION 1Scope of Work

SCOPE OF WORK

34th America's Cup Races and James R. Herman Cruise Terminal and Northeast Wharf Plaza TRANSPORTATION ANALYSIS

Adavant Consulting and LCW Consulting (referred to in the scope of work as "the transportation consultants") are pleased to submit this scope of work for the transportation impact analysis for the 34th America's Cup Races ("AC34") and James R. Herman Cruise Terminal and Northeast Wharf Plaza ("Cruise Terminal") projects. This scope was based on The Planning Department's Transportation Impact Analysis Guidelines for Environmental Review ("SF Guidelines") and scoping discussions with the Planning Department.

Task 1: Prepare Transportation Scope of Work

The transportation consultants will meet with Planning Department, SFMTA, and Port of San Francisco, and other city agencies, as determined by the Planning Department, to discuss and agree upon the required level of detail for the transportation analysis, and will develop a detailed scope of work that will be submitted to the Planning Department for review and approval.

The transportation analysis will include the following impact analysis scenarios:

- 1. Existing:
- 2. Existing plus Cruise Terminal project;
- 3. Existing plus AC34 in 2012 (in the vicinity of Pier 80 and the Marina);
- 4. Existing plus AC34 in 2013; and
- 5. 2035 Cumulative.

Task 2: Existing Data Collection Effort

The transportation consultants will gather previously-collected transportation data and conduct new data collection in order to describe the existing transportation conditions in the areas affected by the two project components. The existing conditions will be analyzed consistent with the methodologies and approaches identified in the *SF Guidelines*. The study areas for the Cruise Terminal and AC34 projects are as follows:

Cruise Terminal Study Area - The transportation study area for the Cruise Terminal will be generally bounded by Bay Street, Kearny Street, Montgomery Street, Lombard Street, Sansome Street, Green Street and the San Francisco Bay.

AC34 Study Area – Since the AC34 events would involve spectators gathering at numerous locations along the waterfront, the transportation study area will extend a couple of blocks inland from the waterfront to incorporate the effects of transportation management plan for the events (i.e., the People's Plan that will be developed by the project sponsor). In general, the study area's inland boundaries will be at Lincoln Boulevard in the Presidio, Lombard Street, Sansome Street, First Street, Harrison Street, Second Street, Fifth Street, Townsend Street and Channel Street. In the vicinity of Pier 80, the study area will be limited to the intersections in the immediate vicinity of the pier. In the vicinity of the Presidio, the study area will be limited to the

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intersections immediately adjacent to access points into the Presidio. Within Marin, the study area will include the transportation network in the immediate vicinity of proposed improvements related to race events at Cavallo Point.

Task 2.1 – Traffic: The transportation consultants will obtain weekday p.m. (4 to 6 p.m.) and Saturday midday (11 a.m. to 1 p.m.) peak period intersection turning movement counts at the 39 study intersections identified in Table 1. Weekday a.m. (7 to 9 a.m.) peak period intersection turning movement volumes will be collected at 18 intersections – intersections 1 through 18 in Table 1. The traffic volume counts along the waterfront will be compared to previously collected traffic data to determine if any adjustments for seasonal variability will be required.

Table 1 – Study Intersections								
1. Beach Street/Columbus Avenue	21. Fremont Street/Folsom Street							
2. North Point Street/Columbus Ave	22. King Street/Third Street							
3. North Point Street/Stockton Street	23. King Street/Fourth Street							
4. Bay Street/Columbus Avenue	24. 16th Street/Third Street							
5. Bay Street/Stockton Street	25. Cesar Chavez Street/Third Street							
6. Bay Street/Kearny Street	26. Cesar Chavez Street/Illinois Street							
7. Broadway/Sansome Street	27. Lincoln Avenue/25th Avenue							
8. Broadway/Battery Street	28. Lake Street/14th Avenue							
9. The Embarcadero/Beach Street	29. Lake Street/15th Avenue							
10. The Embarcadero/North Point Street	30. Jackson Street/Arguello Blvd							
11. The Embarcadero/Bay Street	31. Pacific Avenue/Presidio Blvd							
12. The Embarcadero/Chestnut Street	32. Lombard Street/Lyon Street							
13. The Embarcadero/Lombard Street	33. Lombard Street/Divisadero Street							
14. The Embarcadero/Green Street	34. Lombard Street/Fillmore Street							
15. The Embarcadero/Broadway	35. Bay Street/Laguna Street							
16. The Embarcadero/Washington Street	36. Bay Street/Van Ness Avenue							
17. The Embarcadero/Mission Street	37. Bay Street/Hyde Street							
18. The Embarcadero/Harrison Street	38. Alexander Ave/Bunker Road							
19. The Embarcadero/Bryant Street	39. Alexander Ave/Ft. Baker (East) Rd							
20. The Embarcadero/Brannan Street								

Existing and future intersection lane geometries and signal timing information for the study intersections will be obtained from SFMTA, and lane geometries will be confirmed in the field.

Cruise Terminal – For the Cruise Terminal Analysis, intersections 1 through 18 will be analyzed for weekday a.m., weekday p.m. and Saturday midday conditions.

Traffic information on conditions in the vicinity of Pier 35 when a cruise ship is in port (data collection conducted in May and June 2010) will be obtained from CHS Consulting. Additional field observations of passenger loading/unloading conditions and vehicular access to and from the pier when a cruise ship is in port will be conducted in February and March 2011. The Port of SF will also be contacted to provide relevant information about current traffic management operations at Pier 35.

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AC34 – For the AC34 analysis, all 39 study intersections identified in Table 1 will be analyzed for weekday p.m. and Saturday Midday conditions.

Task 2.2 – Transit: The transportation consultants will compile transit data, including bus, rail and ferry lines, weekday and weekend frequencies, ridership and capacity on all local and regional transit routes in the vicinity of the proposed project sites.

Cruise Terminal - The transportation consultants will obtain the updated Muni and regional screenline analyses for existing weekday p.m. peak conditions (2010) and the year 2030 from the effort being conducted for the Transit Center District Plan EIR.

The transportation consultants will obtain information on existing F-Market historic streetcar operations, including capacity and utilization, for weekday a.m., weekday p.m., and Saturday midday conditions.

AC34 - For the Muni lines servicing the study area, the transportation consultants will obtain weekday p.m. and Saturday midday peak hour ridership and capacity data from SFMTA's ongoing Transit Effectiveness Project ("TEP").

For the AC34 transit analysis, the individual Muni transit line data will be combined into cordons representing five general areas along the waterfront: Presidio/Crissy Field, Marina Green/Fort Mason, Fisherman's Wharf/Aquatic Park (to Bay Street), Embarcadero North (between Bay Street and Folsom Street), and Embarcadero South (between Folsom Street and King Street/Fifth Street). The lines to be included at each cordon will be presented to SFMTA and Planning Department for review and approval. Muni 76-Marin Headlands line serving the Cavallo Point/Fort Baker area on Sundays will be described.

Transit routes, as well as weekday ridership and capacity data will also be provided for Caltrain, Golden Gate Transit, SamTrans, AC Transit, and BART. To the extent available, Saturday ridership and capacity will also be provided. Golden Gate Transit bus lines serving the Fort Baker area on weekdays and weekends will be described.

Task 2.3 – Bicycles: The transportation consultants will describe existing and proposed bicycle routes in the vicinity of the project sites. Bicycle conditions, as they relate to the project sites, will be described qualitatively.

Cruise Terminal – The transportation consultants will conduct bicycle counts on The Embarcadero between Battery and Sansome Streets (in front of the proposed terminal site) during the weekday a.m. (7 to 9 a.m.) weekday p.m. (4 to 6 p.m.) and Saturday midday (11 a.m. to 1 p.m.) peak periods. Counts will be segregated by direction and location: bicyclists traveling northbound within the bicycle lane, and those riding northbound or southbound on The Embarcadero promenade.

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AC34 – No additional bicycle data collection, other than identified above for the Cruise Terminal analysis will be conducted.

Task 2.4 - Pedestrians:

Cruise Terminal – The transportation consultants will conduct weekday a.m. (7 to 9 a.m.), weekday p.m. (4 to 6 p.m.) and Saturday midday (11 a.m. to 1 p.m.) peak period pedestrian counts at the following locations:

- Crosswalks at the intersection of The Embarcadero/Bay;
- Crosswalks at the intersection of The Embarcadero/Lombard/Battery;
- Crosswalks at the intersection of The Embarcadero/Chestnut/Sansome;
- The east side of The Embarcadero south of Pier 27;
- The east side of The Embarcadero north of Pier 31; and
- The east side of The Embarcadero at the location of the proposed cruise terminal driveway

The transportation consultants will confirm sidewalk and crosswalk dimensions, and note any obstructions that reduce effective sidewalk width.

AC34 – No additional pedestrian data collection, other than identified above for the Cruise Terminal analysis will be conducted. The transportation consultants will conduct a qualitative assessment of the pedestrian conditions in the vicinity of the project sites.

Task 2.5 – Parking: The transportation consultants will summarize parking supply and occupancy for the weekday and Saturday midday (11 a.m. to 1 p.m.) periods. The parking supply and occupancy will be based on previously-collected information, new data collection, and data on city-owned parking facilities as provided by the Parking Authority.

Cruise Terminal – The transportation consultants will conduct surveys of existing off-street parking supply and occupancy for weekday and Saturday midday (11 a.m. to 1 p.m.) period. The Cruise Terminal parking study area will be bounded by Bay Street, Kearny Street, Montgomery Street, Lombard Street, Sansome Street, Green Street and the San Francisco Bay. On-street parking regulations on the project adjacent to Pier 27 will be noted. The Port of San Francisco will be contacted to provide available on-street parking data from their on-going parking management plan.

AC34 – Off-street parking supply and utilization will be developed for weekday and Saturday midday period for the five general areas along the waterfront that would be affected by AC34 events: Presidio/Crissy Field, Marina Green/Fort Mason, Fisherman's Wharf/Aquatic Park (to Bay Street), Embarcadero North (between Bay Street and Folsom Street), and Embarcadero South (between Folsom Street and King Street/Fifth Street). As noted above, the study area's inland boundaries for the AC 34 analysis will be at Lincoln Boulevard in the Presidio, Lombard

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¹ Weekday evening parking occupancy for the study areas not conducted because Cruise Terminal arrival/departure activities completed by 3 p.m., and AC34 race events proposed to occur between 1 and 5 p.m.

Street, Sansome Street, First Street, Second Street, and Townsend Street. The off-street facilities will include the facilities identified above for the Cruise Terminal study area, as well as other facilities that are anticipated to be used for AC34 events. The off-street parking facilities to be included will be determined based on discussions with the Planning Department and SFMTA.

Task 3: Develop Project Travel Demand

The transportation consultants will prepare travel demand estimates for Cruise Terminal operations, and for the America's Cup events in 2012 and 2013. The travel demand methodology and estimates will be documented in a technical memorandum, which will be submitted for review prior to use in the impact analysis. The travel demand estimates will be based on existing available information on Pier 35 Cruise terminal operations, field observations conducted in May/June 2010 and March 2011, information from the project sponsors, information from the SFMTA on travel characteristics for larger San Francisco events, and the SF Guidelines.

Cruise Terminal - The transportation consultants will develop daily, as well as a.m., midday and p.m. peak hour, travel demand estimates for cruise terminal operations based on information obtained on existing terminal operations, information regarding the proposed cruise terminal operations, and information contained within the *SF Guidelines*. Information related to existing cruise terminal travel characteristics in New York City and Seattle, and the travel demand analysis conducted for the previously approved cruise terminal at Piers 30/32 will be used for comparison, and as input into the travel demand calculations, as appropriate. Based on the travel demand calculations, short-term and long-term parking demand estimates will be calculated.

Based on information on existing and proposed cruise terminal operations the truck delivery and service vehicle daily and peak demand will also be estimated.

Travel demand associated with the commercial (restaurant and retail) uses of the cruise terminal will be estimated in accordance with the *SF Guidelines*. It is assumed that these uses will be accessible to the general public during both cruise and non-cruise days. A linked trip reduction factor of 90 percent (similar to other retail studies conducted along The Embarcadero) will be applied to the trip generation rates presented in the *SF Guidelines* to account for linked trips along the waterfront (i.e., at least half of the trips are already in the area, independently of these uses). Travel demand associated with the open space will be considered part of background travel along The Embarcadero, and not as a new trip generator.

America's Cup – The transportation consultants will develop weekday and Saturday daily, and weekday p.m. and Saturday midday peak hour, travel demand estimates for representative race events in both 2012 and 2013. The travel demand estimates will be prepared based on information on spectator viewing areas and race operations for both 2012 (in the Marina and near Pier 80 only) and 2013 events provided by the AC34 sponsors, the projected number of spectators, and anticipated travel characteristics of the spectators.

The methodology used to estimate daily and peak hour travel demand will be developed in consultation with the Planning Department. The travel demand estimates will be based on the *SF Guidelines*, information contained within the draft People Plan (to be prepared by the project

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sponsor) regarding plans for traffic, transit and pedestrian management, transit service, and bicycle facilities, and other information that might be available from previous AC events in Spain and New Zealand, to be gathered by the transportation consultant. The transportation consultants will work with Planning Department and SFMTA to develop the People Plan. The People Plan will be produced by the project sponsor.

Task 4: Develop Future 2035 Cumulative Conditions

The transportation consultants will prepare future year 2035 Cumulative traffic volumes and transit ridership projections for the traffic and transit analyses.

Traffic – 2035 Cumulative conditions will be developed for intersections 1 through 18 in Table 1 above for weekday a.m., weekday p.m., and Saturday midday peak hours. 2035 Cumulative conditions for intersections 19 through 39 will not be analyzed, as these intersections are included in the analysis only for the short-term conditions associated with the America's Cup events.

Future year 2035 Cumulative traffic volumes will be based on traffic growth rates between 2010 and 2035, as obtained from the San Francisco County Transportation Authority travel demand model ("SF-CHAMP"), modified, as appropriate, to reflect expected future projects generally along the northeast waterfront. The manual adjustments will be made to incorporate developments that may not be completely accounted for in the SF-CHAMP model, and to reflect localized turning movements related to access points to proposed developments. The transportation consultants will meet with the Planning Department and the Port of San Francisco to review and agree on the future levels of development along the waterfront.

Transit – Future year 2035 Cumulative conditions will be developed for the weekday p.m. peak hour Muni downtown screenlines and regional screenlines based on the 2030 Cumulative transit screenlines developed for the Transit Center District Plan EIR effort (assumed to be available for use by March 1, 2011). The 2030 transit ridership will be adjusted to 2035 Cumulative conditions based on growth rates developed from the SF-CHAMP model for the Muni screenlines, and extrapolated from regional transit ridership growth identified between 2010 and 2030 for the regional screenlines.

Task 5: Conduct Project Impact Assessment

The transportation consultants will identify impacts associated with the Cruise Terminal and AC34 projects. This will include impacts on the study intersections, transit, pedestrian and bicycle circulation, freight loading supply and demand conditions, emergency access, and construction-related activities. In addition, information on parking conditions will also be provided.

Task 5.1 - Cruise Terminal

Traffic. The transportation consultants will determine the weekday a.m., weekday p.m., and Saturday midday peak hour intersection LOS conditions for Existing plus Project and future

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2035 Cumulative conditions at the 18 study intersections identified for the Cruise Terminal project.

The discussion of the future conditions will include the proposed project's percent contribution to the 2035 Cumulative volumes. The transportation consultants, in consultation with the Planning Department, will determine if the proposed project's contribution at study intersections currently operating (or projected to operate) at LOS E or LOS F is considered considerable.

On-site Operations and Access. The transportation consultants will review the *Pier 27 Traffic Simulation Study* prepared by CHS Consultants, and, based on the revised travel demand estimates and the most current scheme for Pier 27, will work with CHS Consulting Group to update the VISSIM micro-simulation analysis for the EIR scenarios. The results of the analysis will be used to document operations and adequacy of on-site taxi and passenger vehicle loading/unloading operations, bus circulation, on-site parking, and queuing at the entrance to Pier 27 on The Embarcadero.

Transit. The transportation consultants will estimate the increase in weekday p.m. peak hour transit ridership for local and regional transit providers associated with the Cruise Terminal operations. For both Muni routes and regional transit providers, a screenline analysis will be conducted for Existing plus Project and 2035 Cumulative conditions.

In addition, the transportation consultants will estimate the increase in weekday a.m., weekday p.m., and Saturday midday peak hour ridership on the F-Market historic streetcar line for Existing plus Project conditions.

Bicycles. The transportation consultants will qualitatively assess bicycle conditions in the vicinity of Pier 27, and potential impacts to bicycle circulation or parking resulting from the project. Potential bicycle safety issues will be identified, including potential conflicts between project-generated vehicular traffic and bicycle circulation, including the effect on nearby citwwide bicycle routes.

The Cruise Terminal, including the associated commercial uses, and Northeast Wharf Plaza's bicycle parking and bicycle-related facilities (e.g., showers and lockers) will be described, and assessed in relation to the *Planning Code* requirements.

Pedestrians. The transportation consultants will assess pedestrian conditions in the vicinity of the project site, including the number of new pedestrian trips that would be added to the network. Project-generated pedestrian trips will be analyzed for Existing plus Project conditions at the crosswalk locations, and at one location on The Embarcadero promenade adjacent to Pier 27. The traffic management plan proposed to be implemented by the cruise terminal operators when a cruise ship is at the terminal will be reviewed, and discussion of pedestrian operations at the entrance to Pier 27 will be provided.

Loading. The transportation consultants will prepare a loading supply/code/demand analysis. The proposed loading supply will be compared to the *Planning Code* requirements prepared by the Cruise Terminal design team and to the estimated demand generated by the Cruise Terminal.

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Emergency Access. The transportation consultants will describe existing emergency vehicle access to Pier 27, and will indicate whether emergency access would be affected by the proposed project.

Construction. The transportation consultants will evaluate potential short-term construction impacts that would be generated by the proposed project based on construction schedule and traffic data provided by the Cruise Terminal design team. Construction impact evaluation will address the staging and duration of construction activity, construction truck routing, estimated daily truck volumes, street and/or sidewalk closures, impacts on Muni operations, and construction worker parking.

Parking. The transportation consultants will prepare a parking supply/code/demand discussion for the proposed project. The *Planning Code* requirements prepared by the Cruise Terminal design team will be reviewed and any exceptions to the *Planning Code* requirements will be noted, as appropriate.

Mitigation/Improvement Measures. The transportation consultants will identify project-generated impacts to the transportation network. New mitigation measures will be proposed to improve operations where significant project-related impacts have been identified, and improvement measures will be proposed where non-significant impacts have been identified. If there are no impacts associated with the proposed project, this will be noted in the transportation report.

Task 5.2 - AC34

The transportation analysis will be prepared for representative race events for both 2012 and 2013 conditions.

Traffic. The transportation consultants will determine the weekday p.m. and Saturday midday peak hour intersection LOS conditions for Existing plus Project conditions at the 39 study intersections identified in Table 1. At locations where street closures would affect intersection operations, a qualitative discussion of operations will be provided. A qualitative discussion of weekday midday peak hour travel demand relative to intersection operations during the midday peak period will be provided.

Transit. The transportation consultants will estimate the increase in weekday p.m. and Saturday midday peak hour transit ridership for local and regional transit providers associated with race events. The transit analysis will be conducted for the five cordons outlined in Task 2.2. Additional Muni and regional transit service proposed to be provided during the race events will be incorporated into the transit capacity utilization analysis.

The analysis will also qualitatively discuss the impacts of traffic on transit operations for those corridors that are likely to be most affected by the AC34 events.

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Water Transportation. The impact on established commuter and recreational ferry service, shipping channels, and planned water taxis during the race events will be identified, and provisions to address any service interruptions will be discussed.

Bicycles. The transportation consultants will qualitatively assess bicycle conditions in the vicinity of the event sites, and potential impacts to bicycle circulation resulting from temporary street closures. Potential bicycle safety issues will be identified, including potential conflicts between project-generated vehicular traffic and bicycle circulation, including the effect on nearby citywide bicycle routes.

Pedestrians. The transportation consultants will qualitatively assess pedestrian conditions in the vicinity of the project site, and will identify the number of new pedestrian trips that would be added to the network at the various spectator areas.

Loading. Based on information regarding deliveries by the event sponsors, the transportation consultants will provide a discussion of loading operations (e.g., locations, time, access) for the various event sites. Impacts of temporary street closure on deliveries and service vehicle access to residences and commercial establishments will be discussed qualitatively.

Emergency Access. The transportation consultants will describe plans developed for maintaining emergency access to the waterfront on race event days.

Secondary Viewing Areas. The existing transportation network will be qualitatively described for the secondary viewing areas, including access by automobile, transit, bicycle, and walking. Impacts on the secondary viewing areas will be analyzed qualitatively, by location, and will include a discussion of all modes.

Construction. The transportation consultants will evaluate potential short-term construction impacts that would be generated by the project based on information provide by the project sponsor. To the extent that sufficient information is available, construction impact evaluation will address the staging and duration of construction activity, construction truck routing, estimated daily truck volumes, street and/or sidewalk closures, impacts on Muni operations, and construction worker parking.

Parking. The transportation consultants will prepare a parking supply and demand discussion for the proposed project. The use of temporary satellite parking facilities proposed by the event sponsors will be included in the parking supply. Displacement of parking spaces resulting from the use of existing off-street parking facilities for event operations will be identified.

Mitigation/Improvement Measures. The transportation consultants will identify project-generated impacts to the transportation network. As appropriate, mitigation and improvement measures to improve operations on event days will be identified.

Task 6: Prepare Documentation

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Technical Memoranda – As part of Task 3 (Project Travel Demand) and Task 4 (Development of Future Year 2035 Cumulative Conditions) above, the transportation consultants will prepare technical memoranda summarizing the methodology and results of the project travel demand effort and the development of cumulative traffic and transit conditions. The memoranda will be submitted to the Planning Department for review and approval prior to use in the impact analysis.

EIR Section – The transportation consultants will prepare an EIR section documenting: 1) the existing conditions, 2) analysis methodology and assumptions, and 3) impact analysis results. Sections 1 and 2 will be submitted for review by the Planning Department prior to incorporation into the Preliminary Draft 1 EIR. The completed EIR section will be reviewed and revised consistent with the overall EIR schedule. Two reviews of the completed transportation section is assumed.

Transportation Appendix – A stand-alone technical appendix will be prepared that will include, but not be limited to, the following:

- 1. Proposed Cruise Terminal circulation plans;
- Traffic volume summaries including figures with turning movement volumes at the study intersections for Existing, Existing plus Project, and 2035 Cumulative conditions;
- 3. Intersection LOS Calculations and summary tables
- 4. Transit Screenlines Muni and Regional for Existing, Existing plus Cruise Terminal project, and 2035 Cumulative conditions (weekday p.m.);
- Transit Cordon calculations for Existing and Existing plus Project conditions for the AC34 conditions (weekday p.m. and Saturday midday);
- 6. Travel Demand Calculations for Cruise Terminal and AC34; and
- 7. Supporting Technical Memoranda.

Data collection information (e.g., traffic volume counts, pedestrian counts) will be submitted to the Planning Department under separate cover, and will not be included in the technical appendix.

Task 7: Attendance at Meetings

The transportation consultants will meet with the Planning Department, and other city agencies, as appropriate, to work out details related to transportation scope of work, impact assumptions (e.g., road closures, transit line reroutes), methodology, and development of improvement and/or mitigation measures.

Task 8: Prepare Data for Air Quality and Noise Analysis

The transportation consultants will summarize and package the Existing, Existing plus Project (Cruise Terminal and AC34), and 2035 Cumulative traffic volumes from the previous tasks for submittal to the noise and air quality analysts for their studies.

Task 9: Respond to Comments on Draft EIR

The transportation consultants will prepare responses to comments on the transportation section of the Draft EIR.

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SECTION 2

Travel Demand Calculations

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34th America's Cup Visitation Estimates - 2012

AVERAGE PEAK WEEKEND RACE DAY SPECTATOR							AVERAGE PEAK WEEKEDAY RACE DAY SPECTATORS					
LOCATION	# of Visitors	% of Tota	I # of Visitors	% of Total	# of Visitors	% of Total	# of Visitors	% of Total	# of Visitors	% of Total	# of Visitors	% of Total
SPECTATORS ON BOATS												
Recreational			11,000 [a						3,800	83%		
Commercial Charter			2,000 [a] 15%					800	17%		
Super Yachts			0 [a] 0%					0	0%		
Subtotal			13,000 [á] 100%	13,000 [a]	7%			4,600	100%	4,600	10%
LANDSIDE SPECTATORS												
Outside San Francisco												
Treasure Island			5,500 [a] 38%					1,300	67%		
Alcatraz Island (private)			500 [a] 3%					0	0%		
Angel Island			1,000 [a] 7%					50	3%		
Fort Baker/Marin Headlands/N	North side of GGB		2,000 [a] 14%					250	13%		
Cavallo Point (private)			800 [a] 6%					100	5%		
Sausalito			3,500 [a	24%					200	10%		
Tiburon/Belvedere			1,000 [a] 7%					50	3%		
Subtotal Outside San Francisco	СО		14,300 [a] 100%	14,300 [a]	7%			1,950	100%	1,950	4%
Programmed Areas in San Fran	ncisco											
Live Sites												
Justin Herman Plaza	5,000 [b]	100%					0	0%				
Union Square	0 [b]	0%					0	0%				
Civic Center	0 [b]	0%	_				0	0%				
Subtotal Live Sites	5,000 [a]	100%	5,000 [a				0	0%	0	0%		
Marina Green			57,000 [a] 42%					18,000	62%		
Piers 27 & 29 (Village)			0 [a] 0%					0	0%		
Crissy Field (Fort Point to Lyo			75,000 [a						11,000	38%		
Subtotal Programmed Areas is			137,000 [a] 100%	137,000 [a]	69%			29,000	100%	29,000	64%
Non-Programmed Areas in San												
The Presidio (incl. south side	of GGB)		2,000 [a						450	5%		
Fort Mason to Acquatic Park			3,000 [a						900	10%		
Fisherman's Wharf			15,000 [a						3,500	37%		
NE Embarcadero (Pier 42 to F	Fisherman's Wharf) [c]		10,000 [a						4,600	49%		
Other			3,000 [a						0	0%		
Subtotal Non-Programmed Ar	reas in SF		33,000 [a] 100%	33,000 [a]				9,450	100%	9,450	21%
Subtotal Landside Spectators					184,300 [a]	93%					40,400	90%
TOTAL ALL AVERAGE PEAK W	EEKEND DAY SPECT	TATORS			197,300	100%					45,000	100%

[[]a] Sources: AECOM, America's Cup - April 2011 [c] Includes visitors to Team bases at Piers 30/32

	WEEKEND F	RACE DAY	WEEKDAY RACE DAY			
LANDSIDE LOCATIONS (Summary by Study Area)	# of Visitors	% of Total	# of Visitors	% of Total		
Presidio and Crissy Field	77,000	41.8%	11,450	28.3%		
Marina and Fort Mason to Acquatic Park	60,000	32.6%	18,900	46.8%		
Fisherman's Wharf	15,000	8.1%	3,500	8.7%		
NE Embarcadero (Fisherman's Wharf to Pier 42)	15,000	8.1%	4,600	11.4%		
Downtown	0	0.0%	0	0.0%		
Other SF	3,000	1.6%	0	0.0%		
Treasure Island	5,500	3.0%	1,300	3.2%		
Alcatraz Island and Angel Island	1,500	0.8%	50	0.1%		
Marin County	7,300	4.0%	600	1.5%		
TOTAL	184.300	100.0%	40.400	100.0%		

Visitation Weekend Peak Race Day				Persor	Vehicle	Avg. Veh		
Landside Locations	Specta	tors	Auto	Transit	Walk/Other	Total	Trips	Occup
Presidio and Crissy Field	77,000	45%	83,686	49,862	28,152	161,700	23,098	3.62
Marina and Fort Mason to Acquatic Park	60,000	35%	65,210	38,853	21,937	126,000	17,999	3.62
Fisherman's Wharf	15,000	9%	16,302	9,713	5,484	31,500	4,500	3.62
NE Embarcadero (Fisherman's Wharf to Pier 42)	15,000	9%	16,302	9,713	5,484	31,500	4,500	3.62
Downtown	0	0%	0	0	0	0	0	0.00
Other SF	3,000	2%	3,260	1,943	1,097	6,300	900	3.62
Total SF Locations	170,000	100%	184,762	110,085	62,154	357,000	50,996	3.62
			52%	31%	17%	100%		
Treasure Island	5,500	38%	11,219	283	49	11,550	2,998	3.74
Alcatraz Island and Angel Island	1,500	10%	3,060	77	13	3,150	818	3.74
Marin County	7,300	51%	14,890	375	65	15,330	3,980	3.74
Total Non-SF Locations	14,300	100%	29,169	<i>735</i>	127	30,030	7,796	3.74
			97%	2%	0%	100%		
TOTAL ALL LOCATIONS	184,300		213,930	110,820	62,280	387,030	58,792	
•			55%	29%	16%	•		

Visitation Weekday Peak Race Day				Persor	Vehicle	Avg. Veh		
Landside Locations	Specta	itors	Auto	Transit	Walk/Other	Total	Trips	Occup
Presidio and Crissy Field	11,450	30%	13,341	6,516	4,188	24,045	5,800	2.30
Marina and Fort Mason to Acquatic Park	18,900	49%	22,021	10,755	6,913	39,690	9,574	2.30
Fisherman's Wharf	3,500	9%	4,078	1,992	1,280	7,350	1,773	2.30
NE Embarcadero (Fisherman's Wharf to Pier 42)	4,600	12%	5,360	2,618	1,683	9,660	2,330	2.30
Downtown	0	0%	0	0	0	0	0	0.00
Other SF	0	0%	0	0	0	0	0	0.00
Total SF Locations	<i>38,450</i>	100%	44,800	21,881	14,064	80,745	19,477	2.30
			55%	27%	17%	100%		
Treasure Island	1,300	67%	2,652	67	11	2,730	1,182	2.24
Alcatraz Island and Angel Island	50	3%	102	3	0	105	45	2.24
Marin County	600	31%	1,224	31	5	1,260	545	2.24
Total Non-SF Locations	1,950	100%	3,977	100	17	4,095	1,773	2.24
			97%	2%	0%	100%		
TOTAL ALL LOCATIONS	40,400		48,777	21,981	14,081	84,840	21,249	
•			57%	26%	17%	•		

VISITATION	
SF Locations =	38,450 visitors
Non-SF Locations =	1,950 visitors
TOTAL =	40 400 visitors

Assumptions for		
PM Peak	Work	Non-work
Inbound	25%	25%
Outbound	75%	75%

Person-trips by Mode		Daily	Trips		PM Peak Hour Trips				
All Locations	SF	non-SF Total		SF	non-SF	Total		% Daily	
Auto	44,800	3,977	48,777	57%	8,985	800	9,785	58%	20%
Transit	21,881	100	21,981	26%	4,346	16	4,362	26%	20%
Walk/Other	14,064	17	14,081	17%	2,818	3	2,821	17%	20%
Total	80,745	4,095	84,840	100%	16,149	819	16,968	100%	20%
	95%	5%	100%		95%	5%	100%		
Vehicle Trips	19,477	1,773	21,249		3,893	356	4,249		20%
	92%	8%	100%		92%	8%	100%		
Avg. veh. occupancy	2.30	2.24	2.30		2.31	2.25	2.30		

Origin Distribution	- 1	Total Daily Person-Trips			PM Peak	PM Peak Hr Total Person-Trips			PM Peak Hour Transit-Trips			PM Peak Hour Vehicle-Trips		
All Locations		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	
San Francisco		20,279	491	20,770	4,056	98	4,154	724	1	726	244	43	287	
East Bay		22,597	1,838	24,435	4,519	368	4,887	1,597	8	1,606	1,192	147	1,339	
North Bay		9,409	1,183	10,592	1,882	237	2,118	249	4	253	857	122	979	
South Bay		24,584	473	25,057	4,917	95	5,011	1,461	2	1,462	1,450	39	1,489	
Out of Region		3,877	109	3,986	775	22	797	314	0	315	150	6	156	
To	otal	80.745	4.095	84.840	16.149	819	16.968	4.346	16	4.362	3.893	356	4.249	

PM Peak Hour	Ī	Inbound to		0	utbound fro	om	Total			
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	
Total Person Trips	4,037	205	4,242	12,112	614	12,726	16,149	819	16,968	
	25%	25%	25%	75%	75%	75%				
Transit Trips	1,086	4	1,090	3,259	12	3,271	4,346	16	4,362	
	25%	25%	25%	75%	75%	75%				
Vehicle Trips	973	89	1,062	2,920	267	3,187	3,893	356	4,249	
	25%	25%	25%	75%	75%	75%				

				AUTO	PERSON	TRIPS							TF	RANSIT TRI	PS			
PM Peak Hour		Inbound to		C	outbound fro	m		Total			Inbound to		C	Outbound fro	m		Total	<u>.</u>
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	131	24	155	393	71	465	525	95	620	181	0	181	543	1	544	724	1	726
East Bay	729	90	819	2,187	269	2,456	2,916	359	3,274	399	2	401	1,198	6	1,204	1,597	8	1,606
North Bay	408	58	466	1,224	174	1,398	1,631	232	1,863	62	1	63	187	3	190	249	4	253
South Bay	863	23	887	2,590	70	2,660	3,454	93	3,547	365	0	366	1,096	1	1,097	1,461	2	1,462
Out of Region	115	5	120	345	16	361	460	21	482	79	0	79	236	0	236	314	0	315
Total	2,246	200	2,446	6,739	600	7,339	8,985	800	9,785	1,086	4	1,090	3,259	12	3,271	4,346	16	4,362

	1				WALK/OT	HER PERS	ON TRIPS							TOTA	L PERSON	TRIPS			
PM Peak Hour			Inbound to		О	outbound fro	m		Total			Inbound to		0	utbound fro	m		Total	
All Locations		SF non-SF Total 702 0 702		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	
San Francisco	7	702	0	702	2,105	1	2,107	2,807	2	2,809	1,014	25	1,039	3,042	74	3,116	4,056	98	4,154
East Bay		2	0	2	5	0	5	7	1	7	1,130	92	1,222	3,390	276	3,665	4,519	368	4,887
North Bay		0	0	0	1	0	1	1	0	2	470	59	530	1,411	177	1,589	1,882	237	2,118
South Bay		1	0	1	2	0	2	3	0	3	1,229	24	1,253	3,688	71	3,759	4,917	95	5,011
Out of Region		0	0	0	1	0	1	1	0	1	194	5	199	581	16	598	775	22	797
To	tal 7	705	1	705	2,114	2	2,116	2,818	3	2,821	4,037	205	4,242	12,112	614	12,726	16,149	819	16,968

					VE	HICLE TRI	PS			
PM Peak Hour			Inbound to		C	outbound fro	m		Total	
All Locations		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco		61	11	72	183	32	215	244	43	287
East Bay		298	37	335	894	110	1,004	1,192	147	1,339
North Bay		214	30	245	643	91	734	857	122	979
South Bay		363	10	372	1,088	29	1,117	1,450	39	1,489
Out of Region		38	1	39	113	4	117	150	6	156
	Total	973	89	1,062	2,920	267	3,187	3,893	356	4,249
		25%	25%	25%	75%	75%	75%			

PM Peak Hour Trips	Daily	Au	to Person T	rips	1	Transit Trips	S	Wa	alk/Other Tri	ips	Tota	al Person T	rips	١	/ehicle-Trip	s
by SF Viewing Location	Visitors	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Presidio and Crissy Field	11,450	669	2,007	2,676	324	971	1,294	210	629	839	1,202	3,607	4,809	290	869	1,159
Marina and Fort Mason to Acquatic Park	18,900	1,104	3,313	4,417	534	1,602	2,136	346	1,039	1,385	1,985	5,954	7,938	478	1,435	1,914
Fisherman's Wharf	3,500	204	613	818	99	297	396	64	192	257	368	1,103	1,470	89	266	354
NE Embarcadero (Fisherman's Wharf to Pier 42)	4,600	269	806	1,075	130	390	520	84	253	337	483	1,449	1,932	116	349	466
Downtown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	38,450	2,246	6,739	8,985	1,086	3,259	4,346	705	2,114	2,818	4,037	12,112	16,149	973	2,920	3,893

PM Peak Hour Veh-Trips		In	bound Arriv	ing from				Ot	utbound De	estined to					Tota			
by SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Presidio and Crissy Field	18	89	64	108	11	290	54	266	191	324	34	869	73	355	255	432	45	1,159
Marina and FM to Aq Park	30	146	105	178	18	478	90	439	316	535	55	1,435	120	586	421	713	74	1,914
Fisherman's Wharf	6	27	19	33	3	89	17	81	58	99	10	266	22	108	78	132	14	354
NE Embarcadero (FW to P42)	7	36	26	43	4	116	22	107	77	130	13	349	29	143	102	173	18	466
Downtown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	61	298	214	363	38	973	183	894	643	1,088	113	2,920	244	1,192	857	1,450	150	3,893

PM Vehicle Trips by		Inl	oound Arriv	ing from		1		Οι	utbound Des	stined to		1			Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	10	37	0	10	1	58	31	110	0	29	4	175	41	147	0	39	6	233
Alcatraz Island (private)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angel Island	0	0	2	0	0	2	0	0	7	0	0	7	0	0	10	0	0	10
F. Baker/M. Headlands	0	0	12	0	0	12	0	0	36	0	0	36	0	0	48	0	0	48
Cavallo Point (private)	0	0	4	0	0	5	1	0	13	0	0	14	2	0	17	0	0	19
Sausalito	0	0	10	0	0	10	0	0	29	0	0	29	0	0	38	0	0	38
Tiburon/Belvedere	0	0	2	0	0	2	0	0	7	0	0	7	0	0	10	0	0	10
Total	11	37	30	10	1	89	32	110	91	29	4	267	43	147	122	39	6	356
	12%	41%	34%	11%	2%	100%	12%	41%	34%	11%	2%	100%	12%	41%	34%	11%	2%	100%

PM Auto Person Trips by	1	Inb	ound Arriv	ina from		Ī		Οι	utbound Des	stined to		Ī			Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	23	90	0	23	5	141	69	269	0	70	16	423	91	359	0	93	21	565
Alcatraz Island (private)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angel Island	0	0	5	0	0	5	0	0	14	0	0	14	0	0	18	0	0	18
F. Baker/M. Headlands	0	0	23	0	0	23	0	0	68	0	0	68	0	0	91	0	0	91
Cavallo Point (private)	1	0	8	0	0	9	3	0	24	0	0	27	4	0	33	0	0	36
Sausalito	0	0	18	0	0	18	0	0	54	0	0	54	0	0	73	0	0	73
Tiburon/Belvedere	0	0	5	0	0	5	0	0	14	0	0	14	0	0	18	0	0	18
Total	24	90	58	23	5	200	71	269	174	70	16	600	95	359	232	93	21	800
PM Transit Trips by	Ī	Inh	ound Arriv	ing from		ĺ		Oı	utbound Des	tined to		ı			Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	FB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	0	2	0	0	0	3	1	6	0	1	0	9	1	8	0	2	0	12
Alcatraz Island (private)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angel Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Baker/M. Headlands	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0	0	2
Cavallo Point (private)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Sausalito	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	1
Tiburon/Belvedere	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	1	0	0	4	1	6	3	1	0	12	1	8	4	2	0	16
PM Walk/Other Trips by	I	Inh	ound Arrivi	ing from		ĺ		Oı	ithound Des	etined to		1			Total			
PM Walk/Other Trips by	SF		ound Arriv		Other	Total	SF		utbound Des		Other	Total	SF	FR	Total NB	SB	Other	Total
Non-SF Viewing Location	SF 0	EB	NB	SB	Other	Total	SF 1	EB	NB	SB	Other	Total	SF 2	EB 1	NB	SB	Other	Total
Non-SF Viewing Location Treasure Island	0	EB 0	NB 0	SB 0	0	Total 1	1	EB 0	NB 0	SB 0	0	2	2	1	NB 0	0	0	2
Non-SF Viewing Location Treasure Island Alcatraz Island (private)	0 0	0 0	NB 0 0	SB 0 0	0 0	1	1 0	0 0	NB 0 0	SB 0 0	0 0		2 0	1 0	NB 0 0	0 0	0 0	2 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island	0	0 0 0	0 0 0	SB 0 0 0	0	1 0	1 0 0	0 0 0	0 0 0	SB 0	0 0 0	2	2	1 0 0	NB 0	0 0 0	0 0 0	2 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands	0 0 0	0 0 0 0	0 0 0 0	SB 0 0	0 0 0	1 0 0	1 0	0 0 0 0	NB 0 0	SB 0 0 0	0 0 0 0	2	2 0 0	1 0	NB 0 0 0	0 0	0 0	2 0 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private)	0 0 0 0	0 0 0 0 0	NB 0 0 0 0	SB 0 0 0 0	0 0 0 0	1 0 0	1 0 0 0 0	0 0 0 0 0	NB 0 0 0 0	SB 0 0 0 0	0 0 0 0	2	2 0 0 0 0	1 0 0 0	NB 0 0 0 0	0 0 0 0	0 0 0 0	2 0 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito	0 0 0	0 0 0 0	0 0 0 0	SB 0 0 0	0 0 0 0	1 0 0	1 0 0 0	0 0 0 0	NB 0 0 0 0	SB 0 0 0	0 0 0 0	2	2 0 0 0	1 0 0 0	NB 0 0 0	0 0 0	0 0 0 0	2 0 0 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private)	0 0 0 0 0	EB 0 0 0 0 0	NB 0 0 0 0 0	SB 0 0 0 0 0	0 0 0 0 0	1 0 0	1 0 0 0 0	0 0 0 0 0 0	NB 0 0 0 0 0	SB 0 0 0 0 0	0 0 0 0 0	2 0 0 0 0	2 0 0 0 0	1 0 0 0 0	NB 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	2 0 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere	0 0 0 0 0 0	EB 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0	0 0 0 0 0 0	1 0 0 0 0 0 0	1 0 0 0 0 0	EB 0 0 0 0 0 0	NB 0 0 0 0 0 0	SB 0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 0 0	2 0 0 0 0 0	1 0 0 0 0 0	NB 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total	0 0 0 0 0 0	0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0	0 0 0 0 0 0	1 0 0 0 0 0 0	1 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 0 0	2 0 0 0 0 0	1 0 0 0 0 0	NB 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by	0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	1 0 0 0 0 0 0	1 0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	2 0 0 0 0 0 0 2	2 0 0 0 0 0 0 0	1 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 0 0 0 0 3
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location	0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1	1 0 0 0 0 0 0 0 1	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 2	2 0 0 0 0 0 0 2	1 0 0 0 0 0 0 0 1	NB 0 0 0 0 0 0 0 0 0 Total	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 3
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island	0 0 0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1	1 0 0 0 0 0 0 0 1	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 strined to SB 71	0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 2	2 0 0 0 0 0 0 2 SF 95	1 0 0 0 0 0 0 0 1	NB 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 3
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private)	0 0 0 0 0 0 0 0 SF 24 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 NB 0 0 0	SB 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1 Total	1 0 0 0 0 0 0 0 1 SF	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 thousand Des	SB 0 0 0 0 0 0 0 0 0 0 strined to SB 71 0	0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 2 Total	2 0 0 0 0 0 0 2 SF 95 0	1 0 0 0 0 0 0 0 1	NB 0 0 0 0 0 0 0 0 0 Total NB 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 3
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island	0 0 0 0 0 0 0 0 SF 24 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1 Total 145 0 5	1 0 0 0 0 0 0 0 1 SF 71 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 utbound Des NB 0 0	SB 0 0 0 0 0 0 0 0 0 titined to SB 71 0 0	0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 2 Total 434 0 14	2 0 0 0 0 0 0 2 SF 95 0	1 0 0 0 0 0 0 1 EB 368 0	NB 0 0 0 0 0 0 0 0 Total NB 0 0 18	0 0 0 0 0 0 0 0 0 0 SB	0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 3 Total 579 0 18
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands	0 0 0 0 0 0 0 0 SF 24 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1 1 Total 145 0 5 23	1 0 0 0 0 0 0 1 1 SF 71 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 strined to SB 71 0 0 0	0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 2 Total 434 0 14 69	2 0 0 0 0 0 0 2 SF 95 0 0	1 0 0 0 0 0 0 1 1 EB 368 0 0	NB 0 0 0 0 0 0 0 0 Total NB 0 0 18	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 3 Total 579 0 18 92
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private)	0 0 0 0 0 0 0 0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1 1 Total 145 0 5 23 9	1 0 0 0 0 0 0 1 1 SF 71 0 0 0 3	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 2 Total 434 0 14 69 28	2 0 0 0 0 0 0 2 SF 95 0 0 0	1 0 0 0 0 0 0 1 1 EB 368 0 0	NB 0 0 0 0 0 0 0 Total NB 0 18 92 33	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 3 Total 579 0 18 92 37
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito	0 0 0 0 0 0 0 0 0 SF 24 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1 1 Total 145 0 5 23 9 18	1 0 0 0 0 0 0 1 1 SF 71 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 14 69 25 55	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 0 2 Total 434 0 14 69 28 55	2 0 0 0 0 0 0 2 SF 95 0 0 0	1 0 0 0 0 0 0 1 1 EB 368 0 0 0	NB 0 0 0 0 0 0 0 0 Total NB 0 18 92 33 74	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 3 Total 579 0 18 92 37 74
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private)	0 0 0 0 0 0 0 0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 1 1 Total 145 0 5 23 9	1 0 0 0 0 0 0 1 1 SF 71 0 0 0 3	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 0 2 Total 434 0 14 69 28	2 0 0 0 0 0 0 2 SF 95 0 0 0	1 0 0 0 0 0 0 1 1 EB 368 0 0	NB 0 0 0 0 0 0 0 Total NB 0 18 92 33	0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 0 0 3 Total 579 0 18 92 37

VISITATION		Assumptions for		
SF Locations =	170,000 visitors	Midday Peak	Work	Non-work
Non-SF Locations =	14,300 visitors	Inbound	80%	80%
TOTAL =	184,300 visitors	Outbound	20%	20%

Person-trips by Mode		Daily	Trips			Midday	Peak Hou	r Trips	
All Locations	SF	non-SF	Tota	al	SF	non-SF	Tot	al	% Daily
Auto	184,762	29,169	213,930	55%	46,295	7,335	53,630	55%	25%
Transit	110,085	735	110,820	29%	27,388	147	27,534	28%	25%
Walk/Other	62,154	127	62,280	16%	15,567	25	15,593	16%	25%
Total	357,000	30,030	387,030	100%	89,250	7,508	96,758	100%	25%
	92%	8%	100%		92%	8%	100%		
Vehicle Trips	50,996	7,796	58,792		12,644	1,952	14,596		25%
	87%	13%	100%		87%	13%	100%		
Avg. veh. occupancy	3.62	3.74	3.64		3.66	3.76	3.67		

Origin Distribution	Total I	Daily Perso	n-Trips	Midday Pea	k Hr Total F	Person-Trips	Midday Pe	eak Hour Tra	ansit-Trips	Midday Pe	ak Hour Ve	hicle-Trips
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	89,617	3,629	93,245	22,404	907	23,311	4,000	13	4,014	820	232	1,051
East Bay	100,009	13,263	113,272	25,002	3,316	28,318	8,836	76	8,912	4,236	849	5,085
North Bay	41,568	8,759	50,327	10,392	2,190	12,582	3,624	40	3,664	1,841	577	2,418
South Bay	108,689	3,504	112,193	27,172	876	28,048	9,426	14	9,440	4,988	237	5,225
Out of Region	17,116	876	17,992	4,279	219	4,498	1,500	4	1,505	759	58	817
Tota	357 000	30 030	387 030	89 250	7 508	96 758	27 388	147	27 534	12 644	1 952	14 596

Midday Peak Hour	I	Inbound to)	0	utbound fro	om		Total	
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
Total Person Trips	71,400	6,006	77,406	17,850	1,502	19,352	89,250	7,508	96,758
	80%	80%	80%	20%	20%	20%			
Transit Trips	21,910	118	22,028	5,478	29	5,507	27,388	147	27,534
	80%	80%	80%	20%	20%	20%			
Vehicle Trips	10,115	1,562	11,677	2,529	390	2,919	12,644	1,952	14,596
•	80%	80%	80%	20%	20%	20%			

				AUTO	PERSON	TRIPS							TF	RANSIT TRI	PS			
Midday Peak Hour		Inbound to		C	outbound fro	m		Total			Inbound to		C	utbound fro	m		Total	
All Locations	SF	SF non-SF Total 319 701 3,019		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	2,319	701	3,019	580	175	755	2,898	876	3,774	3,200	10	3,211	800	3	803	4,000	13	4,014
East Bay	12,904	2,588	15,492	3,226	647	3,873	16,130	3,235	19,365	7,069	60	7,130	1,767	15	1,782	8,836	76	8,912
North Bay	5,408	1,719	7,127	1,352	430	1,782	6,760	2,148	8,908	2,899	32	2,931	725	8	733	3,624	40	3,664
South Bay	14,186	689	14,875	3,546	172	3,719	17,732	861	18,593	7,541	11	7,552	1,885	3	1,888	9,426	14	9,440
Out of Region	2,220	172	2,392	555	43	598	2,775	214	2,989	1,200	4	1,204	300	1	301	1,500	4	1,505
Total	37,036	5,868	42,904	9,259	1,467	10,726	46,295	7,335	53,630	21,910	118	22,028	5,478	29	5,507	27,388	147	27,534

		WALK/OTHER PERSON TRIPS									TOTAL PERSON TRIPS							
Midday Peak Hour		Inbound to		C	Outbound fro	m		Total			Inbound to)	С	outbound fro	m		Total	
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	12,404	15	12,419	3,101	4	3,105	15,505	18	15,524	17,923	726	18,649	4,481	181	4,662	22,404	907	23,311
East Bay	29	4	33	7	1	8	36	5	41	20,002	2,653	22,654	5,000	663	5,664	25,002	3,316	28,318
North Bay	6	1	8	2	0	2	8	2	10	8,314	1,752	10,065	2,078	438	2,516	10,392	2,190	12,582
South Bay	11	0	12	3	0	3	14	0	15	21,738	701	22,439	5,434	175	5,610	27,172	876	28,048
Out of Region	3	0	3	1	0	1	4	0	4	3,423	175	3,598	856	44	900	4,279	219	4,498
Tota	12,454	20	12,474	3,113	5	3,119	15,567	25	15,593	71,400	6,006	77,406	17,850	1,502	19,352	89,250	7,508	96,758

					VE	EHICLE TRI	PS			
Midday Peak Hour	Ī		Inbound to	1	C	outbound fro	m		Total	
All Locations		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco		656	185	841	164	46	210	820	232	1,051
East Bay		3,389	679	4,068	847	170	1,017	4,236	849	5,085
North Bay		1,473	462	1,934	368	115	484	1,841	577	2,418
South Bay		3,990	189	4,180	998	47	1,045	4,988	237	5,225
Out of Region		607	46	654	152	12	163	759	58	817
	Total	10,115	1,562	11,677	2,529	390	2,919	12,644	1,952	14,596
		80%	80%	80%	20%	20%	20%			

Midday Peak Hour Trips	Daily	Aut	o Person T	rips	7	Transit Trip	s	Wa	alk/Other Tr	ips	Tota	al Person T	rips	'	Vehicle-Trip	s
by SF Viewing Location	Visitors	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Presidio and Crissy Field	77,000	16,775	4,194	20,969	9,924	2,481	12,405	5,641	1,410	7,051	32,340	8,085	40,425	4,582	1,145	5,727
Marina and Fort Mason to Acquatic Park	60,000	13,072	3,268	16,339	7,733	1,933	9,666	4,395	1,099	5,494	25,200	6,300	31,500	3,570	893	4,463
Fisherman's Wharf	15,000	3,268	817	4,085	1,933	483	2,417	1,099	275	1,374	6,300	1,575	7,875	893	223	1,116
NE Embarcadero (Fisherman's Wharf to Pier 42)	15,000	3,268	817	4,085	1,933	483	2,417	1,099	275	1,374	6,300	1,575	7,875	893	223	1,116
Downtown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other SF	3,000	654	163	817	387	97	483	220	55	275	1,260	315	1,575	179	45	223
Total	170,000	37,036	9,259	46,295	21,910	5,478	27,388	12,454	3,113	15,567	71,400	17,850	89,250	10,115	2,529	12,644

Midday Peak Hr Vh-Trips		In	bound Arriv	ing from				Οι	tbound De	stined to					Tota	I		
by SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Presidio and Crissy Field	297	1,535	667	1,807	275	4,582	74	384	167	452	69	1,145	371	1,919	834	2,259	344	5,727
Marina and FM to Aq Park	231	1,196	520	1,408	214	3,570	58	299	130	352	54	893	289	1,495	650	1,760	268	4,463
Fisherman's Wharf	58	299	130	352	54	893	14	75	32	88	13	223	72	374	162	440	67	1,116
NE Embarcadero (FW to P42)	58	299	130	352	54	893	14	75	32	88	13	223	72	374	162	440	67	1,116
Downtown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other SF	12	60	26	70	11	179	3	15	6	18	3	45	14	75	32	88	13	223
Total	656	3,389	1,473	3,990	607	10,115	164	847	368	998	152	2,529	820	4,236	1,841	4,988	759	12,644

Midday Vehicle Trips by		Ini	bound Arriv	ing from		1		O	utbound Des	stined to					Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	87	388	0	111	9	596	22	97	0	28	2	149	109	485	0	139	12	745
Alcatraz Island (private)	22	11	0	22	0	55	5	3	0	6	0	14	27	13	0	28	0	69
Angel Island	11	54	45	0	0	110	3	13	11	0	0	27	14	67	56	0	0	137
F. Baker/M. Headlands	22	0	135	56	9	222	5	0	34	14	2	55	27	0	169	70	12	277
Cavallo Point (private)	44	22	23	0	0	88	11	5	6	0	0	22	55	27	28	0	0	110
Sausalito	0	140	214	0	28	382	0	35	54	0	7	95	0	175	268	0	35	477
Tiburon/Belvedere	0	65	45	0	0	110	0	16	11	0	0	27	0	81	56	0	0	137
Total	185	679	462	189	46	1,562	46	170	115	47	12	390	232	849	577	237	58	1,952
	12%	43%	30%	12%	3%	100%	12%	43%	30%	12%	3%	100%	12%	43%	30%	12%	3%	100%

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Midday Auto Person Trips by		In	nbound Arriv	ing from		ĺ			utbound De	stined to					Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	330	1,479	0	405	34	2,248	82	370	0	101	9	562	412	1,849	0	507	43	2,810
Alcatraz Island (private)	82	41	0	81	0	205	21	10	0	20	0	51	103	51	0	101	0	256
Angel Island	41	205	168	0	0	414	10	51	42	0	0	104	52	257	210	0	0	518
F. Baker/M. Headlands	82	0	503	203	34	822	21	0	126	51	9	206	103	0	629	253	43	1,028
Cavallo Point (private)	165	82	84	0	0	331	41	21	21	0	0	83	206	103	105	0	0	414
Sausalito	0	534	796	0	103	1,433	0	134	199	0	26	358	0	668	996	0	129	1,792
Tiburon/Belvedere	0	247	168	0	0	414	0	62	42	0	0	104	0	308	210	0	0	518
Total	701	2,588	1,719	689	172	5,868	175	647	430	172	43	1,467	876	3,235	2,148	861	214	7,335
Midday Transit Trips by			nbound Arriv						utbound De						Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	5	35	0	7	1	47	1	9	0	2	0	12	6	43	0	8	1	59
Alcatraz Island (private)	1	1	0	1	0	4	0	0	0	0	0	1	2	1	0	2	0	4
Angel Island	1	5	3	0	0	9	0	1	1	0	0	2	1	6	4	0	0	11
F. Baker/M. Headlands	1	0	9	3	1	15	0	0	2	1	0	4	2	0	12	4	1	18
Cavallo Point (private)	2	2	2	0	0	6	1	0	0	0	0	1	3	2	2	0	0	7
Sausalito	0	12	15	0	2	29	0	3	4	0	1	7	0	16	18	0	3	37
Tiburon/Belvedere	0	6	3	0	0	9	0	1	1	0	0	2	0	7	4	0	0	11
Total	10	60	32	11	4	118	3	15	8	3	1	29	13	76	40	14	4	147
Midday Walk/Other Trips by			nbound Arriv	0					utbound De			I			Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	7	2	0	0	0	9	2	1	0	0	0	2	9	3	0	0	0	12
Alcatraz Island (private)	2	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	2
Angel Island	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	2
F. Baker/M. Headlands	2	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	3
Cavallo Point (private)	3	0	0	0	0	4	1	0	0	0	0	1	4	0	0	0	0	5
Sausalito	0	1	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	2
Tiburon/Belvedere	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	15	4	1	0	0	20	4	1	0	0	0	5	18	5	1	0	0	25
	_																	
Total Midday Person Trips by			nbound Arriv						utbound De						Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	342	1,516	0	412	35	2,305	85	379	0	103	9	576	427	1,895	0	515	44	2,881
Alcatraz Island (private)	85	42	0	82	0	210	21	11	0	21	0	52	107	53	0	103	0	262
Angel Island	43	211	171	0	0	424	11	53	43	0	0	106	53	263	214	0	0	530
F. Baker/M. Headlands	85	0	513	206	35	839	21	0	128	52	9	210	107	0	641	258	44	1,049
Cavallo Point (private)	171	84	85	0	0	340	43	21	21	0	0	85	213	105	107	0	0	426
Sausalito	0	547	812	0	105	1,464	0	137	203	0	26	366	0	684	1,015	0	131	1,830
Tiburon/Belvedere	_	050	474	_	_		_			_	_		_	040			_	500
	0	253 2,653	171 1,752	0	0	424	0	63	43	0	0	106 1,501	0	316 3,316	214	0	0	529 7,507

34th America's Cup Visitation Estimates - 2013

•	AVE	RAGE PEA	AK WEEKEND I	RACE DAY	SPECTATORS		AV	ERAGE PE	AK WEEKEDAY	RACE DAY	Y SPECTATOR	S.
LOCATION	# of Visitors	% of Total	# of Visitors	% of Total	# of Visitors	% of Total	# of Visitors	% of Total	# of Visitors	% of Total	# of Visitors	% of Total
SPECTATORS ON BOATS												
Recreational			13,200 [a]	73%					4,400	70%		
Commercial Charter			3,000 [a]	17%					1,000	16%		
Super Yachts			1,800 [a]	10%					900	14%		
Subtotal			18,000 [a]	100%	18,000 [a]	5%			6,300	100%	6,300	13%
LANDSIDE SPECTATORS												
Outside San Francisco												
Treasure Island			12,000 [a]	50%					1,500	67%		
Alcatraz Island (private)			500 [a]	2%					0	0%		
Angel Island			1,000 [a]	4%					50	2%		
Fort Baker/Marin Headlands/Nor	rth side of GGB		3,500 [a]	15%					300	13%		
Cavallo Point (private)			800 [a]	3%					150	7%		
Sausalito			5,000 [a]	21%					225	10%		
Tiburon/Belvedere			1,200 [a]	5%					25	1%		
Subtotal Outside San Francisco			24,000 [aj	100%	24,000 [a]	7%			2,250	100%	2,250	5%
Programmed Areas in San Francis	SC0											
Live Sites												
Justin Herman Plaza	8,000 [b]	40%					0	0%				
Union Square	6,000 [b]	30%					0	0%				
Civic Center	6,000 [b]	30%					0	0%				
Subtotal Live Sites	20,000 [a]	100%	20,000 [a]	10%			0	0%	0	0%		
Marina Green			55,000 [a]	27%					8,200	27%		
Piers 27 & 29 (Village)			50,000 [a]	25%					10,350	34%		
Crissy Field (Fort Point to Lyon S	Street)		77,000 [a]	38%					12,300	40%		
Subtotal Programmed Areas in S	SF		202,000 [aj	100%	202,000 [a]	60%			30,850	100%	30,850	62%
Non-Programmed Areas in San Fr	rancisco											
The Presidio (incl. south side of	GGB)		5,000 [a]	6%					500	5%		
Fort Mason to Acquatic Park			7,000 [a]	8%					1,000	9%		
Fisherman's Wharf			25,000 [a]	28%					3,900	37%		
NE Embarcadero (Pier 42 to Fish	herman's Wharf) [c]		48,000 [a]	53%					5,200	49%		
Other			5,000 [a]	6%					0	0%		
Subtotal Non-Programmed Area	as in SF		90,000 [aj	100%	90,000 [a]				10,600	100%	10,600	21%
Subtotal Landside Spectators				•	316,000 [a]	95%			•		43,700	87%
TOTAL ALL AVERAGE PEAK WEE	EKEND DAY SPEC	TATORS			334,000	100%					50,000	100%

[[]a] Sources: AECOM, America's Cup - April 2011 [c] Includes visitors to Team bases at Piers 30/32

	WEEKEND R	ACE DAY	WEEKDAY F	RACE DAY
LANDSIDE LOCATIONS (Summary by Study Area)	# of Visitors	% of Total	# of Visitors	% of Total
Presidio and Crissy Field	82,000	25.9%	12,800	29.3%
Marina and Fort Mason to Acquatic Park	62,000	19.6%	9,200	21.1%
Fisherman's Wharf	25,000	7.9%	3,900	8.9%
NE Embarcadero (Fisherman's Wharf to Pier 42)	106,000	33.5%	15,550	35.6%
Downtown	12,000	3.8%	0	0.0%
Other SF	5,000	1.6%	0	0.0%
Treasure Island	12,000	3.8%	1,500	3.4%
Alcatraz Island and Angel Island	1,500	0.5%	50	0.1%
Marin County	10,500	3.3%	700	1.6%
TOTAL	316,000	100.0%	43,700	100.0%

Visitation Weekend Peak Race Day				Persor		Vehicle	Avg. Veh	
Landside Locations	Specta	itors	Auto	Transit	Walk/Other	Total	Trips	Occup
Presidio and Crissy Field	82,000	28%	89,120	53,100	29,980	172,200	24,598	3.62
Marina and Fort Mason to Acquatic Park	62,000	21%	67,384	40,149	22,668	130,200	18,599	3.62
Fisherman's Wharf	25,000	9%	27,171	16,189	9,140	52,500	7,499	3.62
NE Embarcadero (Fisherman's Wharf to Pier 42)	106,000	36%	115,204	68,641	38,755	222,600	31,797	3.62
Downtown	12,000	4%	13,042	7,771	4,387	25,200	3,600	3.62
Other SF	5,000	2%	5,434	3,238	1,828	10,500	1,500	3.62
Total SF Locations	292,000	100%	317,355	189,087	106,758	613,200	87,593	3.62
			52%	31%	17%	100%		
Treasure Island	12,000	50%	24,477	617	106	25,200	6,542	3.74
Alcatraz Island and Angel Island	1,500	6%	3,060	77	13	3,150	818	3.74
Marin County	10,500	44%	21,417	540	93	22,050	5,724	3.74
Total Non-SF Locations	24,000	100%	48,954	1,233	212	50,400	13,084	3.74
			97%	2%	0%	100%		
TOTAL ALL LOCATIONS	316,000		366,309	190,320	106,970	663,600	100,677	
•	•	!	55%	29%	16%	•		

Visitation Weekday Peak Race Day				Persor	n Trips	1	Vehicle	Avg. Veh
Landside Locations	Specta	ntors	Auto	Transit	Walk/Other	Total	Trips	Occup
Presidio and Crissy Field	12,800	31%	14,914	7,284	4,682	26,880	6,484	2.30
Marina and Fort Mason to Acquatic Park	9,200	22%	10,719	5,235	3,365	19,320	4,660	2.30
Fisherman's Wharf	3,900	9%	4,544	2,219	1,427	8,190	1,976	2.30
NE Embarcadero (Fisherman's Wharf to Pier 42)	15,550	38%	18,118	8,849	5,688	32,655	7,877	2.30
Downtown	0	0%	0	0	0	0	0	0.00
Other SF	0	0%	0	0	0	0	0	0.00
Total SF Locations	41,450	100%	48,295	23,588	<i>15,162</i>	87,045	20,996	2.30
			55%	27%	17%	100%		
Treasure Island	1,500	67%	3,060	77	13	3,150	1,364	2.24
Alcatraz Island and Angel Island	50	2%	102	3	0	105	45	2.24
Marin County	700	31%	1,428	36	6	1,470	636	2.24
Total Non-SF Locations	2,250	100%	4,589	116	20	4,725	2,045	2.24
			97%	2%	0%	100%		
TOTAL ALL LOCATIONS	43,700		52,885	23,704	15,181	91,770	23,042	
•			58%	26%	17%	•		

VISITATION	
SF Locations =	41,450 visitors
Non-SF Locations =	2,250 visitors
TOTAL =	43 700 visitors

Assumptions for		
PM Peak	Work	Non-work
Inbound	25%	25%
Outbound	75%	75%

Person-trips by Mode		Daily	Trips		1	PM P	eak Hour T	rips	
All Locations	SF	non-SF	Tota	al	SF	non-SF	Tota	al .	% Daily
Auto	48,295	4,589	52,885	58%	9,686	923	10,610	58%	20%
Transit	23,588	116	23,704	26%	4,685	19	4,703	26%	20%
Walk/Other	15,162	20	15,181	17%	3,038	3	3,041	17%	20%
Total	87,045	4,725	91,770	100%	17,409	945	18,354	100%	20%
	95%	5%	100%		95%	5%	100%		
Vehicle Trips	20,996	2,045	23,042		4,197	411	4,608		20%
	91%	9%	100%		91%	9%	100%		
Avg. veh. occupancy	2.30	2.24	2.30		2.31	2.25	2.30		

Origin Distribution		Total [Daily Person	n-Trips	PM Peak H	our Total Po	erson-Trips	PM Pea	k Hour Trans	sit-Trips	PM Pea	k Hour Vehic	cle-Trips
All Locations		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco		21,861	567	22,428	4,372	113	4,486	781	2	782	263	50	313
East Bay		24,360	2,121	26,481	4,872	424	5,296	1,722	10	1,732	1,285	170	1,455
North Bay		10,143	1,365	11,508	2,029	273	2,302	268	5	273	924	141	1,064
South Bay		26,502	546	27,048	5,300	109	5,410	1,575	2	1,576	1,563	45	1,608
Out of Region		4,179	126	4,305	836	25	861	339	1	340	162	7	169
Т	otal	87.045	4.725	91,770	17.409	945	18.354	4.685	19	4.703	4.197	411	4.608

PM Peak Hour	1	Inbound to		0	utbound fro	m	ĺ	Total	
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
Total Person Trips	4,352	236	4,589	13,057	709	13,766	17,409	945	18,354
	25%	25%	25%	75%	75%	75%			
Transit Trips	1,171	5	1,176	3,514	14	3,527	4,685	19	4,703
	25%	25%	25%	75%	75%	75%			
Vehicle Trips	1,049	103	1,152	3,148	308	3,456	4,197	411	4,608
	25%	25%	25%	75%	75%	75%			

				AUTO	PERSON	TRIPS							TI	RANSIT TRI	PS			
PM Peak Hour		Inbound to		C	Outbound fro	m		Total			Inbound to			Outbound fro	m		Total	
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	141	27	169	424	82	506	566	109	675	195	0	196	586	1	587	781	2	782
East Bay	786	103	889	2,357	310	2,668	3,143	414	3,557	430	2	433	1,291	7	1,299	1,722	10	1,732
North Bay	440	67	507	1,319	201	1,520	1,759	268	2,026	67	1	68	201	4	205	268	5	273
South Bay	931	27	958	2,792	81	2,873	3,723	107	3,830	394	0	394	1,181	1	1,182	1,575	2	1,576
Out of Region	124	6	130	372	19	391	496	25	521	85	0	85	254	0	255	339	1	340
Tota	1 2,422	231	2,652	7,265	692	7,957	9,686	923	10,610	1,171	5	1,176	3,514	14	3,527	4,685	19	4,703

					WALK/01	HER PERS	ON TRIPS							TOTA	L PERSON	TRIPS			
PM Peak Hour			Inbound to		(Outbound fro	m		Total			Inbound to		0	utbound fro	m		Total	
All Locations		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco		756	1	757	2,269	2	2,271	3,026	2	3,028	1,093	28	1,121	3,279	85	3,364	4,372	113	4,486
East Bay		2	0	2	5	0	6	7	1	8	1,218	106	1,324	3,654	318	3,972	4,872	424	5,296
North Bay		0	0	0	1	0	1	2	0	2	507	68	575	1,521	205	1,726	2,029	273	2,302
South Bay		1	0	1	2	0	2	3	0	3	1,325	27	1,352	3,975	82	4,057	5,300	109	5,410
Out of Region		0	0	0	1	0	1	1	0	1	209	6	215	627	19	646	836	25	861
To	otal	759	1	760	2,278	2	2,281	3,038	3	3,041	4,352	236	4,589	13,057	709	13,766	17,409	945	18,354

					VE	HICLE TRI	PS			
PM Peak Hour			Inbound to		C	outbound fro	m		Total	
All Locations		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco		66	12	78	197	37	234	263	50	313
East Bay		321	42	364	964	127	1,091	1,285	170	1,455
North Bay		231	35	266	693	105	798	924	141	1,064
South Bay		391	11	402	1,173	34	1,206	1,563	45	1,608
Out of Region		41	2	42	122	5	127	162	7	169
	Total	1,049	103	1,152	3,148	308	3,456	4,197	411	4,608
	-	25%	25%	25%	75%	75%	75%	•		

PM Peak Hour Trips	Daily	Aut	to Person Tr	rips	1	Fransit Trips	s	Wa	alk/Other Tri	ps	Tota	al Person Ti	rips	'	Vehicle-Trip	s
by SF Viewing Location	Visitors	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Presidio and Crissy Field	12,800	748	2,243	2,991	362	1,085	1,447	235	704	938	1,344	4,032	5,376	324	972	1,296
Marina and Fort Mason to Acquatic Park	9,200	537	1,612	2,150	260	780	1,040	169	506	674	966	2,898	3,864	233	699	932
Fisherman's Wharf	3,900	228	684	911	110	331	441	71	214	286	410	1,229	1,638	99	296	395
NE Embarcadero (Fisherman's Wharf to Pier 42)	15,550	908	2,725	3,634	439	1,318	1,757	285	855	1,140	1,633	4,898	6,531	394	1,181	1,574
Downtown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	41,450	2,422	7,265	9,686	1,171	3,514	4,685	759	2,278	3,038	4,352	13,057	17,409	1,049	3,148	4,197

PM Peak Hour Veh-Trips		In	bound Arriv	ing from				O	utbound De	estined to		1			Tota			
by SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Presidio and Crissy Field	20	99	71	121	13	324	61	298	214	362	38	972	81	397	285	483	50	1,296
Marina and FM to Aq Park	15	71	51	87	9	233	44	214	154	260	27	699	58	285	205	347	36	932
Fisherman's Wharf	6	30	22	37	4	99	19	91	65	110	11	296	25	121	87	147	15	395
NE Embarcadero (FW to P42)	25	121	87	147	15	394	74	362	260	440	46	1,181	99	482	346	587	61	1,574
Downtown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other SF	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	66	321	231	391	41	1,049	197	964	693	1,173	122	3,148	263	1,285	924	1,563	162	4,197

PM Vehicle Trips by		Int	ound Arriv	ing from				Οι	utbound Des	stined to		1			Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	9	42	0	10	2	63	26	127	0	31	5	189	35	170	0	41	7	252
Alcatraz Island (private)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angel Island	0	0	3	0	0	3	0	0	8	0	0	8	0	0	11	0	0	11
F. Baker/M. Headlands	0	0	15	1	0	16	0	0	45	3	0	48	0	0	61	3	0	64
Cavallo Point (private)	4	0	4	0	0	7	11	0	11	0	0	22	15	0	15	0	0	30
Sausalito	0	0	12	0	0	12	0	0	37	0	0	37	0	0	49	0	0	49
Tiburon/Belvedere	0	0	1	0	0	1	0	0	4	0	0	4	0	0	5	0	0	5
Total	12	42	35	11	2	103	37	127	105	34	5	308	50	170	141	45	7	411
	12%	41%	34%	11%	2%	100%	12%	41%	34%	11%	2%	100%	12%	41%	34%	11%	2%	100%

PM Auto Person Trips by		Inh	ound Arriv	ing from		I		Oı	tbound Des	stined to		ı			Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	19	103	0	25	6	154	58	310	0	74	19	461	77	414	0	99	25	615
Alcatraz Island (private)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angel Island	0	0	5	0	0	5	0	0	15	0	0	15	0	0	21	0	0	21
F. Baker/M. Headlands	0	0	29	2	0	31	0	0	87	6	0	93	0	0	115	8	0	124
Cavallo Point (private)	8	0	7	0	0	15	24	0	22	0	0	46	32	0	29	0	0	61
Sausalito	0	0	23	0	0	23	0	0	70	0	0	70	0	0	93	0	0	93
Tiburon/Belvedere	0	0	3	0	0	3	0	0	8	0	0	8	0	0	10	0	0	10
Total	27	103	67	27	6	231	82	310	201	81	19	692	109	414	268	107	25	923
PM Transit Trips by		Inb	ound Arriv	ing from				Οι	tbound Des	stined to					Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	0	2	0	0	0	3	1	7	0	1	0	10	1	10	0	2	1	13
Alcatraz Island (private)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angel Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Baker/M. Headlands	0	0	1	0	0	1	0	0	2	0	0	2	0	0	2	0	0	2
Cavallo Point (private)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1
Sausalito	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2	0	0	2
Tiburon/Belvedere	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	2	1	0	0	5	1	7	4	1	0	14	2	10	5	2	1	19
PM Walk/Other Trips by Non-SF Viewing Location	SF	Inb EB	ound Arrivi NB	ing from SB	Other	Total	SF	Oı EB	itbound Des	stined to SB	Other	Total	SF	EB	Total NB	SB	Other	Total
Non-SF Viewing Location	SF 0				Other 0	Total	SF 1				Other 0	Total 2	SF 2	EB 1		SB 0	Other 0	Total 2
Non-SF Viewing Location Treasure Island		EB	NB	SB		Total 1 0		EB	NB	SB					NB			Total 2 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private)	0	EB 0	NB 0	SB 0	0	1	1	EB 0	NB 0	SB 0	0	2	2	1	NB 0	0	0	2
Non-SF Viewing Location Treasure Island	0	0 0	NB 0 0	SB 0 0	0	1 0	1	EB 0 0	NB 0 0	SB 0 0	0	2	2	1 0	NB 0 0	0	0 0	2 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island	0 0 0	0 0 0	0 0 0	SB 0 0 0	0 0 0	1 0 0	1 0 0	0 0 0	NB 0 0 0	SB 0 0	0 0 0	2 0 0	2 0 0	1 0 0	NB 0 0 0	0 0 0	0 0 0	2 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands	0 0 0	0 0 0 0	0 0 0 0	SB 0 0 0 0 0 0	0 0 0 0	1 0 0 0	1 0 0 0	EB 0 0 0	NB 0 0 0 0	SB 0 0 0	0 0 0 0	2 0 0 0	2 0 0 0	1 0 0 0	NB 0 0 0 0	0 0 0 0	0 0 0 0	2 0 0 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private)	0 0 0 0	0 0 0 0 0	NB 0 0 0 0	SB 0 0 0 0 0 0 0 0 0	0 0 0 0	1 0 0 0	1 0 0 0 1	EB 0 0 0 0	NB 0 0 0 0	SB 0 0 0 0	0 0 0 0	2 0 0 0 1	2 0 0 0	1 0 0 0	NB 0 0 0 0	0 0 0 0	0 0 0 0	2 0 0 0 1 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito	0 0 0 0	0 0 0 0 0 0	NB 0 0 0 0 0	SB 0 0 0 0 0	0 0 0 0 0	1 0 0 0 0	1 0 0 0 1	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0	SB 0 0 0 0 0	0 0 0 0 0	2 0 0 0 1	2 0 0 0 1	1 0 0 0 0	NB 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	2 0 0 0 1
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere	0 0 0 0 0 0	EB 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	1 0 0 0 0 0	1 0 0 0 1 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0	SB 0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 1 0	2 0 0 0 1 0	1 0 0 0 0 0 0	NB 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 1 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by	0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	1 0 0 0 0 0	1 0 0 0 1 0 0 2	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 1 0	2 0 0 0 1 0 0 2	1 0 0 0 0 0 0	NB 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	2 0 0 0 1 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location	0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	1 0 0 0 0 0	1 0 0 0 1 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 1 0	2 0 0 0 1 0	1 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	2 0 0 0 1 0 0 3
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island	0 0 0 0 0 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	1 0 0 0 0 0 0 0	1 0 0 0 1 0 0 2	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	2 0 0 0 1 0 0 2	2 0 0 0 1 0 0 2	1 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	2 0 0 0 1 0 0 3
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private)	0 0 0 0 0 0 0 1	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 NB	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 1	1 0 0 0 1 0 0 2	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 2	2 0 0 0 1 0 0 2	1 0 0 0 0 0 0 0 1	NB 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 3
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island	0 0 0 0 0 0 0 1	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 NB 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 1	1 0 0 0 1 0 0 2	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 2	2 0 0 0 1 0 2 SF 80	1 0 0 0 0 0 0 0 1	NB 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	2 0 0 0 0 1 1 0 0 0 3 3 Total 630 0 21
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private)	0 0 0 0 0 0 0 1	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 NB 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 1 Total	1 0 0 0 1 0 0 2 SF 60 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 ttbound Des	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 2 Total 473 0	2 0 0 0 1 0 0 2 SF 80 0	1 0 0 0 0 0 0 0 1	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	2 0 0 0 0 1 1 0 0 3 3 Total 630 0
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island	0 0 0 0 0 0 0 1	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 1 1 Total 158 0 5	1 0 0 0 1 0 0 2 SF 60 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 0 2 2 Total 473 0 16	2 0 0 0 1 0 0 2 SF 80 0	1 0 0 0 0 0 0 1 EB 424 0	NB 0 0 0 0 0 0 0 0 o 0 0 0 o 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	2 0 0 0 0 1 1 0 0 0 3 3 Total 630 0 21
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito	0 0 0 0 0 0 0 1 SF 20 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 1 1 Total 158 0 5 32	1 0 0 0 1 0 0 2 SF 60 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 ttbound Des NB 0 0 16 88	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 2 Total 473 0 16 94	2 0 0 0 1 0 0 2 SF 80 0 0	1 0 0 0 0 0 0 1 1 EB 424 0 0	NB 0 0 0 0 0 0 0 0 Total NB 0 0 21 118	0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 1 1 0 0 0 3 3 Total 630 0 21 126
Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private) Sausalito Tiburon/Belvedere Total Total PM Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private)	0 0 0 0 0 0 0 1 1 SF 20 0 0	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0	1 0 0 0 0 0 0 0 0 1 1 Total 158 0 5 32 16	1 0 0 0 1 0 0 2 SF 60 0 0 25	EB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	SB 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 1 0 0 2 Total 473 0 16 94 47	2 0 0 0 1 0 0 2 SF 80 0 0 0 34	1 0 0 0 0 0 0 1 1 EB 424 0 0	NB 0 0 0 0 0 0 0 0 Total NB 0 21 118 29	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 0 1 1 0 0 0 3 3 Total 630 0 21 126 63

PROJECT TRIP GENERATION - WEEKEND PEAK RACE DAY **SUMMARY OF TRIPS**

VISITATION		Assumptions for		
SF Locations =	292,000 visitors	Midday Peak	Work	Non-work
Non-SF Locations =	24,000 visitors	Inbound	80%	80%
TOTAL =	316,000 visitors	Outbound	20%	20%

Person-trips by Mode		Daily	Trips		1	Midday	Peak Hour	Trips	
All Locations	SF	non-SF	Tota	al	SF	non-SF	Tot	al	% Daily
Auto	317,355	48,954	366,309	55%	79,519	12,311	91,830	55%	25%
Transit	189,087	1,233	190,320	29%	47,042	247	47,289	29%	25%
Walk/Other	106,758	212	106,970	16%	26,739	42	26,782	16%	25%
Total	613,200	50,400	663,600	100%	153,300	12,600	165,900	100%	25%
	92%	8%	100%		92%	8%	100%		
Vehicle Trips	87,593	13,084	100,677		21,718	3,276	24,995		25%
	87%	13%	100%		87%	13%	100%		
Avg. veh. occupancy	3.62	3.74	3.64		3.66	3.76	3.67		

Origin Distribution	Total I	Daily Perso	n-Trips	Midday Pea	k Hr Total I	Person-Trips	Midday Pe	ak Hour Tra	ansit-Trips	Midday Pe	ak Hour Ve	hicle-Trips
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	153,930	6,090	160,020	38,483	1,523	40,005	6,871	22	6,893	1,408	389	1,797
East Bay	171,780	22,260	194,040	42,945	5,565	48,510	15,178	127	15,305	7,277	1,424	8,701
North Bay	71,400	14,700	86,100	17,850	3,675	21,525	6,225	67	6,292	3,162	969	4,131
South Bay	186,690	5,880	192,570	46,673	1,470	48,143	16,191	24	16,215	8,568	397	8,965
Out of Region	29,400	1,470	30,870	7,350	368	7,718	2,577	7	2,584	1,304	97	1,401
Total	613.200	50.400	663,600	153.300	12.600	165.900	47.042	247	47.289	21.718	3.276	24.995

Midday Peak Hour	1	Inbound to)	0	utbound fro	om	Ì	Total	
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
Total Person Trips	122,640	10,080	132,720	30,660	2,520	33,180	153,300	12,600	165,900
	80%	80%	80%	20%	20%	20%			
Transit Trips	37,634	197	37,831	9,408	49	9,458	47,042	247	47,289
	80%	80%	80%	20%	20%	20%			
Vehicle Trips	17,375	2,621	19,996	4,344	655	4,999	21,718	3,276	24,995
	80%	80%	80%	20%	20%	20%			

				AUTO	PERSON	TRIPS							TF	RANSIT TRI	PS			
Midday Peak Hour		Inbound to		0	utbound fro	m		Total			Inbound to		C	Outbound fro	m		Total	
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	3,982	1,176	5,158	996	294	1,290	4,978	1,470	6,448	5,497	18	5,515	1,374	4	1,379	6,871	22	6,893
East Bay	22,164	4,344	26,508	5,541	1,086	6,627	27,705	5,430	33,136	12,142	102	12,244	3,036	25	3,061	15,178	127	15,305
North Bay	9,289	2,884	12,174	2,322	721	3,043	11,611	3,606	15,217	4,980	53	5,033	1,245	13	1,258	6,225	67	6,292
South Bay	24,366	1,156	25,522	6,091	289	6,381	30,457	1,445	31,903	12,953	19	12,972	3,238	5	3,243	16,191	24	16,215
Out of Region	3,813	288	4,101	953	72	1,025	4,766	360	5,126	2,062	6	2,068	515	1	517	2,577	7	2,584
Total	63,615	9,849	73,464	15,904	2,462	18,366	79,519	12,311	91,830	37,634	197	37,831	9,408	49	9,458	47,042	247	47,289

				WALK/OT	HER PERS	ON TRIPS							TOTA	L PERSON	TRIPS			
Midday Peak Hour		Inbound to		C	outbound fro	m		Total			Inbound to		0	utbound fro	m		Total	
All Locations	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco	21,306	24	21,331	5,327	6	5,333	26,633	31	26,664	30,786	1,218	32,004	7,697	305	8,001	38,483	1,523	40,005
East Bay	49	6	56	12	2	14	62	8	70	34,356	4,452	38,808	8,589	1,113	9,702	42,945	5,565	48,510
North Bay	11	2	13	3	1	3	14	3	16	14,280	2,940	17,220	3,570	735	4,305	17,850	3,675	21,525
South Bay	19	1	20	5	0	5	24	1	25	37,338	1,176	38,514	9,335	294	9,629	46,673	1,470	48,143
Out of Region	5	0	5	1	0	1	6	0	7	5,880	294	6,174	1,470	74	1,544	7,350	368	7,718
Total	21,391	34	21,425	5,348	8	5,356	26,739	42	26,782	122,640	10,080	132,720	30,660	2,520	33,180	153,300	12,600	165,900

					VE	EHICLE TRI	PS			
Midday Peak Hour	ſ		Inbound to		C	outbound fro	m		Total	
All Locations		SF	non-SF	Total	SF	non-SF	Total	SF	non-SF	Total
San Francisco		1,126	311	1,438	282	78	359	1,408	389	1,797
East Bay		5,821	1,140	6,961	1,455	285	1,740	7,277	1,424	8,701
North Bay		2,529	775	3,305	632	194	826	3,162	969	4,131
South Bay		6,854	318	7,172	1,714	79	1,793	8,568	397	8,965
Out of Region		1,043	78	1,121	261	19	280	1,304	97	1,401
	Total	17,375	2,621	19,996	4,344	655	4,999	21,718	3,276	24,995
	-	80%	80%	80%	20%	20%	20%	•		

Midday Peak Hour Trips	Daily	Aut	o Person T	rips	1	Fransit Trips	S	Wa	alk/Other Tr	ips	Tota	al Person T	rips	,	Vehicle-Trip	s
by SF Viewing Location	Visitors	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total	Inbound	Outbound	Total
Presidio and Crissy Field	82,000	17,864	4,466	22,331	10,568	2,642	13,210	6,007	1,502	7,509	34,440	8,610	43,050	4,879	1,220	6,099
Marina and Fort Mason to Acquatic Park	62,000	13,507	3,377	16,884	7,991	1,998	9,988	4,542	1,135	5,677	26,040	6,510	32,550	3,689	922	4,611
Fisherman's Wharf	25,000	5,446	1,362	6,808	3,222	806	4,028	1,831	458	2,289	10,500	2,625	13,125	1,488	372	1,859
NE Embarcadero (Fisherman's Wharf to Pier 42)	106,000	23,093	5,773	28,866	13,662	3,415	17,077	7,765	1,941	9,707	44,520	11,130	55,650	6,307	1,577	7,884
Downtown	12,000	2,614	654	3,268	1,547	387	1,933	879	220	1,099	5,040	1,260	6,300	714	179	893
Other SF	5,000	1,089	272	1,362	644	161	806	366	92	458	2,100	525	2,625	298	74	372
Total	292,000	63,615	15,904	79,519	37,634	9,408	47,042	21,391	5,348	26,739	122,640	30,660	153,300	17,375	4,344	21,718

Midday Peak Hr Vh-Trips		In	bound Arriv	ing from				Ot	utbound De	estined to		1			Tota	I		
by SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Presidio and Crissy Field	316	1,635	710	1,925	293	4,879	79	409	178	481	73	1,220	395	2,043	888	2,406	366	6,099
Marina and FM to Aq Park	239	1,236	537	1,455	222	3,689	60	309	134	364	55	922	299	1,545	671	1,819	277	4,611
Fisherman's Wharf	96	498	217	587	89	1,488	24	125	54	147	22	372	121	623	271	734	112	1,859
NE Embarcadero (FW to P42)	409	2,113	918	2,488	379	6,307	102	528	230	622	95	1,577	511	2,641	1,148	3,110	473	7,884
Downtown	46	239	104	282	43	714	12	60	26	70	11	179	58	299	130	352	54	893
Other SF	19	100	43	117	18	298	5	25	11	29	4	74	24	125	54	147	22	372
Total	1,126	5,821	2,529	6,854	1,043	17,375	282	1,455	632	1,714	261	4,344	1,408	7,277	3,162	8,568	1,304	21,718

Midday Vehicle Trips by		In	bound Arriv	ing from		1		O	utbound De	stined to					Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	204	806	0	250	44	1,304	51	202	0	62	11	326	255	1,008	0	312	55	1,630
Alcatraz Island (private)	21	11	11	11	0	55	5	3	3	3	0	14	27	13	14	14	0	68
Angel Island	11	54	44	0	0	109	3	13	11	0	0	27	13	67	55	0	0	136
F. Baker/M. Headlands	21	0	288	57	22	388	5	0	72	14	6	97	27	0	360	71	28	485
Cavallo Point (private)	54	11	22	0	0	87	13	3	6	0	0	22	67	13	28	0	0	108
Sausalito	0	194	343	0	11	548	0	48	86	0	3	137	0	242	429	0	14	685
Tiburon/Belvedere	0	65	66	0	0	131	0	16	17	0	0	33	0	81	83	0	0	164
Total	311	1,140	775	318	78	2,621	78	285	194	79	19	655	389	1,424	969	397	97	3,276
_	12%	43%	30%	12%	3%	100%	12%	43%	30%	12%	3%	100%	12%	43%	30%	12%	3%	100%

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-																		
Midday Auto Person Trips by			bound Arriv	0					tbound Des						Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	770	3,074	0	908	164	4,917	193	768	0	227	41	1,229	963	3,842	0	1,136	206	6,146
Alcatraz Island (private)	81	41	41	41	0	205	20	10	10	10	0	51	101	51	52	52	0	256
Angel Island	41	205	165	0	0	410	10	51	41	0	0	103	51	256	206	0	0	513
F. Baker/M. Headlands	81	0	1,071	206	82	1,441	20	0	268	52	21	360	101	0	1,339	258	103	1,802
Cavallo Point (private)	203	41	82	0	0	326	51	10	21	0	0	82	253	51	103	0	0	408
Sausalito	0	738	1,277	0	41	2,056	0	184	319	0	10	514	0	922	1,597	0	51	2,570
Tiburon/Belvedere	0	246	247	0	0	493	0	61	62	0	0	123	0	307	309	0	0	616
Total	1,176	4,344	2,884	1,156	288	9,849	294	1,086	721	289	72	2,462	1,470	5,430	3,606	1,445	360	12,311
Midday Transit Trips by		In	nbound Arriv	ving from		ĺ		Ou	tbound Des	stined to		ĺ			Total			
Non-SF Viewing Location	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total	SF	EB	NB	SB	Other	Total
Treasure Island	11	72	0	15	3	102	3	18	0	4	1	25	14	90	0	19	4	127
Alcatraz Island (private)	1	1	1	1	0	4	0	0	0	0	0	1	2	1	1	1	0	5
Angel Island	1	5	3	0	0	8	0	1	1	0	0	2	1	6	4	0	0	11
F. Baker/M. Headlands	1	0	20	3	2	26	0	0	5	1	0	7	2	0	25	4	2	33
Cavallo Point (private)	3	1	2	0	0	6	1	0	0	0	0	1	4	1	2	0	0	7
Sausalito	0	17	24	0	1	42	0	4	6	0	0	10	0	22	29	0	1	52
Tiburon/Belvedere	0	6	5	0	0	10	0	1	1	0	0	3	0	7	6	0	0	13
Total	18	102	53	19	6	197	4	25	13	5	1	49	22	127	67	24	7	247
Midday Walk/Other Trips by Non-SF Viewing Location	SF	In EB	nbound Arriv NB	ving from SB	Other	Total	SF	Ou EB	tbound Des	stined to SB	Other	Total	SF	EB	Total NB	SB	Other	Total
Treasure Island	16	5	0	0	0	21	4	1	0	0	0	5	20	6	0		^	
Alcatraz Island (private)	2	0	0	0	0	2								U	U	1	0	26
Angel Island	1	0	_		U		0	0	0	0	0	0	2	0	0	0	0	
F. Baker/M. Headlands	2		0	0	0	1	0 0	0 0			0 0	0	2 1					26 2 2
Cavallo Point (private)		0	0 1	0 0	-	1 3			0	0		-		0	0	0	0	2
Sausalito	4	0 0	-		0	1 3 4	0	0	0	0	0	-	1	0	0	0	0 0	2 2
Juusunio	4 0	-	1	0	0	1 3 4 2	0	0 0	0 0	0 0 0	0	-	1 2	0 0 0	0 0 1	0 0	0 0 0	2 2 3
Tiburon/Belvedere		0	1	0	0 0 0	1 3 4 2 1	0 0 1	0 0 0	0 0 0 0	0 0 0 0	0 0	0 0 1	1 2 5	0 0 0	0 0 1 0	0 0 0 0	0 0 0	2 2 3 5
	0	0	1 0 1	0 0	0 0 0 0	1 3 4 2 1	0 0 1 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 1 0	1 2 5 0	0 0 0 0	0 0 1 0	0 0 0 0	0 0 0 0	2 2 3 5 2
Tiburon/Belvedere	0	0 1 0	1 0 1 0	0 0 0 0	0 0 0 0	1 3 4 2 1	0 0 1 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 1 0	1 2 5 0	0 0 0 0 1	0 0 1 0 1	0 0 0 0 0	0 0 0 0 0	2 2 3 5 2
Tiburon/Belvedere	0 0 24	0 1 0 6	1 0 1 0	0 0 0 0 0	0 0 0 0	1 3 4 2 1	0 0 1 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 1 0	1 2 5 0	0 0 0 0 1	0 0 1 0 1	0 0 0 0 0 0 0 1	0 0 0 0 0	2 2 3 5 2
Tiburon/Belvedere Total	0 0 24	0 1 0 6	1 0 1 0	0 0 0 0 0	0 0 0 0	1 3 4 2 1	0 0 1 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 1 0	1 2 5 0	0 0 0 0 1	0 0 1 0 1 0 2	0 0 0 0 0 0 0 1	0 0 0 0 0	2 2 3 5 2
Tiburon/Belvedere Total Total Midday Person Trips b	0 0	0 1 0 6	1 0 1 0 2	0 0 0 0 1	0 0 0 0 0	1 3 4 2 1 34 Total	0 0 1 0 0	0 0 0 0 0 2	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 1 0 0 8	1 2 5 0 0	0 0 0 0 1 0	0 0 1 0 1 0 2	0 0 0 0 0 0	0 0 0 0 0 0	2 2 3 5 2 1 42
Tiburon/Belvedere Total Total Midday Person Trips by Non-SF Viewing Location	0 0 24 SF	0 1 0 6	1 0 1 0 2 2	0 0 0 0 1 1 ving from SB 924	0 0 0 0 0 0	1 3 4 2 1	0 0 1 0 0 6	0 0 0 0 0 2	0 0 0 0 0 0 0 0 stbound Des	0 0 0 0 0 0 0	0 0 0 0 0	0 0 1 0 0 0 8	1 2 5 0 0 31	0 0 0 0 1 0 8	0 0 1 0 1 0 2 Total NB	0 0 0 0 0 0 0 1	0 0 0 0 0 0 0	2 2 3 5 2 1 42
Tiburon/Belvedere Total Total Midday Person Trips by Non-SF Viewing Location Treasure Island	0 0 24 SF 798	0 1 0 6 6	1 0 1 0 2 2 nbound Arriv NB 0	0 0 0 0 1	0 0 0 0 0 0 0	1 3 4 2 1 1 34 Total 5,040	0 0 1 0 0 6	0 0 0 0 0 2 2 Ou EB	0 0 0 0 0 0 0 0 ttbound Des	0 0 0 0 0 0 0 0 0 strined to SB	0 0 0 0 0 0 0	0 0 1 0 0 8	1 2 5 0 0 31 SF	0 0 0 0 1 0 8 EB	0 0 1 0 1 0 2 Total NB	0 0 0 0 0 0 0 1	0 0 0 0 0 0 0 0	2 2 3 5 2 1 42
Tiburon/Belvedere Total Total Midday Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private)	0 0 24 SF 798 84	0 1 0 6 6 In EB 3,150 42	1 0 1 0 2 2 nbound Arriv NB 0 42	0 0 0 0 1 1 ving from SB 924 42	0 0 0 0 0 0 0 0	Total 5,040 210	0 0 1 0 0 6 SF 200 21	0 0 0 0 0 2 2 Ou EB	0 0 0 0 0 0 0 ttbound Des NB 0	0 0 0 0 0 0 0 0 strined to SB 231	0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 0 8 1 1 0 0 0 1 1 1 1 1 1 1	1 2 5 0 0 0 31 SF 998 105	0 0 0 0 1 0 8 EB 3,938 53	0 0 1 0 1 0 2 Total NB 0 52	0 0 0 0 0 0 0 1 1 SB 1,155 53	0 0 0 0 0 0 0 0	2 2 3 5 2 1 42 Total 6,300 262
Tiburon/Belvedere Total Total Midday Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island	SF 798 84 42	0 1 0 6 6 In EB 3,150 42 210	1 0 1 0 2 nbound Arriv NB 0 42 168	0 0 0 0 1 ving from SB 924 42 0	0 0 0 0 0 0 0 0 0 0	Total 5,040 210 420	0 0 1 0 0 6 SF 200 21	0 0 0 0 0 2 2 Ou EB 788 11 53	0 0 0 0 0 0 0 ttbound Des NB 0 10	0 0 0 0 0 0 0 0 stined to SB 231 11	0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 0 8 8 Total 1,260 52 105	1 2 5 0 0 0 31 SF 998 105 53	0 0 0 0 1 0 8 8 EB 3,938 53 263	0 0 1 0 1 0 2 Total NB 0 52 210	0 0 0 0 0 0 0 1 1 SB 1,155 53 0	0 0 0 0 0 0 0 0 Other 210 0	2 2 3 5 2 1 42 Total 6,300 262 525
Tiburon/Belvedere Total Total Midday Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands	0 0 24 SF 798 84 42 84	0 1 0 6 In EB 3,150 42 210 0	1 0 1 0 2 nbound Arriv NB 0 42 168 1,092 84	0 0 0 0 1 1 ving from SB 924 42 0 210	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total 5,040 210 420 1,470 336	0 0 1 0 0 6 SF 200 21 11 21	0 0 0 0 0 2 2 SB 788 11 53 0	0 0 0 0 0 0 0 ttbound Des NB 0 10 42 273	0 0 0 0 0 0 0 0 strined to SB 231 11 0 53	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 0 8 8 Total 1,260 52 105 367	1 2 5 0 0 0 31 SF 998 105 53 105	0 0 0 0 1 0 8 8 EB 3,938 53 263 0	0 0 1 0 1 0 2 Total NB 0 52 210 1,365 105	0 0 0 0 0 0 1 1 SB 1,155 53 0 263	0 0 0 0 0 0 0 0 O O O O O O O O O O	2 2 3 5 2 1 42 Total 6,300 262 525 1,837 420
Tiburon/Belvedere Total Total Midday Person Trips by Non-SF Viewing Location Treasure Island Alcatraz Island (private) Angel Island F. Baker/M. Headlands Cavallo Point (private)	0 0 24 SF 798 84 42 84 210	0 1 0 6 In EB 3,150 42 210 0 42	1 0 1 0 2 nbound Arriv NB 0 42 168 1,092	0 0 0 0 1 1 ving from SB 924 42 0 210	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total 5,040 210 420 1,470	0 0 1 0 0 6 SF 200 21 11 21 53	0 0 0 0 0 2 2 0 EB 788 11 53 0 11	0 0 0 0 0 0 ttbound Des NB 0 10 42 273 21	0 0 0 0 0 0 0 0 stined to SB 231 11 0 53 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 0 8 8 Total 1,260 52 105 367 84	1 2 5 0 0 0 31 SF 998 105 53 105 263	0 0 0 0 1 0 8 8 EB 3,938 53 263 0 53	0 0 1 0 1 0 2 Total NB 0 52 210 1,365	0 0 0 0 0 0 1 1 SB 1,155 53 0 263 0	0 0 0 0 0 0 0 0 Other 210 0 0 105 0	2 2 3 5 2 1 42 Total 6,300 262 525 1,837

34th America's Cup - 2013 PROJECT TRIP GENERATION - WEEKDAY PEAK RACE DAY LAND SPECTATORS IN SAN FRANCISCO (WORK TRIPS)

Daily Visitation	:	41,450	spectators	PEAK HOUR			Week	day PM	Saturda	y Midday
DAILY				% of total daily	trips during p	eak hour [c]:	20%	-	25%	-
Person-trip gener	ation rate [a]:	2.1	trips/spect.	Peak hour pers	on-trip genera	ation rate:	0.4	trips/spect.	0.5	trips/spect.
Total daily person	ı-trips:	87,045	person-trips	Total person-trip	os during pea	k hour:	17,409	person-trips	21,761	person-trips
Percent of Work t	rips [b]:	5%		% of Work trips	during peak	hour [d]:	4%		4%	
Number of daily V	Vork trips:	4,352	person-trips	No. of peak hou	ır Work perso	n-trips:	696	person-trips	870	person-trips
				Avg. Veh.	D	aily	Week	day PM	Saturda	y Midday
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
	[e]			[f]	Trips	Trips	Trips	Trips	Trips	Trips
San Francisco	25.1%	Auto	13.8%	1.32	151	114	24	18	30	23
		Transit	36.0%		393		63		79	
		Walk/Other	50.2%		549		88		110	
		TOTAL	100.0%		1,093	114	175	18	219	23
East Bay	28.0%	Auto	39.4%	3.33	480	144	77	23	96	29
		Transit	57.0%		694		111		139	
		Walk/Other	3.6%		44		7		9	
		TOTAL	100.0%		1,218	144	195	23	244	29
North Bay	11.7%	Auto	52.8%	1.70	268	158	43	25	54	32
		Transit	45.3%		230		37		46	
		Walk/Other	1.9%		10		2		2	
		TOTAL	100.0%		507	158	81	25	101	32
South Bay	30.4%	Auto	58.0%	1.23	769	625	123	100	154	125
		Transit	40.7%		539		86		108	
		Walk/Other	1.3%		17		3		3	
		TOTAL	100.0%		1,325	625	212	100	265	125
Out of Region	4.8%	Auto	47.8%	1.50	100	67	16	11	20	13
		Transit	50.0%		104		17		21	
		Walk/Other	2.2%		5		1		1	
		TOTAL	100.0%		209	67	33	11	42	13
TOTAL	100.0%	Auto	40.6%	1.60	1,767	1,107	283	177	353	221
		Transit	45.1%		1,961		314		392	
		Walk/Other	14.3%		624		100		125	
		TOTAL	100.0%		4,352	1,107	696	177	870	221

[[]a] Two trips per spectator plus two trips per employee

34th America's Cup - 2013
PROJECT TRIP GENERATION - WEEKDAY PEAK RACE DAY
LAND SPECTATORS IN SAN FRANCISCO (NON-WORK TRIPS)

Daily Visitation	1:	41,450	spectators	PEAK HOUR			Week	day PM	Saturda	y Midday
DAILY				% of total daily	trips during pe	eak hour [c]:	20%		25%	-
Person-trip Gener	ration Rate [a]:	2.1	trips/spect.	Peak hour pers	on-trip genera	ation rate:	0.4	trips/spect.	0.5	trips/spect.
Total Person-trips	S:	87,045	person-trips	Total person-tri	ps during pea	k hour:	17,409	person-trips	21,761	person-trips
Percent of Non-W	/ork trips [b]:	95%		% of Non-Work	trips during p	eak hour [d]:	96%		96%	
Number of daily N	lon-Work trips:	82,693	person-trips	No. of peak hou	ır Non-Work p	erson-trips:	16,713	person-trips	20,891	person-trips
				Avg. Veh.	DA	VILY .	Week	day PM	Saturda	y Midday
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
	[e]			[g]	Trips	Trips	Trips	Trips	Trips	Trips
San Francisco	25.1%	Auto	12.9%	2.21	2,679	1,210	541	245	677	306
		Transit	17.1%	· ·	3,551		718		897	
		Walk/Other	70.0%		14,538		2,938		3,673	
		TOTAL	100.0%		20,768	1,210	4,197	245	5,247	306
East Bay	28.0%	Auto	65.6%	2.43	15,172	6,244	3,066	1,262	3,833	1,577
		Transit	34.4%		7,970		1,611		2,013	
		Walk/Other			0		0		0	
		TOTAL	100.0%		23,142	6,244	4,677	1,262	5,846	1,577
North Bay	11.7%	Auto	88.1%	1.91	8,490	4,445	1,716	898	2,145	1,123
		Transit	11.9%		1,146		232		290	
		Walk/Other			0		0		0	
		TOTAL	100.0%		9,636	4,445	1,947	898	2,434	1,123
South Bay	30.4%	Auto	70.7%	2.46	17,812	7,241	3,600	1,463	4,500	1,829
		Transit	29.3%		7,364		1,488		1,860	
		Walk/Other			0		0		0	
		TOTAL	100.0%		25,177	7,241	5,088	1,463	6,360	1,829
Out of Region	4.8%	Auto	59.8%	3.17	2,375	749	480	151	600	189
		Transit	40.2%		1,595		322		403	
		Walk/Other			0		0		0	
		TOTAL	100.0%		3,970	749	802	151	1,003	189
TOTAL	100.0%	Auto	56.3%	2.34	46,528	19,889	9,404	4,020	11,755	5,025
		Transit	26.2%		21,627		4,371		5,464	
		Walk/Other	17.6%		14,538		2,938		3,673	
		TOTAL	100.0%		82,693	19,889	16,713	4,020	20,891	5,025

[[]a] Two trips per spectator plus two trips per employee

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Giants World Series

Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/5% out; PM peak hour: 5% in / 15% out]

[[]d] SF Guidelines; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]f] SF Guidelines; Work trips to SD1-All (All of SF assumed to be like SD1)

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Glants World Series Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/ 5% out; PM peak hour: 5% in / 15% out]

[[]d] SF Guidelines; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]ij SF Guidelines; Visitor trips to SD1-All Other (All of SF assumed to be like SD1. Outside SF, Walk/Other % has been proportionally allocated to Auto and Transit %)

[[]g] SF Guidelines; Visitor trips to SD1-All Other (All of SF assumed to be like SD1)

34th America's Cup - 2013 PROJECT TRIP GENERATION - WEEKDAY PEAK RACE DAY LAND SPECTATORS OUTSIDE SAN FRANCISCO (WORK TRIPS)

Daily Visitation	:	2,250	spectators	PEAK HOUR			Week	day PM	Saturday	y Midday
DAILY				% of total daily t	trips during pe	eak hour [c]:	20%		25%	-
Person-trip genera	ation rate [a]:	2.1	trips/spect.	Peak hour perso			0.4	trips/spect.	0.5	trips/spect.
Total daily person	-trips:	4,725	person-trips	Total person-trip	os during peal	k hour:	945	person-trips	1,181	person-trips
Percent of Work to	rips [b]:	5%	•	% of Work trips	during peak I	hour [d]:	4%	•	4%	
Number of daily W	Vork trips:	236	person-trips	No. of peak hou	ı <u>r Wo</u> rk perso	n-trips:	38	person-trips	47	person-trips
<u> </u>				Avg. Veh.	Da	aily	Week	day PM	Saturday	y Midday
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
<u>"</u>	[e]	·		[f]	Trips	Trips	Trips	Trips	Trips	Trips
San Francisco	12.0%	Auto	13.8%	1.32	4	3	1	0	1	1
1	ļ	Transit	36.0%		10		2	i	2	
1		Walk/Other	50.2%		14		2	l	3	
		TOTAL	100.0%		28	3	5	0	6	1
East Bay	44.9%	Auto	39.4%	3.33	42	13	7	2	8	3
1		Transit	57.0%		60		10	l	12	
<u>'</u>		Walk/Other	3.6%	<u></u>	4		1	۱	1	
		TOTAL	100.0%		106	13	17	2	21	3
North Bay	28.9%	Auto	52.8%	1.70	36	21	6	3	7	4
1		Transit	45.3%		31		5	l	6	
'		Walk/Other	1.9%	<u></u>	1		0	۱	0	
		TOTAL	100.0%		68	21	11	3	14	4
South Bay	11.6%	Auto	58.0%	1.23	16	13	3	2	3	3
1	ļ	Transit	40.7%		11		2	i	2	
<u>'</u>		Walk/Other	1.3%	<u> </u>	0		0	1	0	
		TOTAL	100.0%		27	13	4	2	5	3
Out of Region	2.7%	Auto	47.8%	1.50	3	2	0	0	1	0
Ĭ]	Transit	50.0%		3		1	ŀ	1	
1]	Walk/Other	2.2%		0		0	ŀ	0	
		TOTAL	100.0%		6	2	1	0	1	0
TOTAL	100.0%	Auto	42.6%	1.95	101	52	16	8	20	10
	ļ	Transit	49.0%		116		19	i	23	
]	Walk/Other	8.4%		20		3	ŀ	4	I
		TOTAL	100.0%		236	52	38	8	47	10

[[]a] Two trips per spectator plus two trips per employee

34th America's Cup - 2013
PROJECT TRIP GENERATION - WEEKDAY PEAK RACE DAY
LAND SPECTATORS OUTSIDE SAN FRANCISCO (NON-WORK TRIPS)

Daily Visitation:		2,250	spectators	PEAK HOUR			Week	day PM	Saturday Midday	
DAILY			-	% of total daily	trips during p	eak hour [c]:	20%		25%	
Person-trip Generation Rate [a]:		2.1 trips/spect.		Peak hour person-trip generation rate:			0.4 trips/spect.		0.5 trips/spect.	
Total Person-trips	S:	4,725 person-trips		Total person-trips during peak hour:			945 person-trips		1,181 person-trips	
Percent of Non-W	Vork trips [b]:	95%		% of Non-Work trips during peak hour [d]:			96%		96%	
Number of daily N	Non-Work trips:	4,489	4,489 person-trips		ır Non-Work	person-trips:	907 person-trips		1,134 person-trips	
				Avg. Veh.	D/	\ILY	Week	day PM	Saturda	y Midday
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
	[e]			[g]	Trips	Trips	Trips	Trips	Trips	Trips
San Francisco	12.0%	Auto	100.0%	2.21	539	243	109	49	136	61
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		539	243	109	49	136	61
East Bay	44.9%	Auto	100.0%	2.43	2,015	829	407	168	509	209
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		2,015	829	407	168	509	209
North Bay	28.9%	Auto	100.0%	1.91	1,297	679	262	137	328	172
-		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		1,297	679	262	137	328	172
South Bay	11.6%	Auto	100.0%	2.46	519	211	105	43	131	53
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		519	211	105	43	131	53
Out of Region	2.7%	Auto	100.0%	3.82	120	31	24	6	30	8
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		120	31	24	6	30	8
TOTAL	100.0%	Auto	100.0%	2.25	4,489	1,994	907	403	1,134	504
		Transit	0.0%		0		0		0	
		Walk/Other	0.0%		0		0		0	
		TOTAL	100.0%		4,489	1,994	907	403	1,134	504

[[]a] Two trips per spectator plus two trips per employee

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Giants World Series

Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/ 5% out; PM peak hour: 5% in / 15% out]

[[]d] SF Guidelines; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]f] SF Guidelines; Work trips to SD1-All (All of SF assumed to be like SD1)

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Giants World Series

Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/5% out; PM peak hour: 5% in / 15% out]

[[]d] SF Guidelines; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]f] All visitor trips are allocated to Auto

[[]g] SF Guidelines; Visitor trips to SD1-All Other (All of SF assumed to be like SD1)

34th America's Cup - 2013 PROJECT TRIP GENERATION - WEEKEND PEAK RACE DAY LAND SPECTATORS IN SAN FRANCISCO (WORK TRIPS)

Daily Visitation:		292,000	spectators	PEAK HOUR	PEAK HOUR			Weekday PM		Saturday Midday	
DAILY					trips during p	eak hour [c]:	20%		25%		
Person-trip Generation Rate [a,b]		2.1 trips/spect.		Peak hour pers	on-trip genera	ation rate:	0.4	trips/spect.	0.5 trips/spect.		
Total daily person-trips:		613,200	person-trips	Total person-trip	os during pea	k hour:	122,640	person-trips	153,300	person-trips	
Percent of Work to	rips [b]:	5%		% of Work trips	during peak	hour [d]:	4%		4%		
Number of daily W	/ork trips:	30,660	person-trips	No. of peak hou	ır Work perso	n-trips:	4,906	person-trips	6,132	person-trips	
				Avg. Veh.	D	aily	Week	day PM	Saturda	ıy Midday	
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	
	[e]			[f]	Trips	Trips	Trips	Trips	Trips	Trips	
San Francisco	25.1%	Auto	13.8%	1.32	1,062	804	170	129	212	161	
		Transit	36.0%		2,771		443		554		
		Walk/Other	50.2%		3,864		618		773		
		TOTAL	100.0%		7,697	804	1,231	129	1,539	161	
East Bay	28.0%	Auto	39.4%	3.33	3,384	1,016	541	163	677	203	
		Transit	57.0%		4,896		783		979		
		Walk/Other	3.6%		309		49		62		
		TOTAL	100.0%		8,589	1,016	1,374	163	1,718	203	
North Bay	11.6%	Auto	52.8%	1.70	1,885	1,109	302	177	377	222	
		Transit	45.3%		1,617		259		323		
		Walk/Other	1.9%		68		11		14		
		TOTAL	100.0%		3,570	1,109	571	177	714	222	
South Bay	30.4%	Auto	58.0%	1.23	5,414	4,402	866	704	1,083	880	
		Transit	40.7%		3,799		608		760		
		Walk/Other	1.3%		121		19		24		
		TOTAL	100.0%		9,335	4,402	1,494	704	1,867	880	
Out of Region	4.8%	Auto	47.8%	1.50	703	468	112	75	141	94	
_		Transit	50.0%		735		118		147		
		Walk/Other	2.2%		32		5		6		
		TOTAL	100.0%		1,470	468	235	75	294	94	
TOTAL	100.0%	Auto	40.6%	1.60	12,448	7,799	1,992	1,248	2,490	1,560	
		Transit	45.1%		13,818		2,211		2,764		
		Walk/Other	14.3%		4,394		703		879		
		TOTAL	100.0%		30,660	7,799	4,906	1,248	6,132	1,560	

[[]a] Two trips per spectator plus two trips per employee

34th America's Cup - 2013
PROJECT TRIP GENERATION - WEEKEND PEAK RACE DAY
LAND SPECTATORS IN SAN FRANCISCO (NON-WORK TRIPS)

Daily Visitation:		292,000	spectators	PEAK HOUR			Week	day PM	Saturday Midday	
DAILY				% of total daily trips during peak hour [c]:			20%		25%	
Person-trip Generation Rate [a,b]		2.1 trips/spect.		Peak hour person-trip generation rate:			0.4 trips/spect.		0.5 trips/spect.	
Total Person-trips:		613,200 person-trips		Total person-tri	Total person-trips during peak hour:			person-trips	153,300 person-trips	
Percent of Non-W	ork trips [b]:	95%		% of Non-Work	trips during p	eak hour [d]:	96%		96%	
Number of daily N	lon-Work trips:	582,540 person-trips		No. of peak hou	ır Non-Work p	erson-trips:	117,734	person-trips	147,168 person-trips	
				Avg. Veh.	D <i>A</i>	VILY	Week	day PM	Saturda	y Midday
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
	[e]			[g]	Trips	Trips	Trips	Trips	Trips	Trips
San Francisco	25.1%	Auto	12.9%	3.82	18,864	4,937	3,813	998	4,766	1,247
		Transit	17.1%		25,006		5,054		6,317	
		Walk/Other	70.0%		102,363		20,688		25,860	
		TOTAL	100.0%		146,234	4,937	29,555	998	36,943	1,247
East Bay	28.0%	Auto	65.6%	3.82	106,988	27,999	21,623	5,659	27,029	7,073
-		Transit	34.4%		56,203		11,359		14,199	
		Walk/Other			0		0		0	
		TOTAL	100.0%		163,191	27,999	32,982	5,659	41,227	7,073
North Bay	11.6%	Auto	65.6%	3.82	44,469	11,638	8,988	2,352	11,234	2,940
		Transit	34.4%		23,361		4,721		5,902	
		Walk/Other			0		0		0	
		TOTAL	100.0%		67,830	11,638	13,709	2,352	17,136	2,940
South Bay	30.4%	Auto	65.6%	3.82	116,275	30,429	23,500	6,150	29,375	7,687
-		Transit	34.4%		61,081		12,345		15,431	
		Walk/Other			0		0		0	
		TOTAL	100.0%		177,356	30,429	35,844	6,150	44,806	7,687
Out of Region	4.8%	Auto	65.6%	3.82	18,311	4,792	3,701	968	4,626	1,211
		Transit	34.4%		9,619		1,944		2,430	
		Walk/Other			0		0		0	
		TOTAL	100.0%		27,930	4,792	5,645	968	7,056	1,211
TOTAL	100.0%	Auto	52.3%	3.82	304,907	79,794	61,623	16,127	77,029	20,158
		Transit	30.1%		175,269		35,423		44,279	
		Walk/Other	17.6%		102,363		20,688		25,860	
		TOTAL	100.0%		582,540	79,794	117,734	16,127	147,168	20,158

[[]a] Two trips per spectator plus two trips per employee

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Giants World Series

Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/ 5% out; PM peak hour: 5% in / 15% out]

[[]d] SF Guidelines; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]f] SF Guidelines; Work trips to SD1-All (All of SF assumed to be like SD1)

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Glants World Series Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/5% out; PM peak hour: 5% in / 15% out]

[[]d] SF Guidelines; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]f] SF Guidelines; Visitor trips to SD1-All Other (All of SF assumed to be like SD1. Outside SF, all assumed to be similar to East Bay; in addition Walk/Other % has been proportionally allocated to Auto and Transit %)

[[]g] Fisherman's Wharf Visitor Survey - Fisherman's Wharf Community Benefit District, November 2006

34th America's Cup - 2013 PROJECT TRIP GENERATION - WEEKEND PEAK RACE DAY LAND SPECTATORS OUTSIDE SAN FRANCISCO (WORK TRIPS)

Daily Visitation:		24,000	00 spectators PEAK HOUR				Week	day PM	Saturday Midday	
DAILY				% of total daily trips during peak hour [c]:			20%		25%	
Person-trip Generation Rate [a,b]		2.1 trips/spect.		Peak hour person-trip generation rate:			0.4 trips/spect.		0.5 trips/spect.	
Total daily person	-trips:	50,400	person-trips	Total person-trip	Total person-trips during peak hour:			person-trips	12,600 person-trips	
Percent of Work t	rips [b]:	5%		% of Work trips	during peak l	hour [d]:	4%		4%	
Number of daily V	Vork trips:	2,520	person-trips	No. of peak hou	ır Work perso	n-trips:	403	person-trips	504	person-trips
				Avg. Veh.	Da	aily	Week	day PM	Saturday Midday	
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
	[e]			[f]	Trips	Trips	Trips	Trips	Trips	Trips
San Francisco	12.1%	Auto	13.8%	1.32	42	32	7	5	8	6
		Transit	36.0%		110		18		22	
		Walk/Other	50.2%		153		24		31	
		TOTAL	100.0%		305	32	49	5	61	6
East Bay	44.2%	Auto	39.4%	3.33	439	132	70	21	88	26
		Transit	57.0%		634		102		127	
		Walk/Other	3.6%		40		6		8	
		TOTAL	100.0%		1,113	132	178	21	223	26
North Bay	29.2%	Auto	52.8%	1.70	388	228	62	37	78	46
		Transit	45.3%		333		53		67	
		Walk/Other	1.9%		14		2		3	
		TOTAL	100.0%		735	228	118	37	147	46
South Bay	11.7%	Auto	58.0%	1.23	171	139	27	22	34	28
		Transit	40.7%		120		19		24	
		Walk/Other	1.3%		4		1		1	
		TOTAL	100.0%		294	139	47	22	59	28
Out of Region	2.9%	Auto	47.8%	1.50	35	23	6	4	7	5
		Transit	50.0%		37		6		7	
		Walk/Other	2.2%		2		0		0	
		TOTAL	100.0%		74	23	12	4	15	5
TOTAL	100.0%	Auto	42.6%	1.94	1,074	554	172	89	215	111
		Transit	48.9%		1,233		197		247	
		Walk/Other	8.4%		212		34		42	
		TOTAL	100.0%		2,520	554	403	89	504	111

[[]a] Two trips per spectator plus two trips per employee

34th America's Cup - 2013
PROJECT TRIP GENERATION - WEEKEND PEAK RACE DAY
LAND SPECTATORS OUTSIDE SAN FRANCISCO (NON-WORK TRIPS)

Daily Visitation:		24,000	spectators	PEAK HOUR			Week	day PM	Saturday Midday	
DAILY				% of total daily trips during peak hour [c]:			20%		25%	
Person-trip Generation Rate [a,b]		2.1 trips/spect.		Peak hour person-trip generation rate:			0.4 trips/spect.		0.5 trips/spect.	
Total Person-trips	s:			Total person-tri	Total person-trips during peak hour:			person-trips	12,600 person-trips	
Percent of Non-W	ork trips [b]:			% of Non-Work	% of Non-Work trips during peak hour [d]:				96%	
Number of daily N	lon-Work trips:	47,880	person-trips	No. of peak hour Non-Work person-trips:			9,677	person-trips	12,096 person-trips	
				Avg. Veh.	D/	AILY	Week	day PM	Saturda	y Midday
Origins	Distribution	Mode	Percent [f]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
	[e]			[g]	Trips	Trips	Trips	Trips	Trips	Trips
San Francisco	12.1%	Auto	100.0%	3.82	5,786	1,514	1,169	306	1,462	382
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		5,786	1,514	1,169	306	1,462	382
East Bay	44.2%	Auto	100.0%	3.82	21,147	5,534	4,274	1,118	5,342	1,398
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		21,147	5,534	4,274	1,118	5,342	1,398
North Bay	29.2%	Auto	100.0%	3.82	13,965	3,655	2,822	739	3,528	923
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		13,965	3,655	2,822	739	3,528	923
South Bay	11.7%	Auto	100.0%	3.82	5,586	1,462	1,129	295	1,411	369
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		5,586	1,462	1,129	295	1,411	369
Out of Region	2.9%	Auto	100.0%	3.82	1,397	365	282	74	353	92
		Transit			0		0		0	
		Walk/Other			0		0		0	
		TOTAL	100.0%		1,397	365	282	74	353	92
TOTAL	100.0%	Auto	100.0%	3.82	47,880	12,530	9,677	2,532	12,096	3,165
		Transit	0.0%		0		0		0	
		Walk/Other	0.0%		0		0		0	
		TOTAL	100.0%		47,880	12,530	9,677	2,532	12,096	3,165

[[]a] Two trips per spectator plus two trips per employee

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Giants World Series

Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/5% out; PM peak hour: 5% in / 15% out]

[[]d] SF Guidelines; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]f] SF Guidelines; Work trips to SD1-All (All of SF assumed to be like SD1)

[[]b] Assumes one employee for every 20 spectators based on America's Cup Management data

[[]c] Midday and PM peak hour percentages estimated from BART ridership profile data for 2010 SF Fleet Week and SF Giants World Series Championship Parade (Nov 3, 2010) [Midday peak hour: 20% in/5% out; PM peak hour: 5% in / 15% out]

[[]d] *SF Guidelines*; Appendix C - Table C-2 (Retail)

[[]e] AECOM - April 2011

[[]f] All visitor trips are allocated to Auto

[[]g] Fisherman's Wharf Visitor Survey - Fisherman's Wharf Community Benefit District, November 2006

Cruise Terminal Project

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San Francisco JRH Cruise Terminal at Pier 27 **Travel Demand Assumptions Comparison**

_			CATION		
HOME PORT SCENARIO	Terminal 30 Seattle [a]	Pier 12 New York [b]	Piers 30/32 San Francisco [c]	Pier 27 San Francisco	NOTES (asterisk indicates input data)
Cruise Ship Characteristics					•
Total one-way passengers	3,780 [d]	3,080 [e]	3,000	3,000 *	Represents over 90% of vessel calls in SF
Crew members	1,380 [d]	1,200 [e]	N/A	1,277	Calculated from rate below
Number of passengers per crew member	2.74	2.57	N/A	2.35 *	Economic Impact Study, BAE [f]
Passenger Terminal					
Building size (gsf)	144,000	190,000	100,000	85,000 *	D. Oshima (SF Port); May 13, 2011
Terminal employees	274	290	N/A	220 *	M. Nerney (SF Port) & L. Looper (Metro); March 2, 2011
Employment density (gsf/employee)	526	655	N/A	386	Calculated
Passenger density (gsf/passenger)	38	62	33	28	Calculated
Terminal employees/1,000 passengers	72	94	N/A	73	Calculated
Daily Person-trips					
Total person-trips	16,659	14,365	9,000	12,300	Calculated from trip rate below
Total person-trips/passenger	4.4	4.7	3.0 [g]	4.1 *	Estimated; average from Seattle, NY and SF
Work/Non-Work Trips	=0.		4004	404.4	
Work percentage (excludes crew)	5%	8%	12%	6% *	Average from Seattle and NY
Non-Work percentage (includes crew)	95%	92%	88%	94%	Calculated from above
Work person-trips (excludes crew)	870	1,122	1,080	790	Calculated
Non-Work person-trips (includes crew)	15,789	13,243	7,920	11,510	Calculated
Work person-trips/employee	3.2	3.9	N/A	3.0 *	SF Guidelines - Manufacturing/Industrial uses
Non-Work person-trips/passenger	4.2	4.3	2.6	3.8	Calculated
Modal Split					
Person-trips (includes work and non-work)		==0.			
Private Auto	21%	57%	32%	49% *	Estimated for visitors (50%); SF Guidelines for workers (38.9%
Motor Coach/Bus Shuttle	54%	[h]	52%	19% *	Estimated for visitors (20%); SF Guidelines for workers (0%)
Public Transit	[j]	1%	14%	12% *	Estimated for visitors (9%); SF Guidelines for workers (51.7%)
Taxi/Limo	24%	40%	[k]	18% *	Estimated for visitors (19%); SF Guidelines for workers (0%)
Walk/Other	[j]	1%	2%	2% *	Estimated for visitors (2%); SF Guidelines for workers (9.4%)
All Person-trips	100%	100%	100%	100%	
Vehicle-trips (includes work and non-work)	200/	F00/	0/0/	/50/	Octobrilla
Private Auto	39%	58%	86%	65%	Calculated
Motor Coach/Bus Shuttle	14%	[h] 34%	10%	5%	Calculated
Taxi/Limo Trucks	39%		[k]	27%	Calculated
All Vehicle-trips	7% 100%	8% 100%	4% 100%	3% 100%	Calculated
Vehicle Occupancy (persons per vehicle)	10070	10070	10070	10070	
Private Auto (work)	1.00	N/A	1.20	1.54 *	SF Guidelines - Work trips to SD1
Private Auto (work) Private Auto (non-work)	2.56	3.50	2.25	2.81 *	Pier 35 Cruise Terminal survey [i] (Visitor trips to SD1 = 2.37)
All Private Autos (excludes taxis)	2.06	0.50 N/A	2.23	2.70	Calculated
Motor Coach/Bus Shuttle	14.3 [I]	[h]	30.0	14.4 *	Pier 35 Cruise Terminal survey (M Coach = 25; Shuttle = 5) [i]
Taxi/Limo (excludes driver)	2.29	4.00	[k]	2.43 *	Pier 35 Cruise Terminal survey [i]
Average All Vehicles (incl. trucks)	3.81	3.50	4.76	3.19	Calculated
Daily Vehicle-trips	3.01	5.00	1.70	0.17	
Private Auto vehicle-trips	1,704	2,382	1,380	2,152	Calculated (CHS ±2600, EDAW ±4000, Metro ±3200) [m]
Private Auto venicle-trips Private Auto venicle-trips 1,000 passengers	451	2,362 774	460	717	Calculated (Pier 35 Cruise Terminal survey = 628 [i])
Motor Coach/Bus Shuttle vehicle-trips	620	[h]	158	160	Calc.(Coaches only=CHS ±100, EDAW ±140, Metro ±100) [m
M Coach Bus veh-trips/1,000 passengers	164	[11]	53	53	Calculated (Pier 35 Cruise Terminal survey = 55 [i])
Taxi/Limo vehicle-trips	1,726	1,397	[k]	900	Calculated (CHS ±740, EDAW ±460, Metro ±720) [m]
Taxi/Limo vehicle-trips Taxi/Limo veh-trips/1,000 passengers	457	454	[k]	300	Calculated (CH3 £740, EDAW £400, Wello £720) [III] Calculated (Pier 35 Cruise Terminal survey = 290 [i])
Truck vehicle-trips	322	320	65	95	Calculated (CHS ±50 after 8 am, EDAW ±120, Metro ±140) [r
Truck vehicle-trips Truck veh-trips/1,000 passengers	85	104	22	32 *	Pier 35 Cruise Terminal survey [i]
Total vehicle-trips	4,372	4,100	1,603	3,307	Calculated
Total vehicle-trips/1,000 passengers	1,157	1,331	534	1,102	Calculated
Percent of veh. parked while on cruise	25%	N/A	N/A	1,102	Estimated; professional judgment (±50 autos per cruise)
Origins/Destinations	ZJ /0	IN/A	IV/A	1076	Estimateu, professional juuginent (±00 autos per ciulse)
9					
Passengers				210/ *	Economic Impact Study, DAF III
Stay overnight at a hotel in SF				21% *	Economic Impact Study, BAE [f]
Drive to/from Port on cruise day				65% *	Economic Impact Study, BAE [f]
Fly to/from SF on cruise day				14% *	Economic Impact Study, BAE [f]
All passengers				100%	
Crew members				201	5 1.1 1.0 1. PAE 73
Stay overnight at a hotel in SF				9% *	Economic Impact Study, BAE [f]
Travel to/from ship on cruise day All crew members				91% *	Economic Impact Study, BAE [f]
				100%	

San Francisco JRH Cruise Terminal at Pier 27 **Travel Demand Assumptions Comparison**

		LOC	ATION		
DME PORT SCENARIO	Terminal 30	Pier 12	Piers 30/32	Pier 27	NOTES
	Seattle [a]	New York [b]	San Francisco [c]	San Francisco	(asterisk indicates input data)
/I Peak Hour [n]					
Percent of Daily Trips					
Work	7%	9%	5%	8% *	Average from Seattle and NY
Non-Work	13%	15%	5%	6%	Calculated (Pier 35 Cruise Terminal survey [i] = 7%)
All Trips	12%	9%	5%	6%	Calculated
Percent of Daily Vehicle-trips					
Private Auto	10%	9%	5%	4% *	Seattle and NY (work) and Pier 35 survey [i] (non-work)
Motor Coach/Bus Shuttle	15%	[h]	5%	14% *	Pier 35 Cruise Terminal survey [i]
Taxi/Limo	13%	9%	[k]	9% *	Pier 35 Cruise Terminal survey [i]
Trucks	11%	15%	[0]	15% *	Pier 35 Cruise Terminal survey [i]
All Vehicle-trips	12%	9%	5%	6%	Calculated
Vehicle-trips					
Private Auto	171	203	68	83	Calculated (CHS ±80, EDAW 290 to 440) [m]
Motor Coach/Bus Shuttle	95	[h]	7	22	Calculated (CHS ±20, EDAW 20 to 30) [m]
Taxi/Limo	231	119	, [k]	81	Calculated (CHS ±75, EDAW 60 to 90) [m]
Trucks	35	49	[0]	14	Calculated (CHS ±175, EDAW 16 to 24) [m]
All Vehicle-trips	532	370	75	200	Calculated
Inbound/Outbound Vehicle-trips	in / out	in/ out	in / out	in/ out	Calculated
Private Auto	44% / 56%	48% / 52%			Dior 25 Cruico Torminal curvou [i]
			[p]	49% / 51% *	
Motor Coach/Bus Shuttle	79% / 21%	[h]	[p]	60% / 40% *	
Taxi/Limo	43% / 57%	48% / 52%	[p]		Pier 35 Cruise Terminal survey [i]
Trucks All Vehicle-trips	51% / 49% 50% / 50%	70% / 30% 51% / 49%	[p] 65% / 35%	48% / 52% * 52% / 48%	
	30% / 30%	31%/ 49%	00% / 30%	32% / 48%	Calculated
Iday Peak Hour [q]					
Percent of Daily Trips		440/	70/	20/ 4	
Work	6%	11%	7%	9% *	Average from Seattle and NY
Non-Work	16%	20%	7%	18%	Calculated (Pier 35 Cruise Terminal survey [i] = 17%)
All Trips	14%	11%	7%	17%	Calculated
Percent of Daily Vehicle-trips	4004		=0.4	4.0.	a
Private Auto	13%	11%	7%	16% *	Seattle and NY (work) and Pier 35 survey [i] (non-work)
Motor Coach/Bus Shuttle	13%	[h]	7%	17% *	Pier 35 Cruise Terminal survey [i]
Taxi/Limo	16%	11%	[k]	19% *	Pier 35 Cruise Terminal survey [i]
Trucks	12%	20%	[0]	12% *	Pier 35 Cruise Terminal survey [i]
All Vehicle-trips	14%	11%	7%	17%	Calculated
Vehicle-trips					
Private Auto	226	253	101	354	Calculated (CHS ±430, EDAW 330 to 500) [m]
Motor Coach/Bus Shuttle	80	[h]	11	27	Calculated (CHS ±16, EDAW 18 to 24) [m]
Taxi/Limo	278	148	[k]	171	Calculated (CHS ±150, EDAW 20 to 30) [m]
Trucks	40	62	[0]	11	Calculated (CHS ±10, EDAW 4 to 6) [m]
All Vehicle-trips	624	464	112	<i>563</i>	
Inbound/Outbound Vehicle-trips	in / out	in / out	in / out	in/ out	
Private Auto	45% / 55%	60% / 40%	[p]	52% / 48% *	Pier 35 Cruise Terminal survey [i]
Motor Coach/Bus Shuttle	43% / 58%	[h]	[p]	45% / 55% *	Pier 35 Cruise Terminal survey [i]
Taxi/Limo	50% / 50%	60% / 40%	[p]	53% / 47% *	7 . 1
Trucks	50% / 50%	30% / 70%	[p]	32% / 68% *	Pier 35 Cruise Terminal survey [i]
All Vehicle-trips	47% / 53%	56% / 44%	51% / 49%	52% / 48%	Calculated

San Francisco JRH Cruise Terminal at Pier 27 Travel Demand Assumptions Comparison

		LOCA	ATION		
HOME PORT SCENARIO	Terminal 30	Pier 12	Piers 30/32	Pier 27	NOTES
	Seattle [a]	New York [b] S	San Francisco [c]	San Francisco	(asterisk indicates input data)
PM Peak Hour [r]					
Percent of Daily Trips					
Work	1.3%	1.8%	5.3%	1.5% *	Average from Seattle and NY
Non-Work	1.5%	1.7%	5.3%	1.6%	Calculated
All Trips	1.5%	1.8%	5.3%	1.6%	Calculated
Percent of Daily Vehicle-trips					
Private Auto	1.5%	1.8%	4.6%	1.7% *	Average from Seattle and NY
Motor Coach/Bus Shuttle	1.5%	[h]	5.3%	1.5% *	Average from Seattle and NY
Taxi/Limo	1.5%	1.8%	[k]	1.6% *	Average from Seattle and NY
Trucks	0.9%	1.7%	[0]	1.3% *	Average from Seattle and NY
All Vehicle-trips	1.5%	1.8%	4.5%	1.6%	Calculated
Vehicle-trips					
Private Auto	26	43	64	36	Calculated (CHS and EDAW, no analysis after 3 pm) [m]
Motor Coach/Bus Shuttle	9	[h]	8	2	Calculated (CHS and EDAW, no analysis after 3 pm) [m]
Taxi/Limo	26	25	[k]	15	Calculated (CHS and EDAW, no analysis after 3 pm) [m]
Trucks	3	5	[0]	1	Calculated (CHS and EDAW, no analysis after 3 pm) [m]
All Vehicle-trips	64	<i>7</i> 3	72	54	
Inbound/Outbound Vehicle-trips	in / out	in / out	in / out	in / out	
Private Auto	69% / 31%	12% / 88%	[p]	12% / 88% *	Estimated; based on NY
Motor Coach/Bus Shuttle	56% / 44%	[h]	[p]	0% / 100%	Estimated; professional judgment
Taxi/Limo	50% / 50%	10% / 90%	[p]	10% / 90% *	Estimated; based on NY
Trucks	100% / 0%	30% / 70%	[p]	0% / 100%	Estimated; professional judgment
All Vehicle-trips	61% / 39%	11% / 89%	41% / 59%	11% / 89%	Calculated

- [a] Transportation Technical Report for Draft FEIS Cruise Terminal at Terminal 91, Heffron Transportation, Inc.; September 14, 2006.
- [b] Environmental Assessment Statement Brooklyn Piers 7-12, Philip Habib & Associates; September 6,2006.
- [c] San Francisco Cruise Terminal Mixed-Use Project Transportation Impact Report; The Duffey Company, November 15, 2001.
- [d] Two vessels: Zaandam and Vision of the Seas; surveyed on June 2, 2006.
- [e] One vessel: Crown Princess; surveyed on June 23, 2006.
- [f] Port of San Francisco Economic Impact Study, Bay Area Economics, July 18, 2008.
- [g] San Francisco and Los Angeles Cruise Terminal Trip Generation Study, Korve Engineering, May 26,2000.
- [h] Motor Coach/Bus Shuttle travel is not reported separately; might be included as part of the private auto travel.
- [i] Pier 35 Cruise Terminal survey; CHS Consulting Group May-June 2010 (1950-passenger cruise ship).
- [j] Cruise terminal located in an industrial port area with minimal public transportation and walk access.
- [k] Taxis and limousines are not reported as a separate mode of travel.
- [I] Includes hotel shuttles, shuttle express and motor coach service to/from the airport.
- [m] CHS = Pier 27 Traffic Simulation Study Final Report, CHS Consulting Group, October 15, 2010 (4,000-passenger cruise ship);

 EDAW = Pier 27 Cruise Terminal Conceptual Site Planning Study Summary Report, BAE and EDAW/AECOM, February 2, 2008 (4,400-passenger cruise ship);

 Metro = San Francisco Cruise Terminal and Northeast Wharf Plaza Facility Program Statement Rev.2; KMD/PLA/BA, April 29, 2010 (Metro Cruise Services, 4,000- to 4,400-passenger cruise ship).
- [n] Highest hour between 7 and 9 am.
- [o] Peak hour truck traffic not estimated.
- [p] Not estimated separately.
- [q] Highest hour between 11 am and 1 pm.
- [r] Highest hour between 4 and 6 pm.

Typical sequence for SF Home-Port cruise ship operations:

6:00 AM Start of operations.

Terminal operations and security staff arrive at the terminal.

6:30 AM Set up and preparation.

Cruise line shore personnel, longshoremen, Federal agents and other dock personnel arrive.

Most provisioning trucks arrive at the terminal and are stationed at the pier.

7 to 8 AM Vessel docks at the pier. [a]

The vessel is met by the agent, longshoremen, Federal agencies, line handlers, Port personnel and cruise line representatives

The gangway is moved and connected to the ship's passenger door(s).

The vessel is inspected by Federal agencies.

Ship is cleared by U.S. Customs (CBP); begin baggage unloading.

Baggage is removed and transported to the customs area by the longshoremen

Longshoremen proceed to remove from the vessel any items requested and begin provisioning

Additional provisioning trucks arrive at the pier.

8:30 AM Passenger disembarkation begins.

Passengers arrive at the baggage claim area where they collect their baggage in the designated baggage lay-down zone

Passengers clear Immigration, and then proceed to the Customs area (Red & Green Channel) where passengers retrieve their baggage, either with or without engaging the services of a longshoreman/porter.

A minimum of 90% of passengers will be cleared during disembarkation (when passenger enters the terminal concourse until exits the terminal into the ground transportation area) in 30 minutes or less. [Source: Facility Program Statement, April 29, 2010]

30 to 9 AM Passengers begin departing the terminal.

After passengers clear Customs, they exit the building where they board their designated bus, taxi, or privately operated vehicle or onto the public way for travelers on foot and depart the site.

Passengers using prearranged bus transportation to the airport or hotels either drop off their luggage with a representative, or carry their luggage to the bus. In some cases, the cruise lines can arrange for separate truck transportation of the luggage to their destination Some embarking passengers begin to arrive at the terminal.

9 to 11 AM Some embarking passengers begin to arrive at the terminal.

11:00 AM Passenger disembarkation is virtually completed.

Last disembarking passengers depart the terminal before noon

AM to 2 PM Majority of embarking passengers arrive at the terminal.

Passengers drop off their luggage at curbside, where they are met by porters, and initiate check-in procedures.

Passengers arriving via privately owned vehicles or taxi are dropped off curbside where they are met by porters, and initiate check-in procedures. Their baggage is collected and moved to the proper adjacent baggage screening area; passengers arriving on foot drop baggage at the curb-side collection area near the terminal entrance.

All baggage is screened via baggage scanner and then stacked into baggage cages for movement to the cruise vessel service shell door across the apron via forklift. They are sorted accordingly based upon each cruise vessel's home-port operating plan.

Noon Passenger boarding begins.

Cruise line commences boarding of the vessel.

Passengers travel through the entrance vestibule/lobby and arrive to the security screening area

Passengers are processed through security, including hand carried baggage screening and passenger portal screening prior to entering the check-in area

Passengers are then processed for boarding at the check-in area and may wait at an adjacent waiting area

Passengers board the ship.

30 to 3 PM Last vehicles arrive at the terminal.

Last provisioning trucks arrive at the pier.

Last vehicles arrive at the terminal with passengers.

3:30 PM Passenger embarkation is completed.

4:00 PM Vessel departs for the cruise. [b]

5 to 6 PM End of operations.

Last provisioning trucks depart the pier.

Cruise line shore personnel, longshoremen and all other dock personnel leave.

Terminal operations staff secure the facility.

- [a] 68% of all vessels in 2003-2011 docked in SF between 6 and 8 AM.
- [b] 63% of all vessels in 2003-2011 departed SF between 3 and 6 PM; about half of them departed before 4 PM.

PROJECT TRIP GENERATION - WEEKDAY AM PEAK HOUR SUMMARY OF TRIPS

Proposed Project: Cruise Terminal = 3,000 - passenger home-port cruise ship

Retail Use = 5,000 gsf Restaurant/Café Use = 0 gsf

Special Event = 600 - guest evening event

			Weekday D	aily Trips				AM	Peak Hour Tr	ips		P	ercent of D	aily during AN	1 Peak Hou	r
Person-trips by Mode	Cruise	Retail	Rest./Café	Event	To	ital	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Auto	6,062	37	0	503	6,603	48%	254	7	0	0	261	4.2%	18.8%	0.0%	0.0%	3.9%
M.Coach/Shuttle Bus	2,302				2,302	17%	322				322	14.0%	0.0%	0.0%	0.0%	14.0%
Transit	1,444	27	0	433	1,904	14%	104	9	0	0	113	7.2%	34.9%	0.0%	0.0%	5.9%
Taxi (Cruise only)	2,187				2,187	16%	197				197	9.0%	0.0%	0.0%	0.0%	9.0%
Walk/Other	305	38	0	444	786	6%	22	2	0	0	23	7.2%	4.5%	0.0%	0.0%	3.0%
Total	12,300	102	0	1,380	13,782	100%	898	18	0	0	916	7.3%	17.7%	0.0%	0.0%	6.6%
	89%	1%	0%	10%	100%		98%	2%	0%	0%	100%					
Vehicle Trips	3,307	18	0	239	3,564		200	5	0	0	205	6.1%	25.2%	0.0%	0.0%	5.8%
·	93%	1%	0%	7%	100%		98%	2%	0%	0%	100%					
Avg. veh. occupancy	3.19	2.06	0.00	2.11	3.11		3.85	1.54	0.00	0.00	3.80					

Weekday	Total Daily		AM Pe	ak Hour Perso	n-Trips			AM Pe	ak Hour Trans	it-Trips			AM Pea	k Hour Vehicl	e-Trips	
Distribution	Person-trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	2,927	192	2	0	0	194	19	1	0	0	20	42	0	0	0	42
Superdistrict 2	1,929	126	3	0	0	129	16	2	0	0	18	28	1	0	0	29
Superdistrict 3	1,833	119	3	0	0	122	15	2	0	0	17	27	1	0	0	28
Superdistrict 4	1,009	65	2	0	0	67	9	1	0	0	10	15	1	0	0	15
East Bay	1,644	106	4	0	0	110	16	2	0	0	18	22	0	0	0	22
North Bay	701	46	1	0	0	47	5	1	0	0	6	10	0	0	0	11
South Bay	1,047	67	3	0	0	70	9	1	0	0	10	17	1	0	0	18
Out of Region	2,692	177	0	0	0	177	16	0	0	0	16	39	0	0	0	39
Total	13.782	898	18	0	0	916	104	9	0	0	113	200	5	0	0	205

Assumptions for	Cruise	R	etail	Restau	rant/Café	E	/ent
AM Peak	(combined)	Work	Non-work	Work	Non-work	Work	Non-work
Inbound	52%	100%	50%	90%	50%		
Outbound	48%	0%	50%	10%	50%		

			Inbound					Outbound			İ		Total		
AM Peak Hour	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Total Person Trips	469	18	0	0	487	430	0	0	0	430	898	18	0	0	916
	52%	100%	0%	0%	53%	48%	0%	0%	0%	47%					
Transit Trips	54	9	0	0	63	50	0	0	0	50	104	9	0	0	113
	52%	100%	0%	0%	56%	48%	0%	0%	0%	44%					
Vehicle Trips	105	5	0	0	109	96	0	0	0	96	200	5	0	0	205
	52%	100%	0%	0%	53%	48%	0%	0%	0%	47%					

PROJECT TRIP GENERATION - WEEKDAY AM PEAK HOUR SUMMARY OF TRIPS

AM Peak Hour			Inbound					Outbound			1		Total		
Auto Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	27	0	0	0	27	25	0	0	0	25	52	0	0	0	52
Superdistrict 2	18	1	0	0	19	17	0	0	0	17	35	1	0	0	36
Superdistrict 3	18	1	0	0	19	16	0	0	0	16	34	1	0	0	35
Superdistrict 4	10	1	0	0	11	9	0	0	0	9	19	1	0	0	20
East Bay	16	2	0	0	18	15	0	0	0	15	31	2	0	0	32
North Bay	7	1	0	0	8	6	0	0	0	6	13	1	0	0	14
South Bay	11	2	0	0	13	10	0	0	0	10	21	2	0	0	23
Out of Region	25	0	0	0	26	23	0	0	0	23	49	0	0	0	49
Tota	132	7	0	0	139	121	0	0	0	121	254	7	0	0	261

AM Peak Hour	1		Inbound					Outbound					Total		
Transit Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	10	1	0	0	11	9	0	0	0	9	19	1	0	0	20
Superdistrict 2	8	2	0	0	10	8	0	0	0	8	16	2	0	0	18
Superdistrict 3	8	2	0	0	9	7	0	0	0	7	15	2	0	0	17
Superdistrict 4	5	1	0	0	6	4	0	0	0	4	9	1	0	0	10
East Bay	8	2	0	0	10	7	0	0	0	7	16	2	0	0	18
North Bay	3	1	0	0	3	3	0	0	0	3	5	1	0	0	6
South Bay	4	1	0	0	6	4	0	0	0	4	9	1	0	0	10
Out of Region	8	0	0	0	8	8	0	0	0	8	16	0	0	0	16
Total	54	9	0	0	63	50	0	0	0	50	104	9	0	0	113

M.Coach/Shuttle/Taxi			Inbound					Outbound					Total		
Walk/Other Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	63	1	0	0	65	58	0	0	0	58	122	1	0	0	123
Superdistrict 2	39	0	0	0	39	36	0	0	0	36	75	0	0	0	75
Superdistrict 3	37	0	0	0	37	34	0	0	0	34	70	0	0	0	70
Superdistrict 4	20	0	0	0	20	18	0	0	0	18	38	0	0	0	38
East Bay	31	0	0	0	31	28	0	0	0	28	59	0	0	0	60
North Bay	14	0	0	0	14	13	0	0	0	13	27	0	0	0	27
South Bay	20	0	0	0	20	18	0	0	0	18	38	0	0	0	38
Out of Region	59	0	0	0	59	54	0	0	0	54	112	0	0	0	112
Total	282	2	0	0	284	259	0	0	0	259	541	2	0	0	543

AM Peak Hour			Inbound					Outbound					Total		
Total Person Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	100	2	0	0	103	92	0	0	0	92	192	2	0	0	194
Superdistrict 2	66	3	0	0	68	60	0	0	0	60	126	3	0	0	129
Superdistrict 3	62	3	0	0	65	57	0	0	0	57	119	3	0	0	122
Superdistrict 4	34	2	0	0	36	31	0	0	0	31	65	2	0	0	67
East Bay	55	4	0	0	59	51	0	0	0	51	106	4	0	0	110
North Bay	24	1	0	0	25	22	0	0	0	22	46	1	0	0	47
South Bay	35	3	0	0	38	32	0	0	0	32	67	3	0	0	70
Out of Region	92	0	0	0	93	85	0	0	0	85	177	0	0	0	177
Total	469	18	0	0	487	430	0	0	0	430	898	18	0	0	916

PROJECT TRIP GENERATION - WEEKDAY AM PEAK HOUR SUMMARY OF TRIPS

AM Peak Hour			Inbound					Outbound					Total		
Vehicle-Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	22	0	0	0	22	20	0	0	0	20	42	0	0	0	42
Superdistrict 2	15	1	0	0	15	13	0	0	0	13	28	1	0	0	29
Superdistrict 3	14	1	0	0	15	13	0	0	0	13	27	1	0	0	28
Superdistrict 4	8	1	0	0	8	7	0	0	0	7	15	1	0	0	15
East Bay	11	0	0	0	12	11	0	0	0	11	22	0	0	0	22
North Bay	5	0	0	0	6	5	0	0	0	5	10	0	0	0	11
South Bay	9	1	0	0	10	8	0	0	0	8	17	1	0	0	18
Out of Region	21	0	0	0	21	19	0	0	0	19	39	0	0	0	39
Total	105	5	0	0	109	96	0	0	0	96	200	5	0	0	205

PROJECT TRIP GENERATION - WEEKDAY PM PEAK HOUR SUMMARY OF TRIPS

Proposed Project: Cruise Terminal = 3,000 - passenger home-port cruise ship

Retail Use = 5,000 gsf Restaurant/Café Use = 0 gsf

Special Event = 600 - guest evening event

			Weekday D	aily Trips			ĺ	PM	Peak Hour Tr	rips		F	ercent of D	aily during PN	/ Peak Hou	r
Person-trips by Mode	Cruise	Retail	Rest./Café	Event	To	tal	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Auto	6,062	37	0	503	6,603	48%	100	3	0	66	170	1.7%	9.0%	0.0%	13.2%	2.6%
M.Coach/Shuttle Bus	2,302				2,302	17%	33				33	1.5%	0.0%	0.0%	0.0%	1.5%
Transit	1,444	27	0	433	1,904	14%	23	2	0	52	77	1.6%	9.0%	0.0%	11.9%	4.0%
Taxi (Cruise only)	2,187				2,187	16%	36				36	1.6%	0.0%	0.0%	0.0%	1.6%
Walk/Other	305	38	0	444	786	6%	5	3	0	66	74	1.6%	9.0%	0.0%	14.9%	9.4%
Total	12,300	102	0	1,380	13,782	100%	197	9	0	184	390	1.6%	9.0%	0.0%	13.3%	2.8%
	89%	1%	0%	10%	100%		51%	2%	0%	47%	100%					
Vehicle Trips	3,307	18	0	239	3,564		54	2	0	29	85	1.6%	9.0%	0.0%	12.3%	2.4%
	93%	1%	0%	7%	100%		64%	2%	0%	35%	100%					
Avg. veh. occupancy	3.19	2.06	0.00	2.11	3.11		3.13	2.06	0.00	2.25	2.81					

Weekday	Total Daily		PM Pe	ak Hour Perso	n-Trips			PM Pe	ak Hour Trans	it-Trips			PM Pea	k Hour Vehicle	e-Trips	
Distribution	Person-trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	2,927	42	2	0	39	83	4	0	0	7	12	11	0	0	2	14
Superdistrict 2	1,929	28	1	0	26	54	3	0	0	10	14	8	0	0	4	12
Superdistrict 3	1,833	26	1	0	25	52	3	0	0	10	13	7	0	0	4	12
Superdistrict 4	1,009	14	0	0	14	28	2	0	0	5	7	4	0	0	3	7
East Bay	1,644	23	1	0	22	46	3	1	0	7	11	6	0	0	4	10
North Bay	701	10	0	0	9	20	1	0	0	1	3	3	0	0	3	6
South Bay	1,047	15	1	0	14	30	2	0	0	4	6	4	0	0	4	9
Out of Region	2,692	39	3	0	36	77	4	0	0	9	12	11	0	0	4	15
Tota	I 13,782	197	9	0	184	390	23	2	0	52	77	54	2	0	29	85

Assumptions for	Cruise	Re	etail	Restau	rant/Café	E۱	/ent
PM Peak	(combined)	Work	Non-work	Work	Non-work	Work	Non-work
Inbound	11%	0%	50%	0%	50%	100%	100%
Outbound	89%	100%	50%	100%	50%	0%	0%

			Inbound					Outbound					Total		
PM Peak Hour	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Total Person Trips	21	3	0	184	208	176	6	0	0	182	197	9	0	184	390
	11%	35%	0%	100%	53%	89%	65%	0%	0%	47%					
Transit Trips	2	1	0	52	54	20	2	0	0	22	23	2	0	52	77
	11%	21%	0%	100%	71%	89%	79%	0%	0%	29%					
Vehicle Trips	6	0	0	29	36	48	1	0	0	50	54	2	0	29	85
	11%	29%	0%	100%	42%	89%	71%	0%	0%	58%					

PROJECT TRIP GENERATION - WEEKDAY PM PEAK HOUR SUMMARY OF TRIPS

PM Peak Hour			Inbound					Outbound			1		Total		
Auto Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	2	0	0	5	7	19	0	0	0	19	21	0	0	5	27
Superdistrict 2	1	0	0	8	10	12	0	0	0	13	14	0	0	8	22
Superdistrict 3	1	0	0	10	11	12	0	0	0	12	13	0	0	10	23
Superdistrict 4	1	0	0	6	7	6	0	0	0	7	7	0	0	6	13
East Bay	1	0	0	10	12	10	0	0	0	11	12	1	0	10	22
North Bay	1	0	0	6	7	5	0	0	0	5	5	0	0	6	12
South Bay	1	0	0	8	9	7	0	0	0	7	8	1	0	8	17
Out of Region	2	0	0	13	15	18	0	0	0	18	20	1	0	13	34
Tota	I 11	1	0	66	78	89	2	0	0	92	100	3	0	66	170

PM Peak Hour			Inbound					Outbound]		Total		
Transit Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	0	0	0	7	8	4	0	0	0	4	4	0	0	7	12
Superdistrict 2	0	0	0	10	10	3	0	0	0	3	3	0	0	10	14
Superdistrict 3	0	0	0	10	10	3	0	0	0	3	3	0	0	10	13
Superdistrict 4	0	0	0	5	5	2	0	0	0	2	2	0	0	5	7
East Bay	0	0	0	7	7	3	0	0	0	3	3	1	0	7	11
North Bay	0	0	0	1	1	1	0	0	0	1	1	0	0	1	3
South Bay	0	0	0	4	4	2	0	0	0	2	2	0	0	4	6
Out of Region	0	0	0	9	9	3	0	0	0	3	4	0	0	9	12
Total	2	1	0	52	54	20	2	0	0	22	23	2	0	52	77

M.Coach/Shuttle/Taxi	l		Inbound					Outbound					Total		
Walk/Other Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	2	0	0	27	29	15	1	0	0	16	17	1	0	27	45
Superdistrict 2	1	0	0	8	9	9	0	0	0	9	10	0	0	8	18
Superdistrict 3	1	0	0	5	7	9	0	0	0	9	10	0	0	5	15
Superdistrict 4	1	0	0	3	4	5	0	0	0	5	5	0	0	3	8
East Bay	1	0	0	5	6	7	0	0	0	7	8	0	0	5	14
North Bay	0	0	0	2	2	3	0	0	0	3	4	0	0	2	5
South Bay	1	0	0	2	2	5	0	0	0	5	5	0	0	2	7
Out of Region	2	1	0	14	16	14	1	0	0	14	15	1	0	14	31
Total	8	2	0	66	76	66	2	0	0	68	74	3	0	66	144

PM Peak Hour			Inbound					Outbound					Total		
Total Person Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	5	1	0	39	44	38	1	0	0	39	42	2	0	39	83
Superdistrict 2	3	0	0	26	29	25	1	0	0	25	28	1	0	26	54
Superdistrict 3	3	0	0	25	28	23	1	0	0	24	26	1	0	25	52
Superdistrict 4	2	0	0	14	15	13	0	0	0	13	14	0	0	14	28
East Bay	2	0	0	22	25	21	1	0	0	22	23	1	0	22	46
North Bay	1	0	0	9	11	9	0	0	0	9	10	0	0	9	20
South Bay	2	0	0	14	16	13	1	0	0	14	15	1	0	14	30
Out of Region	4	1	0	36	41	35	1	0	0	36	39	3	0	36	77
Tota	21	3	0	184	208	176	6	0	0	182	197	9	0	184	390

PROJECT TRIP GENERATION - WEEKDAY PM PEAK HOUR SUMMARY OF TRIPS

PM Peak Hour			Inbound					Outbound					Total		
Vehicle-Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	1	0	0	2	4	10	0	0	0	10	11	0	0	2	14
Superdistrict 2	1	0	0	4	5	7	0	0	0	7	8	0	0	4	12
Superdistrict 3	1	0	0	4	5	6	0	0	0	7	7	0	0	4	12
Superdistrict 4	0	0	0	3	4	4	0	0	0	4	4	0	0	3	7
East Bay	1	0	0	4	5	5	0	0	0	5	6	0	0	4	10
North Bay	0	0	0	3	4	2	0	0	0	3	3	0	0	3	6
South Bay	0	0	0	4	4	4	0	0	0	4	4	0	0	4	9
Out of Region	1	0	0	4	5	10	0	0	0	10	11	0	0	4	15
Total	6	0	0	29	36	48	1	0	0	50	54	2	0	29	85

PROJECT TRIP GENERATION - SATURDAY MIDDAY PEAK HOUR SUMMARY OF TRIPS

Proposed Project: Cruise Terminal = 3,000 - passenger home-port cruise ship

Retail Use = 5,000 gsf Restaurant/Café Use = 0 gsf

Special Event = 600 - guest evening event

			Saturday D	aily Trips			ĺ	Midd	ay Peak Hour	Trips		Per	cent of Dai	y during Midd	lay Peak H	our
Person-trips by Mode	Cruise	Retail	Rest./Café	Event	To	tal	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Auto	6,062	44	0	503	6,609	48%	1,005	4	0	0	1,009	16.6%	10.1%	0.0%	0.0%	15.3%
M.Coach/Shuttle Bus	2,302				2,302	17%	391				391	17.0%	0.0%	0.0%	0.0%	17.0%
Transit	1,444	31	0	433	1,908	14%	211	3	0	0	214	14.6%	10.1%	0.0%	0.0%	11.2%
Taxi (Cruise only)	2,187				2,187	16%	416				416	19.0%	0.0%	0.0%	0.0%	19.0%
Walk/Other	305	44	0	444	792	6%	45	4	0	0	50	14.9%	10.1%	0.0%	0.0%	6.3%
Total	12,300	119	0	1,380	13,799	100%	2,068	12	0	0	2,080	16.8%	10.1%	0.0%	0.0%	15.1%
	89%	1%	0%	10%	100%		99%	1%	0%	0%	100%					
Vehicle Trips	3,307	21	0	239	3,567		563	2	0	0	565	17.0%	10.1%	0.0%	0.0%	15.9%
	93%	1%	0%	7%	100%		100%	0%	0%	0%	100%					
Avg. veh. occupancy	3.19	2.06	0.00	2.11	3.11		3.22	2.06	0.00	0.00	3.21					

Saturday	Total Daily		Midday F	Peak Hour Pers	on-Trips		İ	Midday F	Peak Hour Trai	nsit-Trips			Midday P	eak Hour Vehi	cle-Trips	
Distribution	Person-trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	2,930	449	2	0	0	451	42	0	0	0	42	121	0	0	0	121
Superdistrict 2	1,930	290	1	0	0	291	31	1	0	0	32	79	0	0	0	79
Superdistrict 3	1,835	272	1	0	0	273	29	0	0	0	30	75	0	0	0	75
Superdistrict 4	1,010	148	1	0	0	148	16	0	0	0	17	40	0	0	0	40
East Bay	1,646	235	2	0	0	237	28	1	0	0	29	62	0	0	0	62
North Bay	702	104	1	0	0	105	11	0	0	0	11	29	0	0	0	29
South Bay	1,049	150	1	0	0	151	16	0	0	0	17	43	0	0	0	43
Out of Region	2,697	421	3	0	0	425	38	0	0	0	38	115	0	0	0	116
Tota	13,799	2.068	12	0	0	2.080	211	3	0	0	214	563	2	0	0	565

Assumptions for	Cruise	R	etail	Restau	rant/Café	E۱	/ent
Midday Peak	(combined)	Work	Non-work	Work	Non-work	Work	Non-work
Inbound	52%	50%	50%	50%	50%		
Outbound	48%	50%	50%	50%	50%		

			Inbound					Outbound			İ		Total		
Midday Peak Hour	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Total Person Trips	1,066	6	0	0	1,072	1,002	6	0	0	1,008	2,068	12	0	0	2,080
	52%	50%	0%	0%	52%	48%	50%	0%	0%	48%					
Transit Trips	109	2	0	0	110	102	2	0	0	104	211	3	0	0	214
	52%	50%	0%	0%	52%	48%	50%	0%	0%	48%					
Vehicle Trips	290	1	0	0	292	273	1	0	0	274	563	2	0	0	565
	52%	50%	0%	0%	52%	48%	50%	0%	0%	48%					

PROJECT TRIP GENERATION - SATURDAY MIDDAY PEAK HOUR SUMMARY OF TRIPS

Midday Peak Hour			Inbound					Outbound			1		Total		
Auto Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	112	0	0	0	112	105	0	0	0	105	216	0	0	0	217
Superdistrict 2	72	0	0	0	72	68	0	0	0	68	140	0	0	0	140
Superdistrict 3	68	0	0	0	68	64	0	0	0	64	132	0	0	0	132
Superdistrict 4	37	0	0	0	37	35	0	0	0	35	72	0	0	0	72
East Bay	59	0	0	0	59	55	0	0	0	55	114	1	0	0	114
North Bay	26	0	0	0	26	25	0	0	0	25	51	0	0	0	51
South Bay	38	0	0	0	39	36	0	0	0	36	74	1	0	0	75
Out of Region	106	1	0	0	107	100	1	0	0	100	206	1	0	0	207
Total	518	2	0	0	520	487	2	0	0	489	1,005	4	0	0	1,009

Midday Peak Hour	ĺ		Inbound					Outbound					Total		
Transit Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	22	0	0	0	22	20	0	0	0	20	42	0	0	0	42
Superdistrict 2	16	0	0	0	16	15	0	0	0	15	31	1	0	0	32
Superdistrict 3	15	0	0	0	15	14	0	0	0	14	29	0	0	0	30
Superdistrict 4	8	0	0	0	9	8	0	0	0	8	16	0	0	0	17
East Bay	14	0	0	0	15	14	0	0	0	14	28	1	0	0	29
North Bay	5	0	0	0	6	5	0	0	0	5	11	0	0	0	11
South Bay	8	0	0	0	9	8	0	0	0	8	16	0	0	0	17
Out of Region	19	0	0	0	20	18	0	0	0	18	38	0	0	0	38
Total	109	2	0	0	110	102	2	0	0	104	211	3	0	0	214

M.Coach/Shuttle/Taxi			Inbound					Outbound					Total		
Walk/Other Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	98	1	0	0	99	92	1	0	0	93	190	1	0	0	192
Superdistrict 2	61	0	0	0	61	57	0	0	0	58	119	0	0	0	119
Superdistrict 3	57	0	0	0	57	54	0	0	0	54	111	0	0	0	111
Superdistrict 4	31	0	0	0	31	29	0	0	0	29	60	0	0	0	60
East Bay	48	0	0	0	48	45	0	0	0	46	94	0	0	0	94
North Bay	22	0	0	0	22	21	0	0	0	21	42	0	0	0	43
South Bay	31	0	0	0	31	29	0	0	0	29	59	0	0	0	59
Out of Region	92	1	0	0	93	86	1	0	0	87	178	2	0	0	179
Total	439	2	0	0	442	413	2	0	0	415	852	4	0	0	857

Midday Peak Hour			Inbound					Outbound					Total		
Total Person Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	231	1	0	0	232	217	1	0	0	218	449	2	0	0	451
Superdistrict 2	149	1	0	0	150	140	1	0	0	141	290	1	0	0	291
Superdistrict 3	140	1	0	0	141	132	1	0	0	132	272	1	0	0	273
Superdistrict 4	76	0	0	0	76	71	0	0	0	72	148	1	0	0	148
East Bay	121	1	0	0	122	114	1	0	0	115	235	2	0	0	237
North Bay	54	0	0	0	54	50	0	0	0	51	104	1	0	0	105
South Bay	77	1	0	0	78	72	1	0	0	73	150	1	0	0	151
Out of Region	217	2	0	0	219	204	2	0	0	206	421	3	0	0	425
Total	1,066	6	0	0	1,072	1,002	6	0	0	1,008	2,068	12	0	0	2,080

PROJECT TRIP GENERATION - SATURDAY MIDDAY PEAK HOUR SUMMARY OF TRIPS

Midday Peak Hour	1		Inbound					Outbound					Total		
Vehicle-Trips	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total	Cruise	Retail	Rest./Café	Event	Total
Superdistrict 1	62	0	0	0	63	59	0	0	0	59	121	0	0	0	121
Superdistrict 2	41	0	0	0	41	38	0	0	0	38	79	0	0	0	79
Superdistrict 3	38	0	0	0	39	36	0	0	0	36	75	0	0	0	75
Superdistrict 4	21	0	0	0	21	20	0	0	0	20	40	0	0	0	40
East Bay	32	0	0	0	32	30	0	0	0	30	62	0	0	0	62
North Bay	15	0	0	0	15	14	0	0	0	14	29	0	0	0	29
South Bay	22	0	0	0	22	21	0	0	0	21	43	0	0	0	43
Out of Region	59	0	0	0	60	56	0	0	0	56	115	0	0	0	116
Total	290	1	0	0	292	273	1	0	0	274	563	2	0	0	565

PROJECT TRIP GENERATION

LAND USE: CRUISE TERMINAL (WORK TRIPS)

Vessel Size:		3,000	passengers	PEAK HOUR			AM Pe	ak Hour	Midday F	eak Hour	PM Pe	ak Hour
DAILY				% of total daily	trips during p	eak hour [b]:	7%		17%		2%	
Person-trip gener	ation rate [a]:	4.1	trips/pax.	Peak hour pers	on-trip gener	ation rate:	0.30	trips/pax.	0.69	trips/pax.	0.07	trips/pax.
Total daily person	n-trips:	12,300	person-trips	Total person-tri	ips during pea	k hour:	898	person-trips	2,068	person-trips	197	person-trip
Percent of Work t		6%		% of Work trips			8%		9%		2%	
Number of daily V			person-trips	No. of peak ho				person-trips		person-trips		person-trip
,				Avg. Veh.		ilv		ak Hour		eak Hour		ak Hour
Origins	Distribution	Mode	Percent [c]	Occupancy	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
Origins	[c]	Wode	i ciccin [c]	[c]	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips
Superdistrict 1	12.8%	Auto	13.8%	1.28	14	11	1	1	1	1	0	0
Superuistrict i	12.070	Motor Coach	0.0%	1.20	14	11	'	'	'	'	U	U
		Transit	36.0%		36		3		3		1	
		Taxi	0.0%		30		3		3		'	
		Walk/Other	50.2%		51		4		4		1	
		TOTAL	100.0%	-	101	11	8	1	9	1	2	0
0 111110	44.40/			100								
Superdistrict 2	14.4%	Auto	31.6%	1.23	36	29	3	2	3	2	1	0
		Motor Coach	0.0%		25				,			
		Transit	65.8%		75		6		6		1	
		Taxi	0.0%									
		Walk/Other	2.6%		3		0		0		0	
		TOTAL	100.0%		114	29	9	2	10	2	2	0
Superdistrict 3	17.0%	Auto	39.5%	1.29	53	41	4	3	5	4	1	1
		Motor Coach	0.0%	1	I							
		Transit	54.4%	1	73		6		6		1	
		Taxi	0.0%									
		Walk/Other	6.1%		8		1		1		0	
		TOTAL	100.0%		134	41	10	3	11	4	2	1
Superdistrict 4	11.2%	Auto	41.7%	1.53	37	24	3	2	3	2	1	0
		Motor Coach	0.0%									
		Transit	54.5%		48		4		4		1	
		Taxi	0.0%									
		Walk/Other	3.8%		3		0		0		0	
		TOTAL	100.0%		88	24	7	2	8	2	1	0
East Bay	22.4%	Auto	39.4%	3.33	70	21	5	2	6	2	1	0
		Motor Coach	0.0%									
		Transit	57.0%		101		8		9		2	
		Taxi	0.0%									
		Walk/Other	3.6%		6		0		1		0	
		TOTAL	100.0%	1	177	21	13	2	15	2	3	0
North Bay	6.1%	Auto	52.8%	1.70	25	15	2	1	2	1	0	0
riorar bay	0.170	Motor Coach	0.0%	1.70		10	-		-			
		Transit	45.3%		22		2		2		0	
		Taxi	0.0%				-		-			
		Walk/Other	1.9%		1		0		0		0	
		TOTAL	100.0%	1	48	15	4	1	4	1	1	0
South Bay	14.3%	Auto	58.0%	1.23	66	53	5	4	6	5	1	1
Jouin Day	14.570	Motor Coach	0.0%	1.23	00	55	,	7	Ü	3		
		Transit	40.7%	1	46		4		4		1	
		Taxi	0.0%	1	40		7		4		'	
		Walk/Other	1.3%	1	1		0		0		0	
		TOTAL	100.0%	1	113	53	9	4	10	5	2	1
Out of Region	1.8%	Auto	47.8%	1.50	7	5	1	0	1	0	0	0
out of Region	1.070	Motor Coach	0.0%	1.50	′	J	'	U	'	U	U	U
		Transit	50.0%	1	7		1		1		0	
		Taxi	0.0%	1	,		'				U	
		Walk/Other	2.2%	1	0		0		0		0	
		TOTAL	100.0%	t	14	5	1	0	1	0	0	0
TOTAL	100.00/			1.54								
TOTAL	100.0%	Auto	38.9%	1.54	307	199	23	15	26	17	5	3
		Motor Coach	0.0%	1	0	0	0	0	0	0	0	0
		Transit	51.7%	1	408		31		35		6	
		Taxi	0.0%	1	0	0	0	0	0	0	0	0
		Walk/Other	9.4%	154	74	100	6	15	6	17	1	
		TOTAL	100.0%	1.54	790	199	60	15	67	17	12	3

[a] Based on Seattle (2006), NY (2006) and San Francisco (2001) cruise terminal studies.
[b] Based on Seattle (2006) and NY (2006) cruise terminal studies.
[c] SF Guidelines; Work trips to SD1-All

San Francisco JRH Cruise Terminal at Pier 27 PROJECT TRIP GENERATION
LAND USE: CRUISE TERMINAL (NON-WORK TRIPS)

LAND OSL.	CITOISE	TERMINAL (NO	14-44-01	tit iitii 3)
Vessel Size:			3.000	passengers

Vessel Size:		3,000	passengers	PEAK HOUR			AM	Peak Ho	JL .	Midd	ay Peak F	lour	PM	Peak Ho	ur
DAILY				% of total daily t			7%			17%			2%		
Person-trip Genera			trips/pax.	Peak hour perso				trips/pax.			trips/pax.			trips/pax.	
otal Person-trips:			person-trips	Total person-trip				person-tri	ps		person-tri	ıps		person-tri	ips
Percent of Non-W		94%		% of Non-Work			7%			17%			2%		
Number of daily N	on-Work trips:	11,510	person-trips	No. of peak hou				person-tri			person-tri			person-tri	
				Avg. Veh.	DA			Peak Ho			ay Peak F			Peak Ho	
Origins	Distribution	Mode	Percent [d]	Occupancy	Person	Vehicle-	Percent of			Percent of		Vehicle-			Veh
	[c]			[c]	Trips	Trips	Daily [d]	Trips	Trips	Daily [d]	Trips	Trips	Daily [d]	Trips	Tri
Superdistrict 1	22.0%	Auto	50.0%	2.81	1,266	451	4.0%	51	18	17.0%	215	77	1.7%	21	
		Motor Coach	20.0%	14.40	506	35	14.0%	71	5	17.0%	86	6	1.5%	7	
		Transit	9.0%		228		7.0%	16		17.0%	39		1.6%	4	
		Taxi	19.0%	2.43	481	198	9.0%	43	18	19.0%	91	38	1.6%	8	
		Walk/Other	2.0%		51		7.0%	4		17.0%	9		1.6%	11	
		TOTAL	100.0%		2,532	684	7.3%	184	41	17.4%	440	120	1.6%	41	1
Superdistrict 2	14.0%	Auto	50.0%	2.81	806	287	4.0%	32	11	17.0%	137	49	1.7%	13	
		Motor Coach	20.0%	14.40	322	22	14.0%	45	3	17.0%	55	4	1.5%	5	-
		Transit	9.0%		145		7.0%	10		17.0%	25		1.6%	2	
		Taxi	19.0%	2.43	306	126	9.0%	28	11	19.0%	58	24	1.6%	5	
		Walk/Other	2.0%		32	105	7.0%	2	0.1	17.0%	5	7/	1.6%	1	_
		TOTAL	100.0%		1,611	435	7.3%	117	26	17.4%	280	76	1.6%	26	
Superdistrict 3	13.0%	Auto	50.0%	2.81	748	266	4.0%	30	11	17.0%	127	45	1.7%	12	
		Motor Coach	20.0%	14.40	299	21	14.0%	42	3	17.0%	51	4	1.5%	4	
		Transit	9.0%		135		7.0%	9		17.0%	23		1.6%	2	
		Taxi	19.0%	2.43	284	117	9.0%	26	11	19.0%	54	22	1.6%	5	
		Walk/Other	2.0%		30		7.0%	2		17.0%	5		1.6%	0	
		TOTAL	100.0%		1,496	404	7.3%	109	24	17.4%	260	71	1.6%	24	
Superdistrict 4	7.0%	Auto	50.0%	2.81	403	143	4.0%	16	6	17.0%	68	24	1.7%	7	
		Motor Coach	20.0%	14.40	161	11	14.0%	23	2	17.0%	27	2	1.5%	2	
		Transit	9.0%		73		7.0%	5		17.0%	12		1.6%	1	
		Taxi	19.0%	2.43	153	63	9.0%	14	6	19.0%	29	12	1.6%	3	
		Walk/Other TOTAL	2.0%		16 806	218	7.0%	1 59	13	17.0%	3 140	38	1.6%	13	-
			100.0%				7.3%			17.4%			1.6%		
East Bay	11.0%	Auto	50.0%	2.81	633	225	4.0%	25	9	17.0%	108	38	1.7%	10	
		Motor Coach	20.0%	14.40	253	18	14.0%	35	2	17.0%	43 19	3	1.5%	4	
		Transit	9.0%	0.40	114	00	7.0%	8	9	17.0%		40	1.6%		
		Taxi	19.0%	2.43	241	99	9.0%	22	9	19.0%	46	19	1.6%	4	
		Walk/Other TOTAL	2.0%		25 1.266	342	7.0%	92	20	17.0%	4 220	60	1.6%	20	
	F 00/			0.04											
North Bay	5.0%	Auto	50.0%	2.81	288	102	4.0%	12	4	17.0%	49 20	17	1.7%	5 2	
		Motor Coach	20.0%	14.40	115	8	14.0%	16	1	17.0%		1	1.5%		
		Transit	9.0%	2.42	52 109	45	7.0%	4		17.0%	9	9	1.6%	1	
		Taxi Walk/Other	19.0% 2.0%	2.43	109	45	9.0% 7.0%	10 1	4	19.0% 17.0%	21 2	9	1.6%	2	
		TOTAL	100.0%		576	155	7.0%	42	9	17.0%	100	27	1.6%	9	
Couth Day	7.00/			2.01					_					7	
South Bay	7.0%	Auto Motor Coach	50.0% 20.0%	2.81 14.40	403 161	143 11	4.0% 14.0%	16 23	6	17.0% 17.0%	68 27	24 2	1.7%	2	
				14.40		11			2			2			
		Transit	9.0%	2.42	73	/2	7.0% 9.0%	5	,	17.0%	12 29	10	1.6%	1	
		Taxi Walk/Othor	19.0%	2.43	153	63		14 1	6	19.0%	29 3	12	1.6%	3	
		Walk/Other TOTAL	2.0%	-	16 806	218	7.0%	59	13	17.0%	140	38	1.6%	13	
Out of Books	21.0%	Auto	50.0%	2.81	1,209	430	4.0%	48	17	17.4%	205	73	1.0%	20	
Out of Region	Z 1.U76	Auto Motor Coach	20.0%	14.40	483		4.0%		5	17.0%	205 82		1.7%	20 7	
				14.40	483 218	34		68	5		82 37	6		3	
		Transit	9.0% 19.0%	2.43	459	189	7.0% 9.0%	15 41	17	17.0% 19.0%	87	36	1.6%	8	
		Taxi Walk/Other	2.0%	2.43	459	109	7.0%	3	17	17.0%	8/	30	1.6%	1	
		TOTAL	100.0%	-	2,417	653	7.0%	176	39	17.0%	420	115	1.6%	39	-
TOTAL	400.00/			0.04											
TOTAL	100.0%	Auto	50.0%	2.81	5,755	2,048	4.0%	230	82	17.0%	978	348	1.7%	95	
		Motor Coach	20.0%	14.40	2,302	160	14.0%	322	22	17.0%	391	27	1.5%	33	
		Transit	9.0%	2.42	1,036	000	7.0%	73	01	17.0%	176	171	1.6%	17	
		Taxi	19.0%	2.43	2,187	900	9.0%	197	81	19.0%	416	171	1.6%	36 4	1
		Walk/Other	2.0%	0.00	230	0.400	7.0%	16	405	17.0%	39		1.6%		5
		TOTAL	100.0%	3.30	11,510	3,108	7.3%	838	185	17.4%	2,000	546	1.6%	185	

6/7/2011

[a] Based on Seattle (2006), NY (2006) and San Francisco (2001) cruise terminal studies.
[b] Based on Seattle (2006) and NY (2006) cruise terminal studies.
[c] San Francisco Cruise Terminal Mont-Use Project - Transportation Impact Report: The Duffey Company, November 15, 2001 (SF Guidelines Visitor trips to SD1-All Other).
[d] Estimated from Pier 35 Cruise Terminal survey; CHS Consulting Group May-June 2010.

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CALCULATION OF TRIP GENERATION RATES FOR WEEKDAY AM PEAK HOUR & SATURDAY MIDDAY CONDITIONS

ITE RETAIL LAND USE NO. 820 (Shopping Center)

	Vehicle-trips	per 1000 gsf	Weekday-to-
	Weekday	Saturday	Sat. factor
Daily	42.94	49.97	1.16
AM Peak Hour	1.00		
PM Peak Hour	3.73	4.89	1.31
AM % of Daily	2.3%		
PM % of Daily	8.7%	9.8%	1.13
AM to PM Rate Factor	3 73		

ITE RESTAURANT LAND USE NO. 932 (High-Turnover Sit-Down)

	Vehicle-trips	per 1000 gsf	Weekday-to-
	Weekday	Saturday	Sat. factor
Daily	127.15	158.37	1.25
AM Peak Hour	11.52		
PM Peak Hour	11.15	14.07	1.26
AM % of Daily	9.1%		
PM % of Daily	8.8%	8.9%	1.01
AM to PM Rate Factor	0.97		

Source: Institute of Transportation Engineers, Trip Generation Report, 8th Edition,2008

		•	Trip Generation	Saturday Peak 1	rip Generation
	05 0 11 11	ITE AM peak-		ITE Weekday-	5
	SF Guidelines	to-PM Peak	Proposed	to-Saturday	Proposed
	Weekday	Trip Gen	AM Peak Hour	Trip Gen	Saturday
	Rates	Rate Factor	Rates	Rate Factor	Rates
Retail					
Proposed Size (gsf)	5,000				
Linked Trip Factor for Work trips	0%				
Linked Trip Factor for Non-Work trip	90%				
Daily trips per 1000 gsf	150.0			1.16	174.6
AM % of daily			2.4%		_
AM trips per 1000 gsf		3.73	3.6		
PM % of daily	9.0%				10.1%
PM trips per 1000 gsf	13.5			1.31	17.7
Restaurant/Café					
Proposed Size (gsf)	0				
Linked Trip Factor for Work trips	0%				
Linked Trip Factor for Non-Work trip	90%				
Daily trips per 1000 gsf	600.0			1.25	747.3
AM % of daily			13.9%		
AM trips per 1000 gsf		0.97	83.7		
PM % of daily	13.5%				13.7%
PM trips per 1000 gsf	81.0			1.26	102.2

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San Francisco JRH Cruise Terminal at Pier 27

PROJECT TRIP GENERATION LAND USE: RETAIL (WORK TRIPS) Proposed Size:

DAILY:		Habard 5	Trip Factor (al:	0%	PEAK HO	ID					147 - 1 1 7	NA DL II	0.110.11	av Pk Hour
	trip Generation R		111p Factor (a): 150.0	trips/1000 qsf			of daily trip	c.	weekday i	AM Pk Hour 2.4% [d]	weekday i	9.0% [b]	Sat Midda	10.1% [e]
	erson-trips (w/out			750			n-trip rate (tr		n.	2.4% [u] 3.6		13.5		17.7
	rips (w/ linked trip		4%	30			n-trip rate (ii n-trips (w/ou			3.0 18		68		88
	trip Generation Ra		174.6	trips/1000 qsf						18		9		12
	erson-trips (w/out l			873			during peak		ioi).	100% [f]		4% [q]		4% [h]
	rips (w/ linked trip		4%	35			(w/ linked tri			18		470 [9] 3		4 /0 [11]
Daturday Work 1	nps (w iinkcu iip	iactor) [rij.	770	Average		ay Daily		ay Daily	Wookday	AM Pk Hour	Wookday I	PM Pk Hour	Cat Midde	ay Pk Hour
Origins	Distribution [i]	Mode	Percent [i]	Vehicle	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
Origins	Distribution [i]	Would	r el celli [ij	Occup. [i]	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips
Superdistrict 1	12.8%	Auto	13.8%	1.28	1	0	1	0	0	0	0	0	0	0
Superuisirici	12.070	Transit	36.0%	1.20	i	U	2	U	1	U	0	U	0	U
		Walk	47.5%		2		2		1		0		0	
		Other	2.7%		0		0		0		0		0	
l		TOTAL	100.0%		4	0	4	0	2	0	0	0	0	0
Superdistrict 2	14.4%	Auto	31.6%	1.23	1	1	2	1	1	1	0	0	0	0
Superuisirict 2	14.476	Transit	65.8%	1.23	3	'	3	'	2	'	0	U	0	U
il		Walk	1.3%		0		0		0		0		0	
i		Other	1.3%		0		0		0		0		0	
l		TOTAL	100.0%		4	1	5	1	3	1	0	0	1	0
Superdistrict 3	17.0%	Auto	39.5%	1.29	2	2	2	2	1	1	0	0	0	0
Superdistrict 3	17.076	Transit	54.4%	1.29	3	2	3	2	2	'	0	U	0	0
		Walk	3.8%		0		0		0		0		0	
		Other	2.3%		0		0		0		0		0	
l		TOTAL	100.0%		5	2	6	2	3	1	0	0	1	0
Superdistrict 4	11.2%	Auto	41.7%	1.53	1	1	2	1	1	1	0	0	0	0
Superuistrict 4	11.270	Transit	54.5%	1.55	2	'	2	'	i	'	0	0	0	0
		Walk	0.0%		0		0		0		0		0	
		Other	3.8%		0		0		0		0		0	
		TOTAL	100.0%		3	1	4	1	2	1	0	0	0	0
East Bay	22.4%	Auto	39.4%	3.33	3	1	3	1	2	0	0	0	0	0
Last bay	22.470	Transit	57.0%	3.33	4	'	4		2		0		0	
		Walk	0.0%		o i		0		0		0		0	
		Other	3.6%		ō		0		0		0		0	
		TOTAL	100.0%		7	1	8	1	4	0	1	0	1	0
North Bay	6.1%	Auto	52.8%	1.70	1	1	1	1	1	0	0	0	0	0
l	0.170	Transit	45.3%		i		i		i	"	0		0	_
l		Walk	0.0%		i		ó		Ö		0		0	
l		Other	1.9%		ő		ő		0		0		0	
		TOTAL	100.0%		2	1	2	1	1	0	0	0	0	0
South Bay	14.3%	Auto	58.0%	1.23	2	2	3	2	2	1	0	0	0	0
		Transit	40.7%		2	-	2	_	1	1 1	0	-	0	1 -
		Walk	0.0%		0		0		o o		0		0	
i		Other	1.3%		ő		0		0		0		0	
		TOTAL	100.0%		4	2	5	2	3	1	0	0	1	0
Out of Region	1.8%	Auto	47.8%	1.50	0	0	0	0	0	0	0	0	0	0
La. a. region		Transit	50.0%		ō	"	0		0	_	0		0	
		Walk	0.0%		ő		ő		0		0		0	
		Other	2.2%		0		0		0		0		0	
		TOTAL	100.0%		1	0	1	0	0	0	0	0	0	0
TOTAL	100.0%	Auto	38.9%	1.54	12	8	14	9	7	5	1	1	1	1
		Transit	51.7%		16	-	18		9	-	1		2	
i		Walk	6.9%		2		2		1		0		0	
il.		Other	2.5%		1		1		0		0		0	1
II .			2.3%						U		U		U	

- [a] No linked-trip factor assumed for work trips
- [b] SF Guidelines, Appendix C Table C-1 (General Retail)
 [c] The Saturday trip generation rate is based on the weekday to Saturday ratio for Shopping Center [LU 820] from ITE Trip Generation, 8th Edition
- [d] The weekday a.m. percentage is based on the weekday a.m. to weekday p.m. ratio for Shopping Center [LU 820] from ITE Trip Generation, 8th Edition [e] The Saturday midday percentage is based on the Saturday midday to weekday p.m. ratio for Shopping Center [LU 820] from ITE Trip Generation, 8th Edition
- [f] All retail trips occurring before 9 a.m. are assumed to be work trips
- [g] SF Guidelines, Appendix C Table C-2 (Retail)
- [iii] The Saturday daily and midday peak hour percentages of work/non-work trips are assumed to be the same as the weekday p.m. percentages shown in Table C-2 of the SF Guidelines [iii] SF Guidelines, Appendix E Table E-3 Work Trips to SD1 (All)

San Francisco JRH Cruise Terminal at Pier 27 PROJECT TRIP GENERATION LAND USE: RETAIL (NON-WORK TRIPS)

Proposed Size: 5,000 gsf

DAILY:			Frip Factor [a]:	90%	PEAK HOU				Weekday A	M Pk Hour	Weekday	PM Pk Hour	Sat Midda	
	trip Generation Ra			trips/1000 gsf						2.4% [d]		9.0% [b]		10.1%
	erson-trips (w/out			750			n-trip rate (tr			3.6		13.5		17.
	Trips (w/ linked tri			72			n-trips (w/ou			18		68		88
	trip Generation Ra			trips/1000 gsf			n-trips (w/ lir		tor):	18		9		12
	erson-trips (w/out l			873			Trips during			0% [f]		96% [g]		96%
Sat. Non-Work Tr	ips (w/ linked trip I	factor) [h]:	96%	84			Trips (w/ link			0		6		8
				Average		ay Daily		ay Daily		M Pk Hour		PM Pk Hour	Sat Midda	
Origins	Distribution [i]	Mode	Percent [i]	Vehicle	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehic
				Occup. [i]	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trip
Superdistrict 1	19.0%	Auto	18.1%	1.62	2	2	3	2	0	0	0	0	0	0
		Transit	14.7%		2		2		0		0		0	
		Walk	63.0%		9		10		0		1		1	
		Other	4.2%		1		1		0		0		0	
		TOTAL	100.0%		14	2	16	2	0	0	1	0	2	0
Superdistrict 2	7.0%	Auto	27.9%	1.66	1	1	2	1	0	0	0	0	0	0
		Transit	32.6%		2		2		0		0		0	
		Walk	34.1%		2		2		0		0		0	
		Other	5.4%		0		0		0		0		0	
		TOTAL	100.0%		5	1	6	1	0	0	0	0	1	0
Superdistrict 3	8.0%	Auto	31.2%	2.08	2	1	2	1	0	0	0	0	0	0
		Transit	21.7%		1		1		0		0		0	
		Walk	41.3%		2		3		0		0		0	
		Other	5.8%		0		7		0		0		0	
		TOTAL	100.0%		6	1		1	0	0	_	0	1	0
Superdistrict 4	3.0%	Auto	34.0%	1.51	1	0	1	1	0	0	0	0	0	0
		Transit	34.0%		1		1		0		0		0	
		Walk Other	28.0% 4.0%		0		1 0		0				0	
		TOTAL	100.0%		2	0	3	1	0	0	0	0	0	0
Foot Door	11.0%	Auto	38.1%	2.35	3	1	4	1	0	0	0	0	0	0
East Bay	11.0%	Transit	23.2%	2.35	2	1	2	'	0	U	0	0	0	U
		Walk	36.6%		3		3		0		0		0	
		Other	2.1%		0		0		0		0		0	
		TOTAL	100.0%		8	1	9	1	0	0	1	0	1	0
North Bay	5.0%	Auto	46.1%	2.27	2	1	2	1	0	0	0	0	0	0
North Day	3.070	Transit	17.6%	2.27	1	'	1	' '	0		0	0	0	
		Walk	34.1%		l i		i		ő		0		0	
		Other	2.2%		Ö		0		0		0		0	
		TOTAL	100.0%		4	1	4	1	0	0	0	0	0	0
South Bay	8.0%	Auto	73.8%	2.84	4	1	5	2	0	0	0	0	1	0
		Transit	14.1%		i	1	1	_	0	_	0	-	0	
		Walk	10.1%		i		1		0		0		0	
		Other	2.0%		0		0		0		0		0	
		TOTAL	100.0%		6	1	7	2	0	0	1	0	1	0
Out of Region	39.0%	Auto	37.0%	3.12	10	3	12	4	0	0	1	0	- 1	0
		Transit	8.4%		2	1	3		0		0		0	
		Walk	28.3%		8		9		0		1		1	
		Other	26.3%		7		9		0		1		1	
		TOTAL	100.0%		28	3	33	4	0	0	3	0	3	0
TOTAL	100.0%	Auto	35.7%	2.43	26	11	30	12	0	0	2	- 1	3	- 1
		Transit	15.7%		11		13		0		1		1	
		Walk	36.1%		26		30		0		2		3	
		Other	12.5%		9	1	10		0		1		1	
		TOTAL	100.0%	1	72	11	84	12	0	0	6	1	8	1

- [a] Assumes that 90 percent of the retail customers are already in the area, based on field surveys

- [b] SF Guidelines, Appendix C Table C-1 (General Retail)
 [c] The Saturday trip generation rate is based on the weekday to Saturday ratio for Shopping Center (LU 820) from ITE Trip Generation, 8th Edition
 [d] The weekday a.m. percentage is based on the weekday a.m. to weekday p.m. ratio for Shopping Center (LU 820) from ITE Trip Generation, 8th Edition
- [e] The Saturday midday percentage is based on the Saturday midday to weekday p.m. ratio for Shopping Center [LU 820] from ITE Trip Generation, 8th Edition
- [f] All retail trips occurring before 9 a.m. are assumed to be work trips
- [1] Air learnings occurring retired Fair. and eastwires to be with high [g) SF Guidelines, Appendix C Table C-2 (Retail) [h] The Saturady daily and midday peak high percentages of worknowork trips are assumed to be the same as the weekday p.m. percentages shown in Table C-2 of the SF Guidelines [j) SF Guidelines, Appendix E Table E-10 Visitor Trips to SD1 (Retail)

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San Francisco JRH Cruise Terminal at Pier 27

Linked Trip Factor [a]: 0% PEAK HOUR:
e [b]: 2.50 trips/guest Peak hour trips as a % of daily trips:

PROJECT TRIP GENERATION

Weekday person-trip Generation Rate [b]:

DAILY:

LAND USE: EVENT SPACE (WORK TRIPS) Proposed Size: 600 guests

	erson-trips (w/out		actor):	1,500		hour persor				0.0		0.3		0.0
	rips (w/ linked trip		20%	300		hour persor			factor):	0		203		0
Saturday person-	trip Generation Ra	ate [b]:	2.50	trips/guest	Total peak	hour persor	n-trips (w/ lir	ked trip fac	tor):	0		184		0
Total Saturday P	erson-trips (w/out	linked trip fa		1,500	Percent of	Work Trips	during peak	hour:				8% [f]		
Saturday Work T	rips (w/ linked trip	factor) [g]:	20%	300	Peak hour	Work Trips	(w/ linked tr	ip factor):		0		16		0
				Average	Weekd	ay Daily	Saturd	ay Daily	Weekday	AM Pk Hour	Weekday F	PM Pk Hour	Sat Midda	ıy Pk Hour
Origins	Distribution [h]	Mode	Percent [h]	Vehicle	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
	- 1			Occup. [h]	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips
Superdistrict 1	12.8%	Auto	13.8%	1.28	5	4	5	4	0	0	0	0	0	0
		Transit	36.0%		14		14		0		1		0	
		Walk	47.5%		18		18		0		1		0	
		Other	2.7%		1		- 1		0		0		0	
		TOTAL	100.0%		38	4	38	4	0	0	2	0	0	0
Superdistrict 2	14.4%	Auto	31.6%	1.23	14	11	14	11	0	0	1	1	0	0
		Transit	65.8%		28		28		0		2		0	
		Walk	1.3%		1		1		0		0		0	
		Other	1.3%		1		1		0		0		0	
		TOTAL	100.0%		43	11	43	11	0	0	2	1	0	0
Superdistrict 3	17.0%	Auto	39.5%	1.29	20	16	20	16	0	0	1	1	0	0
		Transit	54.4%		28		28		0		1		0	
		Walk	3.8%		2		2		0		0		0	
		Other	2.3%		1		1		0		0		0	
		TOTAL	100.0%		51	16	51	16	0	0	3	1	0	0
Superdistrict 4	11.2%	Auto	41.7%	1.53	14	9	14	9	0	0	1	0	0	0
		Transit	54.5%		18		18		0		1		0	
		Walk	0.0%		0		0		0		0		0	
		Other	3.8%		1		- 1		0		0		0	
		TOTAL	100.0%		34	9	34	9	0	0	2	0	0	0
East Bay	22.4%	Auto	39.4%	3.33	26	8	26	8	0	0	1	0	0	0
		Transit	57.0%		38		38		0		2		0	
		Walk	0.0%		0		0		0		0		0	
		Other	3.6%		2		2		0		0		0	
		TOTAL	100.0%		67	8	67	8	0	0	4	0	0	0
North Bay	6.1%	Auto	52.8%	1.70	10	6	10	6	0	0	1	0	0	0
		Transit	45.3%		8		8		0		0		0	
		Walk	0.0%		0		0		0		0		0	
		Other	1.9%		0		0		0		0		0	
		TOTAL	100.0%		18	6	18	6	0	0	1	0	0	0
South Bay	14.3%	Auto	58.0%	1.23	25	20	25	20	0	0	1	1	0	0
		Transit	40.7%		17		17		0		1		0	
		Walk	0.0%		0		0		0		0		0	
		Other	1.3%		43	20	43	20	0		0	-	0	
0 / (0 /	4.00/	TOTAL	100.0%	4.50						0	2	1		0
Out of Region	1.8%	Auto	47.8%	1.50	3	2	3	2	0	0	0	0	0	0
		Transit	50.0%		3		3		0		0		0	
		Walk	0.0%		0		0		0		0		0	
ļ		Other	2.2%		5	2	0 5	2	0	0	0	0	0	0
TOTAL	100.00/			1.54										
TOTAL	100.0%	Auto	38.9%	1.54	117	76	117	76	0	0	6	4	0	0
		Transit Walk	51.7% 6.9%		155 21		155 21		0		8 1		0	
					7		7		0		0		0	
-		Other	2.5%		300	76	300	76	0	0	16	4	0	0
		TUTAL	100.0%		300	/0	300	/0	U	U	10	4	U	U

Weekday AM Pk Hour Weekday PM Pk Hour Sat Midday Pk Hour

13.5% [d]

0.0% [c]

- [a] No linked-trip factor assumed for work trips
 [b] Assumes two trips per person and one employee for every four guests
- [c] Evening event starting after 6 p.m.

- (c) Evening event starting after 6 p.m.

 (d) The p.m. percentage is assumed to be the same as a restaurant use; taken from SF Guidelines, Appendix C Table C-1

 (e) Assumes one employee for every four guests

 (f) The percentage of vox fitips is assumed to be double the percentages shown in Table C-2 of the SF Guidelines for restaurant use (4%)

 (g) The Saturday daily percentages of workfnor-work trips are assumed to be the same as the weekday p.m. percentages shown in Table C-2 of the SF Guidelines for restaurant uses

 (h) SF Guidelines, Appendix E Table E-3 Work Trips to SD1 (All)

San Francisco JRH Cruise Terminal at Pier 27 PROJECT TRIP GENERATION LAND USE: EVENT SPACE (NON-WORK TRIPS)
Proposed Size: 600 guests

Proposed Size:

DAILY:		Linked 7	Trip Factor [a]:	10%	PEAK HOL	JR:			Weekday A	AM Pk Hour	Weekday I	PM Pk Hour	Sat Midda	ay Pk Hour
	-trip Generation Ra		2.50	trips/guest			of daily trip		,	0.0% [c]	,	13.5% [d]		0.0% [c
	erson-trips (w/out			1,500			n-trip rate (tr			0.0		0.3		0.0
	Trips (w/ linked trip			1,080			n-trips (w/ou			0		203		0
	trip Generation Ra		2.50	trips/guest			n-trips (w/ lir		tor):	0		184		0
	erson-trips (w/out I			1,500			Trips during					92% [f]		
sat. Non-Work Tr	rips (w/ linked trip t	actor) [g]:	80%	1,080			Frips (w/ link			0		168		0
				Average		ay Daily		ay Daily		AM Pk Hour		PM Pk Hour		ay Pk Hour
Origins	Distribution [h]	Mode	Percent [h]		Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-	Person	Vehicle-
				Occup. [h]	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips	Trips
Superdistrict 1	22.0%	Auto	12.9%	2.29	31	13	31	13	0	0	5	2	0	0
		Transit Walk	17.1% 65.3%		41 155		41 155		0		6 24		0	
		Other	4.7%		111		11		0		24		0	
		TOTAL	100.0%		238	13	238	13	0	0	37	2	0	0
Superdistrict 2	14.0%	Auto	31.9%	2.07	48	23	48	23	0	0	7	4	0	0
Superaistrict 2	14.0%	Transit	35.0%	2.07	48 53	23	48 53	23	0	0	8	4	0	U
		Walk	26.7%		40		40		0		6		0	
		Other	6.4%		10		10		0		2		0	
		TOTAL	100.0%		151	23	151	23	0	0	23	4	0	0
Superdistrict 3	13.0%	Auto	38.8%	2.39	54	23	54	23	0	0	8	4	0	0
Superuisuitt 3	13.070	Transit	36.8%	2.37	52	23	52	23	0		8	"	0	, v
		Walk	17.4%		24		24		0		4		0	
		Other	7.0%		10		10		0		2		0	
		TOTAL	100.0%		140	23	140	23	0	0	22	4	0	0
Superdistrict 4	7.0%	Auto	42.5%	1.93	32	17	32	17	0	0	5	3	0	0
ouperuisinet i	7.070	Transit	32.7%	1.70	25		25	.,	0		4		0	
		Walk	17.7%		13		13		0		2		0	
		Other	7.1%		5		5		0		1		0	
		TOTAL	100.0%		76	17	76	17	0	0	12	3	0	0
East Bay	11.0%	Auto	47.4%	2.43	56	23	56	23	0	0	9	4	0	0
,		Transit	24.9%		30		30		0		5		0	
		Walk	25.4%		30		30		0		5		0	
		Other	2.3%		3		3		0		0		0	
		TOTAL	100.0%		119	23	119	23	0	0	18	4	0	0
North Bay	5.0%	Auto	71.1%	1.91	38	20	38	20	0	0	6	3	0	0
		Transit	9.6%		5		5		0		1		0	
		Walk	15.8%		9		9		0		1		0	
		Other	3.5%		2		2		0		0		0	
		TOTAL	100.0%		54	20	54	20	0	0	8	3	0	0
South Bay	7.0%	Auto	59.5%	2.46	45	18	45	18	0	0	7	3	0	0
		Transit	24.6%		19		19		0		3		0	
		Walk	13.5%		10		10		0		2		0	
		Other	2.4%		2	40	2	40	0		0		0	L .
		TOTAL	100.0%		76	18	76	18	0	0	12	3	0	0
Out of Region	21.0%	Auto	35.9%	3.17	81	26	81	26	0	0	13	4	0	0
		Transit	24.1%		55	1	55		0		8		0	1
		Walk	27.7%		63	1	63		0		10		0	1
		Other	12.3%		28 227	24	28 227	24	0	0	4 35	4	0	-
TOTAL	400.007	TOTAL	100.0%	0.07		26		26	0	0		4	0	0
TOTAL	100.0%	Auto	35.8%	2.37	387	163	387	163	0	0	60	25	0	0
		Transit Walk	25.7%		278		278		0		43 54		0	
			32.0%		345		345 70						0	
		Other	6.5%		70 1.080	163	1.080	163	0	0	11 168	25	0	0

- [a] Assumes that 10 percent of the event guests are already in the area [b] Assumes two trips per person and one employee for every four guests
- [c] Evening event starting after 6 p.m.
- [d] The p.m. percenatage is assumed to be the same as a restaurant use; taken from SF Guidelines, Appendix C Table C-1
 [e] Assumes one employee for every four quests

- (e) The percentages of work trips is assumed to be double the percentages shown in Table C-2 of the SF Guidelines for restaurant use (4%)

 [g] The Saturday daily percentages of workhon-work trips are assumed to be the same as the weekday p.m. percentages shown in Table C-2 of the SF Guidelines for restaurant uses

 [h] SF Guidelines, Appendix E Table E-11 Visitor Tips is OSD ((all Other)).

Cruise Terminal Demand 2011 05 13 v1.xls Printed on 6/7/2011 Cruise Terminal Demand 2011 05 13 v1.xls Printed on 6/7/2011

Cruise Terminal Bus Loading Demand

Cruise reminial bus Loading Der			А	RRIVAL	_S
			Avg.	Max.	Ratio
	Before surve	y starts	3	8	3.00
80 bus demand	7:30	8:30	2	7	3.00
7 hour period during day	7:45	8:45	3	9	3.18
1.71 35 min loadingduration	8:00	9:00	4	10	2.40
	8:15	9:15	9	17	2.00
7 avg spaces	8:30	9:30	16	31	1.96
15 peak spaces	8:45	9:45	23	43	1.86
	9:00	10:00	28	54	1.92
	9:15	10:15	29	55	1.93
14 spaces provided	9:30	10:30	24	49	2.03
6 staging spaces	9:45	10:45	21	48	2.27
4 extra spaces on Pier 29	10:00	11:00	19	44	2.30
Total = 24 spaces	10:15	11:15	22	48	2.23
	10:30	11:30	21	45	2.16
7:30 am to 2:30 pm = 7 hours	10:45	11:45	20	40	2.00
	11:00	12:00	19	41	2.18
	11:15	12:15	15	34	2.34
	11:30	12:30	15	35	2.39
	11:45	12:45	12	33	2.71
	12:00	13:00	18	38	2.09
	12:15	13:15	19	40	2.07
	12:30	13:30	19	39	2.03
	12:45	13:45	21	41	1.97
	13:00	14:00	14	33	2.41
	13:15	14:15	11	30	2.77
	13:30	14:30	9	28	3.17
	13:45	14:45	7	25	3.49
	14:00	15:00	5	20	3.87
	14:15	15:15	4	15	3.75
	14:30	15:30	2	9	3.86
	14:45	15:45	1	3	4.50
			433	972	2.24

Cruise Terminal Truck Loading Demand

Oraise Terminal Track Loading Bei	IIuIIu				
			Α	RRIVAL	.S
			Avg.	Max.	Ratio
Bef	ore surve	y starts	11	15	1.32
	7:30	8:30	5	13	2.89
49 truck demand	7:45	8:45	5	13	2.60
9 hour period during day	8:00	9:00	5	11	2.44
0.5 2-hour loading duration	8:15	9:15	4	9	2.35
	8:30	9:30	3	7	2.10
11 avg spaces	8:45	9:45	4	8	2.18
28 peak spaces	9:00	10:00	4	9	2.25
	9:15	10:15	4	10	2.50
	9:30	10:30	3	9	2.84
	9:45	10:45	4	10	2.86
between 29 and 32 spaces provided	10:00	11:00	4	9	2.45
	10:15	11:15	4	8	2.18
	10:30	11:30	4	10	2.50
6:30 am to 3:30 pm = 9 hours	10:45	11:45	3	7	2.63
	11:00	12:00	2	9	3.86
	11:15	12:15	2	9	4.15
	11:30	12:30	2	8	4.80
	11:45	12:45	2	8	4.36
	12:00	13:00	2	5	3.33
	12:15	13:15	2	5	3.00
	12:30	13:30	2	4	2.40
	12:45	13:45	2	5	3.00
	13:00	14:00	1	4	3.43
	13:15	14:15	1	5	3.75
	13:30	14:30	1	4	4.00
	13:45	14:45	1	3	3.60
	14:00	15:00	1	3	3.60
	14:15	15:15	0	1	3.00
	14:30	15:30	0	1	3.00
	14:45	15:45	0	0	0.00
	15:00	16:00	0	0	0.00
			85	222	2.61 Aver

SECTION 3

Traffic Volumes Scenarios and Intersection Lane Geometry Summaries This page intentionally left blank

Existing Traffic Volumes on The Embarcadero

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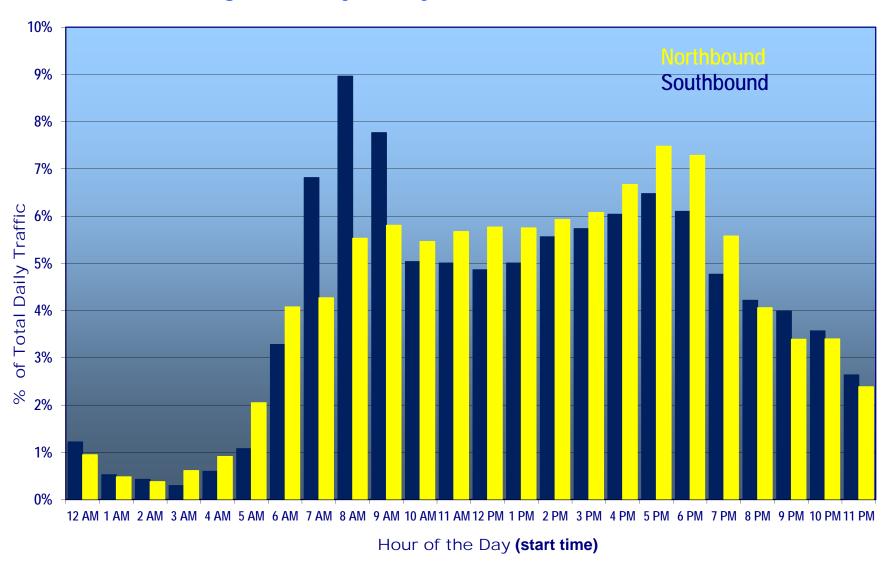
Pier 27 Traffic Counts - Two-way seven-day ADT by Baymetrics The Embarcadero, between Sansome St. and Lombard St.

Distriction Southbound Northbound Southbound So	esday, June 01, 2010 Wednesday, June 02, 2010 Thursday, June 03, 2010 Friday, June 04, 2010	wennesday I		, .	Monday, Ma (Memori	y 30, 2010	Sunday, Ma	ay 29, 2010	Saturday, M	Date
ADT Volume				, ,		Northbound	Southbound	Northbound	Southbound	Direction
Traffic Volume Survey by Priord Michight - 10A - 2 Prior	43 13,594 15,035 14,266 15,090 14,292 15,504 15,228	13,594 15,035	15,043	13,624	15,491	15,240	14,449	16,273	16,152	
Maingain Color C	20,001 27,001 27,002 30,132	7,57	20,037	113	27,		27,0	1 23		Traffic Volume Sun
Freekhour Petrod	4,683 3,607 4,822 3,575 4,750 3,545 4,540	3.607 4.8	4.683	2.449	2.710	2.594	2.712	2.898		
Post-Norm 245 PM 512 245 PM 1,122 245 PM 245 PM 1,122 245 PM 245 PM 1,122 245 PM										
Peak four 7-65 PM September 1-75 PM										
Peak four 1.45 PM .335	1,142 2:45 PM 775 2:45 PM 1,045 2:45 PM 880 2:45 PM 1,028 2:15 PM 887 2:45 PM 1,045 2:45 PM 1	2:45 PM 775 2:45 PM 1,04	2:45 PM 1,142 2	1:30 PM 1,127	12:15 PM 1,095	2:45 PM 1,134	2:45 PM 893	2:45 PM 1,122	2:45 PM 872	Peak hour
Peak Human Pea		4,667 4,53	4,379	4,551		5,241	5,764		6,041	3 PM - 8 PM
Peak hour Traffic by Period Peak										
Peak How Traffic by Period Peak How Traff										
Non- 2 PM 1:15 PM 753 1:45 PM 1:15 PM 753 1:45 PM 1:102 1:45 PM	662 11:45 PM 695 11:45 PM 669 11:45 PM 721 11:45 PM 697 11:45 PM 738 11:45 PM 734 11:45 PM	11:45 PM 695 11:45 PM 66	11:45 PM 662 1	11:45 PM 553	11:45 PM 1,019	11:45 PM 941	11:45 PM 1,090	11:45 PM 929	, ,	
Non2 PM 1-15 PM 753 1-15 PM 763 1-15 PM 1072 1-15 PM 1079 1-15 PM 10		0.05.00	0.45.414.4.074	0.45.444453	0.45.44. 505	0.45.444504	0.45.444400	0.45.444 574	ı´ l	
4 PM - 6 PM 430 PM 1210 430 PM 1210 445 PM 1127 445 PM 1070 430 PM 1,726 445 PM 1,756 445 PM 1,756 445 PM 936 445 PM 936 445 PM 931 445 PM 931 445 PM 970 44.5 PM 970 47.5										
12:00 AM										
12:15 AM 93 87 52 244 103 520 58 303 67 55 255 45 248 28 146 22 118 39 194 29 147 35 188 33 131 150 AM 75 363 51 214 90 467 39 240 45 227 40 226 23 126 18 101 35 165 23 110 31 156 27 125 133 AM 46 277 41 187 70 352 31 180 36 183 21 134 13 79 14 68 13 106 11 81 16 101 22 94 145 AM 8 232 37 172 48 297 30 152 33 161 22 111 14 65 12 58 24 41 19 14 15 15 14 17 69 10 76 13 74 18 18 18 18 18 18 18 18 18 18 18 18 18										
12:30 AM								-		
12:45 AM										
1:00 AM						-				
1.30 AM										
1:45 AM	i 111	14 84 19 1:	15 111	28 166	47 214	52 222	89 412	43 207	63 324	1:15 AM
2:00 AM 52 209 30 151 45 252 31 144 30 146 23 94 13 55 18 58 16 72 9 55 20 65 20 67 2:15 AM 44 190 37 145 44 207 21 113 29 128 18 84 12 52 7 51 7 60 12 49 11 57 11 66 2:30 AM 33 177 23 127 34 171 24 106 23 115 8 71 19 58 11 48 22 69 12 50 20 61 9 53 245 AM 26 155 26 116 32 155 25 101 25 107 9 58 14 58 15 51 17 62 12 45 12 63 14 54 330 AM 21 124 28 114 18 128 20 90 24 101 19 54 6 51 20 53 13 59 30 66 6 49 23 57 3:15 AM 17 97 23 100 16 100 15 84 19 91 6 42 7 46 22 68 16 68 22 76 14 52 29 75 3:30 AM 14 78 15 92 16 82 23 83 19 87 10 44 12 39 19 76 14 60 15 79 15 47 22 88 3:45 AM 15 67 29 95 10 60 14 72 21 83 14 49 7 32 21 82 11 54 21 88 9 44 20 94 4:15 AM 18 62 14 72 15 54 9 63 11 66 26 74 13 51 31 97 14 53 29 96 17 49 28 96 4:30 AM 12 60 23 80 19 57 20 60 21 68 17 81 20 59 25 103 29 68 33 114 31 65 45 119 45 AM 12 66 17 68 12 59 14 60 15 62 18 85 38 90 48 130 17 74 13 14 31 65 45 119 45 AM 12 66 17 68 12 59 14 60 15 62 18 85 38 90 48 130 17 74 14 53 117 42 142 515 AM 21 66 17 68 12 59 14 60 15 57 20 63 25 72 27 88 34 105 55 159 34 94 46 145 33 117 42 142 515 AM 20 70 34 105 22 69 19 73 26 87 20 82 39 131 43 171 28 108 40 156 44 144 50 164 5:30 AM 21 66 17 68 12 59 14 60 15 62 18 85 38 90 48 130 17 74 37 130 36 92 27 126 5:15 AM 20 70 34 105 22 69 19 73 26 87 20 82 39 131 43 171 28 108 40 156 44 144 50 164 5:30 AM 24 98 60 171 39 106 44 115 55 21 42 60 166 42 168 129 303 61 171 171 28 108 40 156 44 144 50 164 5:30 AM 24 98 60 171 39 106 44 115 55 21 42 60 166 42 168 129 303 61 171 171 28 108 40 156 44 144 50 164 5:30 AM 24 98 60 171 39 106 44 115 52 142 60 166 42 168 129 303 61 171 171 28 108 40 156 44 144 50 164 5:30 AM 24 98 60 171 39 106 44 115 55 142 60 166 42 168 129 303 61 171 171 21 281 42 163 131 295 5:45 AM 24 98 60 171 39 106 44 115 55 142 60 166 42 168 129 303 61 171 171 121 281 42 163 131 295 5:45 AM 24 98 60 171 39 106 44 115 55 2142 60 166 42 168 129 303 61 171 171 121 281 42 163 131 295 5:45 AM 24 98 60 171 39 106 44 115 55 2142 60 166 42 168 129 303 61 171 171 121 281 42 163 131 295 5:45 AM 24 98 60	3 79 14 68 13 106 11 81 16 101 22 94 15 117 23	14 68 13 16	13 79	21 134	36 183	31 180	70 352	41 187	46 277	1:30 AM
2:15 AM										
2:30 AM										
2:45 AM										
3:00 AM 21 124 28 114 18 128 20 90 24 101 19 54 6 51 20 53 13 59 30 66 6 49 23 57 3:15 AM 17 97 23 100 16 100 15 84 19 91 6 42 7 46 22 68 16 68 22 76 14 52 29 75 3:30 AM 14 78 15 92 16 82 23 83 19 87 10 44 12 39 19 76 14 60 15 79 15 47 22 88 3:45 AM 15 67 29 95 10 60 14 72 21 83 14 49 7 32 21 82 11 54 21 88 9 44 20 94 4:00 AM 15 61 14 81 13 55 17 69 15 74 24 54 19 45 26 88 14 55 31 89 8 46 26 97 4:15 AM 18 62 14 72 15 54 9 63 11 66 26 74 13 51 31 97 14 53 29 96 17 49 28 96 4:30 AM 12 60 23 80 19 57 20 60 21 68 17 81 20 59 25 103 29 68 33 114 31 65 45 119 4:45 AM 21 66 17 68 12 59 14 60 15 62 18 85 38 90 48 130 17 74 37 130 36 92 27 126 5:00 AM 17 68 31 85 16 62 20 63 25 72 27 88 34 105 55 159 34 94 46 145 33 117 42 142 5:15 AM 20 70 34 105 22 69 19 73 26 87 20 82 39 131 43 171 28 108 40 156 44 144 50 164 5:30 AM 24 98 60 171 39 106 44 115 52 142 60 166 42 168 129 303 61 171 121 281 42 163 131 295 6:00 AM 27 108 83 223 30 120 74 169 78 195 93 232 81 215 168 416 86 223 159 394 96 226 147 400										
3:15 AM										
3:30 AM										
3:45 AM										
4:00 AM										
4:30 AM 12 60 23 80 19 57 20 60 21 68 17 81 20 59 25 103 29 68 33 114 31 65 45 119 4:45 AM 21 66 17 68 12 59 14 60 15 62 18 85 38 90 48 130 17 74 37 130 36 92 27 126 5:00 AM 17 68 31 85 16 62 20 63 25 72 27 88 34 105 55 159 34 94 46 145 33 117 42 142 5:15 AM 20 70 34 105 22 69 19 73 26 87 20 82 39 131 43 171 28 108 40 156 44 144 50 164 5:30 AM 34 171 24 163 313 29 </td <td></td> <td></td> <td>19 45</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			19 45							
4:45 AM 21 66 17 68 12 59 14 60 15 62 18 85 38 90 48 130 17 74 37 130 36 92 27 126 5:00 AM 17 68 31 85 16 62 20 63 25 72 27 88 34 105 55 159 34 94 46 145 33 117 42 142 5:15 AM 20 70 34 105 22 69 19 73 26 87 20 82 39 131 43 171 28 108 40 156 44 144 50 164 5:30 AM 37 95 46 128 29 79 32 85 39 105 59 124 53 164 76 222 48 127 74 197 44 </td <td>51 31 97 14 53 29 96 17 49 28 96 25 58 26</td> <td>31 97 14</td> <td>13 51</td> <td>26 74</td> <td>11 66</td> <td>9 63</td> <td>15 54</td> <td>14 72</td> <td>18 62</td> <td>4:15 AM</td>	51 31 97 14 53 29 96 17 49 28 96 25 58 26	31 97 14	13 51	26 74	11 66	9 63	15 54	14 72	18 62	4:15 AM
5:00 AM) 59 25 103 29 68 33 114 31 65 45 119 30 80 41	25 103 29 (20 59	17 81	21 68	20 60	19 57	23 80	12 60	4:30 AM
5:15 AM 20 70 34 105 22 69 19 73 26 87 20 82 39 131 43 171 28 108 40 156 44 144 50 164 5:30 AM 37 95 46 128 29 79 32 85 39 105 59 124 53 164 76 222 48 127 74 197 44 157 72 191 5:45 AM 24 98 60 171 39 106 44 115 52 142 60 166 42 168 129 303 61 171 121 281 42 163 131 295 6:00 AM 27 108 83 223 30 120 74 169 78 195 93 232 81 215 168 416 86 223 159 394 96 226 147 400										
5:30 AM 37 95 46 128 29 79 32 85 39 105 59 124 53 164 76 222 48 127 74 197 44 157 72 191 5:45 AM 24 98 60 171 39 106 44 115 52 142 60 166 42 168 129 303 61 171 121 281 42 163 131 295 6:00 AM 27 108 83 223 30 120 74 169 78 195 93 232 81 215 168 416 86 223 159 394 96 226 147 400										
5:45 AM										
6:00 AM 27 108 83 223 30 120 74 169 78 195 93 232 81 215 168 416 86 223 159 394 96 226 147 400										
0:15 AWI 41 1791 70 7051 34 1371 57 7071 00 7351 77 7841 117 7881 138 5111 115 3101 147 4961 118 3001 134 4841				72 284	66 235	57 207	34 132	76 265	41 129	6:15 AM
7:15 AM 78 254 63 322 93 280 54 250 58 285 65 286 238 739 128 578 264 773 141 565 246 755 121 541	3 739 128 578 264 773 141 565 246 755 121 541 244 740 143	128 578 264 7 ⁻	238 739	65 286	58 285	54 250	93 280	63 322	78 254	7:15 AM

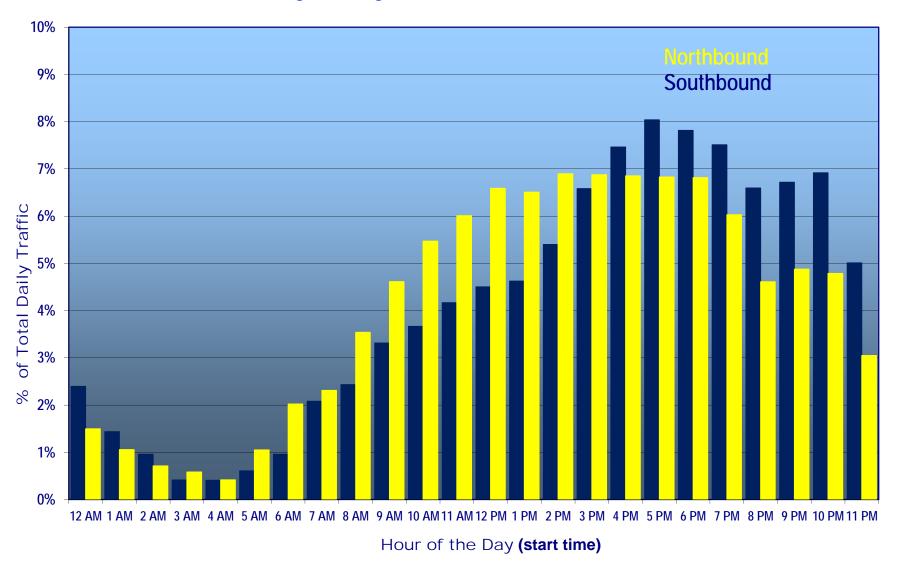
Pier 27 Traffic Counts - Two-way seven-day ADT by Baymetrics The Embarcadero, between Sansome St. and Lombard St.

Date	Saturday, May	y 29, 2010	Sunday, Ma	y 30, 2010		ay 31, 2010 rial Day)	Tuesday, Ju (Sea Prince	ne 01, 2010 ess at P35)	Wednesday, Ju	ne 02, 2010	Thursday, Jui	ne 03, 2010	Friday, June	204, 2010
Direction	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound	Southbound	Northbound
10:00 AM	139 552	236 807	152 585	205 787	223 796	204 704	228 1,142	176 747	201 1,045	198 786	212 1,028	199 776	201 1,045	193 861
10:15 AM	160 573	228 846	152 606	233 831	228 835	193 741	227 1,045	164 717	184 905	220 801	162 873	185 776	194 930	216 867
10:30 AM	148 595	199 853	146 600	251 900	228 878	228 806	244 958	181 714	156 769	194 806	161 752	175 757	168 784	207 853
10:45 AM	145 592	227 890	140 590	260 949	240 919	230 855	227 926	180 701	162 703	214 826	153 688	223 782	176 739	211 827
11:00 AM	168 621	231 885	178 616	259 1,003	241 937	232 883	229 927	175 700	169 671	230 858	182 658	222 805	177 715	187 821
11:15 AM	150 611	233 890	167 631	296 1,066	267 976	252 942	188 888	178 714	195 682	212 850	183 679	189 809	185 706	224 829
11:30 AM	169 632	247 938	177 662	283 1,098	268 1,016	275 989	198 842	166 699	181 707	224 880	165 683	204 838	188 726	220 842
11:45 AM 12:00 PM	186 673 170 675	267 978 287 1,034	181 703 168 693	271 1,109 284 1,134	271 1,047 285 1,091	274 1,033 287 1,088	197 812 194 777	172 691 172 688	189 734 205 770	208 874 214 858	203 733 170 721	226 841 228 847	208 758 169 750	219 850 265 928
12:15 PM	189 714	260 1,061	160 686	286 1,124	271 1,095	261 1,097	185 774	165 675	169 744	193 839	186 724	193 851	186 751	249 953
12:30 PM	198 743	272 1,086	193 702	248 1,089	260 1,087	282 1,104	202 778	158 667	182 745	224 839	177 736	201 848	187 750	256 989
12:45 PM	170 727	253 1,072	165 686	259 1,077	256 1,072	284 1,114	170 751	163 658	185 741	187 818	191 724	203 825	194 736	239 1,009
1:00 PM	186 743	274 1,059	171 689	266 1,059	270 1,057	268 1,095	186 743	168 654	180 716	194 798	188 742	228 825	216 783	237 981
1:15 PM	199 753	264 1,063	186 715	258 1,031	261 1,047	278 1,112	194 752	179 668	180 727	221 826	172 728	194 826	204 801	249 981
1:30 PM	187 742	246 1,037	185 707	272 1,055	259 1,046	297 1,127	185 735	166 676	190 735	199 801	187 738	229 854	176 790	221 946
1:45 PM	175 747	275 1,059	203 745	255 1,051	267 1,057	274 1,117	201 766	161 674	178 728	198 812	220 767	227 878	181 777	230 937
2:00 PM	192 753	283 1,068	210 784	246 1,031	266 1,053	263 1,112	201 781	179 685	226 774	226 844	194 773	211 861	223 784	233 933
2:15 PM 2:30 PM	208 762 205 780	266 1,070 274 1,098	208 806 228 849	240 1,013 253 994	252 1,044 263 1,048	293 1,127 272 1,102	233 820 192 827	177 683 188 705	212 806 202 818	200 823 210 834	221 822 230 865	220 887 196 854	231 811 230 865	235 919 232 930
2:30 PM 2:45 PM	267 872	274 1,096 299 1,122	247 893	280 1,019	243 1,024	287 1,115	189 815	231 775	205 845	198 834	206 851	196 854 220 847	180 864	232 930 246 946
3:00 PM	229 909	266 1,105	232 915	273 1,046	231 989	281 1,133	210 824	201 797	206 825	210 818	181 838	227 863	216 857	219 932
3:15 PM	234 935	275 1,114	229 936	260 1,066	246 983	272 1,112	226 817	201 821	224 837	196 814	198 815	204 847	241 867	223 920
3:30 PM	274 1,004	276 1,116	259 967	242 1,055	266 986	275 1,115	195 820	245 878	229 864	232 836	199 784	218 869	237 874	220 908
3:45 PM	326 1,063	302 1,119	226 946	236 1,011	303 1,046	273 1,101	196 827	228 875	247 906	207 845	213 791	228 877	262 956	227 889
4:00 PM	250 1,084	248 1,101	270 984	254 992	284 1,099	301 1,121	233 850	228 902	219 919	202 837	198 808	230 880	271 1,011	227 897
4:15 PM	327 1,177	298 1,124	262 1,017	256 988	267 1,120	270 1,119	206 830	231 932	220 915	216 857	271 881	244 920	258 1,028	255 929
4:30 PM	316 1,219	296 1,144	305 1,063	286 1,032	272 1,126	287 1,131	226 861	240 927	223 909	249 874	235 917	268 970	215 1,006	240 949
4:45 PM 5:00 PM	312 1,205 294 1,249	273 1,115 301 1,168	290 1,127 321 1,178	283 1,079 276 1,101	274 1,097 309 1,122	297 1,155 312 1,166	213 878 238 883	237 936 253 961	232 894 239 914	264 931 260 989	227 931 197 930	223 965 264 999	217 961 255 945	272 994 254 1,021
5:15 PM	310 1,232	281 1,151	305 1,221	244 1,089	292 1,147	286 1,182	265 942	236 966	252 946	238 1,011	253 912	239 994	235 922	256 1,022
5:30 PM	339 1,255	260 1,115	317 1,233	241 1,044	313 1,188	207 1,102	248 964	301 1,027	275 998	270 1,032	270 947	274 1,000	258 965	256 1,038
5:45 PM	355 1,298	269 1,111	307 1,250	283 1,044	293 1,207	204 1,009	238 989	282 1,072	250 1,016	325 1,093	229 949	291 1,068	228 976	293 1,059
6:00 PM	312 1,316	274 1,084	302 1,231	285 1,053	265 1,163	181 878	275 1,026	267 1,086	257 1,034	283 1,116	310 1,062	292 1,096	226 947	259 1,064
6:15 PM	329 1,335	254 1,057	327 1,253	274 1,083	241 1,112	187 779	249 1,010	272 1,122	269 1,051	268 1,146	230 1,039	273 1,130	224 936	286 1,094
6:30 PM	328 1,324	287 1,084	348 1,284	272 1,114	273 1,072	170 742	216 978	262 1,083	240 1,016	260 1,136	201 970	275 1,131	181 859	242 1,080
6:45 PM	293 1,262	294 1,109	332 1,309	291 1,122	260 1,039	174 712	234 974	245 1,046	228 994	239 1,050	181 922	241 1,081	181 812	217 1,004
7:00 PM 7:15 PM	336 1,286 301 1,258	257 1,092 265 1,103	295 1,302 274 1,249	257 1,094 280 1,100	309 1,083 275 1,117	152 683 143 639	204 903 200 854	189 968 203 899	204 941 193 865	224 991 196 919	188 800 186 756	242 1,031 219 977	178 764 207 747	230 975 220 909
7:30 PM	301 1,231	234 1,050	274 1,249	222 1,050	265 1,109	143 639	147 785	188 825	145 770	189 848	176 731	221 923	186 752	204 871
7:45 PM	275 1,213	225 981	289 1,132	226 985	248 1,097	137 574	160 711	158 738	187 729	161 770	175 725	163 845	157 728	195 849
8:00 PM	274 1,151	205 929	222 1,059	213 941	231 1,019	131 553	155 662	146 695	144 669	175 721	160 697	135 738	184 734	180 799
8:15 PM	269 1,119	191 855	305 1,090	194 855	220 964	115 525	170 632	143 635	162 638	148 673	155 666	134 653	192 719	163 742
8:30 PM	252 1,070	178 799	248 1,064	196 829	217 916	130 513	150 635	134 581	162 655	144 628	152 642	145 577	171 704	157 695
8:45 PM	270 1,065	176 750	191 966	172 775	155 823	95 471	142 617	134 557	145 613	113 580	144 611	137 551	170 717	143 643
9:00 PM	282 1,073	189 734	183 927	146 708	157 749	119 459	141 603	125 536	133 602	97 502	163 614	130 546	149 682	169 632
9:15 PM 9:30 PM	283 1,087 272 1,107	206 749	169 791 145 688	145 659	159 688 171 642	108 452 91 413	143 576 146 572	99 492 104 462	175 615 137 590	98 452 98 406	150 609 188 645	123 535 127 517	171 661 159 649	146 615 133 591
9:45 PM	248 1.085	190 761 209 794	130 627	143 606 145 579	171 642 148 635	91 413 95 413	125 555	123 451	121 566	98 406 119 412	188 645 149 650	111 491	159 649 174 653	145 593
10:00 PM	258 1,061	252 857	119 563	143 579	117 595	70 364	107 521	101 427	115 548	194 509	155 642	124 485	198 702	130 554
10:15 PM	308 1,086	197 848	121 515	128 558	112 548	74 330	131 509	119 447	128 501	188 599	133 625	84 446	184 715	143 551
10:30 PM	278 1,092	145 803	103 473	97 512	98 475	63 302	109 472	99 442	95 459	118 619	139 576	102 421	173 729	146 564
10:45 PM	273 1,117	185 779	90 433	124 491	108 435	84 291	81 428	81 400	100 438	89 589	151 578	92 402	167 722	142 561
11:00 PM	222 1,081	146 673	87 401	116 465	81 399	64 285	80 401	91 390	74 397	85 480	123 546	83 361	169 693	123 554
11:15 PM	215 988	131 607	93 373	91 428	80 367	49 260	87 357	99 370	100 369	57 349	122 535	69 346	141 650	104 515
11:30 PM	209 919	115 577	89 359	80 411	66 335	43 240	85 333 50 311	163 434	74 348	57 288	99 495	67 311	130 607	97 466
11:45 PM	163 809	104 496	61 330	68 355	56 283	59 215	59 311	60 413	58 306	58 257	76 420	75 294	125 565	82 406

The Embarcadero Daily Traffic Volume Average Weekday Hourly Distribution of Traffic



The Embarcadero Daily Traffic Volume Saturday Hourly Distribution of Traffic



Weekday AM Peak Hour

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Table 1
San Francisco Northern Waterfront Model
Weekday AM Peak Hour

,,	1		ķ1		_					RSECTI	ON TURN					Maste			T-1-1 6"
#	Intersection Name	U-turn	No Left	rthboun Thru		Total	Left	Southb Thru		Total	Left	Eastbo Thru		Total	Left	Westbe Thru		Total	Total All Approaches
											ase Volun							. •	търгодоно
1	Beach Street/Columbus Avenue		30	0	4	34	0	0	0	0	0	127	36	163	6	65	0	71	268
	North Point Street/Columbus Ave		24	66	10	100	13	50	15	78	20	204	36	260	32	115	35	182	620
3	North Point Street/Stockton Street		30	34	33	97	5	25	13	43	23	216	64	303	6	95	8	109	552
4	Bay Street/Columbus Avenue		112	73	65	250	1	109	6	116	6	1,373	375	1,754	25	313	21	359	2,479
	Bay Street/Stockton Street		35	20	101	156	33	16	48	97	32	1,311	18	1,361	26	425	51	502	2,116
6	Bay Street/Kearny Street		37	2	12	51	1	12	14	27	9	1,265	176	1,450	10	446	2	458	1,986
7	Broadway/Sansome Street		115	226	57	398	0	0	0	0	228	1,021	0	1,249	0	391	131	522	2,169
8	Broadway/Battery Street		0	0	0	0	59	601	83	743	0	614	464	1,078	22	437	0	459	2,280
9	The Embarcadero/Beach Street/Grant Av	1	130	87	22	240	0	16	0	16	0	0	156	156	6	8	16	30	442
10	The Embarcadero/N. Point St./Kearny St.	15	116	232	0	363	0	157	19	176	2	229	29	260	1	5	17	23	822
11	The Embarcadero/Bay Street	0	463	339	0	802	0	376	26	402	21	0	1,259	1,280	0	0	0	0	2,484
12	The Embarcadero/Chestnut St./Sansome	1	93	692	0	786	0	1,623	13	1,636	132	111	10	253	0	0	0	0	2,675
13	The Embarcadero/Lombard St./Battery	1	65	773	77	916	21	1,042	573	1,636	9	12	175	196	2	4	4	10	2,758
14	The Embarcadero/Green Street	6	103	911	0	1,020	7	989	62	1,058	6	0	21	27	0	0	0	0	2,105
15	The Embarcadero/Broadway	26	523	970	0	1,519	2	987	25	1,014	52	0	417	469	0	0	0	0	3,002
16	The Embarcadero/Washington Street	4	380	1,466	0	1,850	6	1,358	68	1,432	53	0	149	202	0	0	0	0	3,484
17	The Embarcadero/Mission Street	0	0	1,755	0	1,755	0	1,362	148	1,510	97	0	80	177	0	0	0	0	3,442
18	The Embarcadero/Harrison Street	0	0	1,361	0	1,361	0	1,138	262	1,400	205	0	155	360	0	0	0	0	3,121
19	The Embarcadero/Bryant Street	0	156	1,236	84	1,476	48	1,190	54	1,292	121	43	174	338	3	8	4	15	3,121
20	The Embarcadero/Brannan Street	1	6	1,309	0	1,316	1	1,190	174	1,365	167	0	36	203	0	0	0	0	2,884
43	The Embarcadero/Howard Street	0	228	1,618	0	1,846	2	1,219	217	1,438	136	0	99	235	0	0	0	0	3,519
44	The Embarcadero/Folsom Street	0	96	1,472	0	1,568	0	1,288	32	1,320	375	0	116	491	0	0	0	0	3,379
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Table 1
San Francisco Northern Waterfront Model
Weekday AM Peak Hour

										RSECTI	ON TURN	ING MOVE							
	Intersection Name		N	orthbou	nd			Southbo				Eastbou				Westbe	ound		Total Al
		U-turn	Left	Thru	Right	Total				Total	Left			Total	Left	Thru	Right	Total	Approach
							JRH (Cruise Ter	minal Pr	oject V	olumes [ir	ncludes neg	gative pa	aths]					
1	Beach Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	North Point Street/Columbus Ave		0	0	0	0	0	0	0	0	0	4	0	4	0	3	0	3	7
3	North Point Street/Stockton Street		0	0	0	0	0	0	0	0	0	4	0	4	0	3	0	3	7
4	Bay Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	14
	Bay Street/Stockton Street		0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	14	14
6	Bay Street/Kearny Street		0	0	0	0	0	0	0	0	0	0	0	0	26	14	26	66	66
7	Broadway/Sansome Street		0	11	0	11	0	0	0	0	0	15	0	15	0	13	0	13	39
	Broadway/Battery Street		0	0	0	0	0	10	0	10	0	15	0	15	0	13	0	13	38
9	The Embarcadero/Beach Street/Grant Av	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
10	The Embarcadero/N. Point St./Kearny St.	9	3	4	0	16	0	4	0	4	0	4	0	4	26	0	0	26	50
11	The Embarcadero/Bay Street	0	66	16	0	82	0	43	0	43	0	0	0	0	0	0	0	0	125
	The Embarcadero/Chestnut St./Sansome	10	0	82	2 0	92	0	43	0	43	0	0	26	26	0	0	0	0	161
13	The Embarcadero/Lombard St./Battery	0	0	79	-77	2	4	65	10	79	6	-12	0	-7	-2	-4	-4	-10	64
14	The Embarcadero/Green Street	0	0	-4	. 0		0	63	0	63	6	0	0	6	0	0	0	0	65
15	The Embarcadero/Broadway	0	0	-19	0	-19	0	50	13	63	15	0	0	15	0	0	0	0	59
16	The Embarcadero/Washington Street	0	0	-19	0	-19	0	50	0	50	0	0	0	0	0	0	0	0	31
_	The Embarcadero/Mission Street	0	0				0	50	0	50	0	0	0	0	0	0	0	0	31
_	The Embarcadero/Harrison Street	0	0	-10			0	15	17	33	0	0	0	0	0	0	0	0	23
	The Embarcadero/Bryant Street	0	0				0	15	0	15	0	0	0	0	0	0	0	0	6
	The Embarcadero/Brannan Street	0	0				0	15	0	15	0	0	0	0	0	0	0	0	6
	The Embarcadero/Howard Street	0	0				0	50	0	50	0	0	0	0	0	0	0	0	31
_	The Embarcadero/Folsom Street	0	0				0	33	17	50	-10	0	0	-10	0	0	0	0	31
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Table 1
San Francisco Northern Waterfront Model
Weekday AM Peak Hour

										RSECTI	ON TURN								
#	Intersection Name			rthboun				Southbo				Eastbo				Westb			Total All
		U-turn	Left	Thru	Right	Total	Left			Total	Left			Total	Left	Thru	Right	Total	Approach
							E	xisting Ba	ase plus	JRH Cru	iise Termi		ct Volum	es					
	Beach Street/Columbus Avenue	0	30	0	4	34	0	0	0	0	0	127	36	163	6	65	0	71	268
2	North Point Street/Columbus Ave	0	24	66	10	100	13	50	15	78	20	208	36	264	32	118	35	185	627
3	North Point Street/Stockton Street	0	30	34	33	97	5	25	13	43	23	220	64	307	6	98	8	112	559
4	Bay Street/Columbus Avenue	0	112	73	65	250	1	109	6	116	6	1,373	375	1,754	25	327	21	373	2,493
5	Bay Street/Stockton Street	0	35	20	101	156	33	16	48	97	32	1,311	18	1,361	26	439	51	516	2,130
6	Bay Street/Kearny Street	0	37	2	12	51	1	12	14	27	9	1,265	176	1,450	36	460	28	524	2,052
7	Broadway/Sansome Street	0	115	237	57	409	0	0	0	0	228	1,036	0	1,264	0	404	131	535	2,208
	Broadway/Battery Street	0	0	0	0	0	59	611	83	753	0	629	464	1,093	22	450	0	472	2,318
9	The Embarcadero/Beach Street/Grant Av	5	130	87	22	244	0	16	0	16	0	0	156	156	6	8	16	30	446
10	The Embarcadero/N. Point St./Kearny St.	24	119	236	0	379	0	161	19	180	2	233	29	264	27	5	17	49	872
11	The Embarcadero/Bay Street	0	529	355	0	884	0	419	26	445	21	0	1,259	1,280	0	0	0	0	2,609
12	The Embarcadero/Chestnut St./Sansome	11	93	774	0	878	0	1,666	13	1,679	132	111	36	279	0	0	0	0	2,836
13	The Embarcadero/Lombard St./Battery	1	65	852	0	918	25	1,107	583	1,715	15	0	175	190	0	0	0	0	2,822
14	The Embarcadero/Green Street	6	103	907	0	1,016	7	1,052	62	1,121	12	0	21	33	0	0	0	0	2,170
5/101	The Embarcadero/Broadway	26	523	951	0	1,500	2	1,037	38	1,077	67	0	417	484	0	0	0	0	3,061
6/102	The Embarcadero/Washington Street	4	380	1,447	0	1,831	6	1,408	68	1,482	53	0	149	202	0	0	0	0	3,515
	The Embarcadero/Mission Street	0	0	1,736	0	1,736	0	1,412	148	1,560	97	0	80	177	0	0	0	0	3,473
	The Embarcadero/Harrison Street	0	0	1,352	0	1,352	0	1,153	279	1,433	205	0	155	360	0	0	0	0	
	The Embarcadero/Bryant Street	0	156	1,227	84	1,467	48	1,205	54	1,307	121	43	174	338	3	8		15	
	The Embarcadero/Brannan Street	1	6	1,300	0	1,307	1	1,205	174	1,380	167	0	36	203	0	0		0	2,890
	The Embarcadero/Howard Street	0	228	1,599	0	1,827	2	1,269	217	1,488	136	0	99	235	0	0		0	
	The Embarcadero/Folsom Street	0	96	1,463	0	1,559	0	1,321	49	1,370	366	0	116	482	0	0	0	0	3,410
44	The Embarcadero/Folsoff Street	U	90	1,403	- 0	1,559	- 0	1,321	49	1,370	300	- 0	110	402	U	0	- 0	0	3,410
		 																	

Table 1
San Francisco Northern Waterfront Model
Weekday AM Peak Hour

				orthboun						ERSECT	ON TURN			3					
	Intersection Name			Southb			Eastbound								Total All				
		U-turn	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Approach
									2035	Final Cu	mulative \								
	Beach Street/Columbus Avenue		31	-	5	36	-	-	-	-	-	130	37	167	7	67	-	74	277
	North Point Street/Columbus Ave		25	78	11	114	14	51	16	81	21	218	37	276	33	123	36	192	663
	North Point Street/Stockton Street		31	60	34	125	6	26	14	46	24	230	66	320	7	102	9	118	609
	Bay Street/Columbus Avenue		115	75	67	257	2	112	7	121	7	1,513	383	1,903	36	553	30	619	2,900
	Bay Street/Stockton Street		36	21	104	161	34	17	49	100	33	1,450	19	1,502	37	651	72	760	2,523
	Bay Street/Kearny Street		40	3	13	56	4	13	15	32	10	1,398	185	1,593	46	698	30	774	2,455
	Broadway/Sansome Street		118	266	65	449	-	-	-	-	262	1,185	-	1,447	-	608	159	767	2,663
	Broadway/Battery Street		-	-	-	-	61	626	106	793	-	776	474	1,250	27	662	-	689	2,732
	The Embarcadero/Beach Street/Grant Av	6	155	104	27	292	-	17	-	17	-	-	160	160	7	9	17	33	502
	The Embarcadero/N. Point St./Kearny St.	27	144	286	-	457	-	170	20	190	3	241	30	274	29	6	18	53	974
	The Embarcadero/Bay Street	-	725	437	-	1,162	-	441	27	468	22	-	1,391	1,413	-	-	-	-	3,043
	The Embarcadero/Chestnut St./Sansome	12	135	1,024	-	1,171	-	1,821	14	1,835	146	138	39	323	-	-		-	3,32
	The Embarcadero/Lombard St./Battery	8	101	1,154	-	1,263	27	1,238	608	1,873	18	-	216	234	-	-	-	-	3,37
	The Embarcadero/Green Street	8	166	1,240	-	1,414	18	1,262	70	1,350	26	-	71	97	-	-	-	-	2,86
	The Embarcadero/Broadway	31	684	1,302	-	2,017	3	1,289	51	1,343	110	-	482	592	-	-	-	-	3,95
	The Embarcadero/Washington Street	5	450	1,943	-	2,398	7	1,715	80	1,802	71	-	175	246	-	-	-	-	4,44
	The Embarcadero/Mission Street	-	-	2,321	-	2,321	-	1,762	167	1,929	99	-	172	271	-	-	-	-	4,52
	The Embarcadero/Harrison Street	-	-	1,872	-	1,872	-	1,527	350	1,876	230	-	159	389	-	-	-	-	4,13
	The Embarcadero/Bryant Street	10	134	1,584	100	1,828	158	1,487	42	1,687	256	240	327	823	199	90	63	352	4,68
	The Embarcadero/Brannan Street	2	8	1,804	-	1,814	7	1,725	290	2,022	251	-	37	288	-	-	-	-	4,12
	The Embarcadero/Howard Street	2	279	2,178	-	2,459	3	1,672	259	1,934	139	-	101	240	-	-	-	-	4,63
44	The Embarcadero/Folsom Street	6	117	1,981	-	2,104	-	1,716	59	1,775	477	-	153	630	-	-	-	-	4,50

Weekday PM Peak Hour

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Table 2San Francisco Northern Waterfront Model
Weekday PM Peak Hour

										RSECTI	ON TURN					101 11			
#	Intersection Name	U-turn	Left	rthboun Thru	a Right	Total	Left	Southb Thru	ouna Right	Total	Left	Eastbo Thru	Right	Total	Left	Westbe Thru	ouna Right	Total	Total All Approache
		-									ase Volur								1
1	Beach Street/Columbus Avenue		17	0	8	25	0	0	0	0	0	157	92	249	9	76	0	85	359
	North Point Street/Columbus Ave		62	38	22	122	22	76	58	156	21	131	44	196	28	292	29	349	823
	North Point Street/Stockton Street		23	20	32	75	14	37	22	73	17	235	57	309	7	152	5	164	621
_	Bay Street/Columbus Avenue		341	86	66	493	0	145	4	149	1	576	187	764	7	1,034	34	1,075	2.481
	Bay Street/Stockton Street		21	25	58	104	40	33	31	104	22	506	20	548	23	1,089	30	1,142	1,898
	Bay Street/Kearny Street		124	3	24	151	2	3	14	19	10	543	57	610	19	1,004	2	1,025	1,805
	Broadway/Sansome Street		274	286	39	599	0	0	0	0	76	543	0	619	0	766	107	873	2.091
	B Broadway/Battery Street		0	0	0	0	54	597	155	806	0	322	257	579	37	719	0	756	2,141
	The Embarcadero/Beach Street/Grant Av	1	148	335	28	512	4	141	0	145	0	0	308	308	17	73	8	98	1,063
	The Embarcadero/N. Point St./Kearny St.	10	144	468	0	622	1	412	54	467	19	243	13	275	4	25	10	39	
	The Embarcadero/Bay Street	0	947	606	0	1.553	0	639	30	669	16	0	552	568	0	0	0	0	
	The Embarcadero/Chestnut St./Sansome	5	31	1,215	0	1,251	18	1,166	7	1,191	79	316	15	410	0	0	0	0	,
	The Embarcadero/Lombard St./Battery	40	63	1,191	11	1,305	12	828	346	1,186	30	7	250	287	40	30	28	98	,
_	The Embarcadero/Green Street	13	33	1,256	0	1,302	4	919	11	934	27	0	64	91	0	0	0	0	
	The Embarcadero/Broadway	53	382	1,216	0	1,651	6	945	42	993	69	0	319	388	0	0	0	0	-,
	The Embarcadero/Washington Street	4	298	1,536	0	1,838	9	1,255	55	1,319	95	0	183	278	0	0	0	0	-,
	The Embarcadero/Mission Street	0	2 2	1,800	0	1,802	0	1,388	179	1,567	162	0	87	249	0	0	0	0	
	The Embarcadero/Harrison Street	0	0	1,388	0	1,388	0	1,237	310	1,547	182	0	169	351	0	0	0	0	
	The Embarcadero/Harrison Street	0	135	1,273	9	1,417	43	1,325	38	1,406	75	6	168	249	75	62	39	176	3,248
	The Embarcadero/Bryant Street	3	46	1,300	0	1,349	3	1,293	273	1,569	119	0	15	134	0	02	0	0	
	Fremont Street/Folsom Street	3	40	185	73	262	217	39	1	257	167	405	57	629	0	95	66	161	1,309
	King Street/Third Street		76	678	260	1,014	0	0	0	0	835	954	14	1,803	143	1,210	40	1,393	4,210
	King Street/Fourth Street		8	52	50	110	56	304	432	792	116	1,696	17	1,829	24	1,210	34	1,285	4,016
	16th Street/Third Street	0	231	555	0	786	7	286	73	366	87	1,090	177	273	0	9	5	1,203	1,439
	Cesar Chavez Street/Third Street	U	223	524	16	763	17	321	96	434	96	179	154	429	13	195	18	226	1,439
	Cesar Chavez Street/Illinois Street		130	84	3	217	13	62	37	112	35	69	107	211	13	61	24	86	626
	Lincoln Blvd/25th Av/El Camino del Mar	0	17	24	225	266	13	20	2	36	35 1	221	23	245	317	208	5	530	
	Lake Street/14th Avenue	0				33	8	0	0		30	264		245		208		398	734
			3	12	18					8			1		73		27		
	Lake Street/15th Avenue	0	7	5	19	31	31	26	32	89	4	207	0	215	17	263	4	284	619
	Jackson Street/Arguello Blvd	0	0	310	46	356 366	43	450 452	30	493	5	0	4	0 17	85 23	18	49 39	134 80	983 988
	Pacific Avenue/Presidio Blvd	_	5	353	8					525									
	Lombard Street/Lyon Street	0	146	22	7	175	22	56	200	278	164	180	94	438	5	228	19	252	1,143
	Lombard Street/Divisadero Street	0	179	153	27	359	67	140	34	241	0	1,327	172	1,499	1	1,975	120	2,096	4,195
-	Lombard Street/Fillmore Street	0	47	126	36	209	14	199	54	267	4	1,067	65	1,136	3	1,900	65	1,968	3,580
	Bay Street/Laguna Street	0	173	0	34	207	529	151	13	693	0	210	104	314	19	348	1,208	1,575	2,789
	Bay Street/Van Ness Avenue	0	73	173	122	368	5	329	191	525	9	581	114	704	39	1,242	21	1,302	2,899
	Bay Street/Hyde Street	0	0	36	10	46	2	69	19	90	2	681	32	715	0	1,365	21	1,386	2,237
	Alexander Ave/Bunker Road	0	54	237	0	291	0	299	17	316	37	0	176	213	0	0	0	0	820
	Alexander Ave/Ft. Baker (East) Rd	0	0	270	10	280	8	308	5	321	0	0	0	0	4	0	26	30	
	Bush Street/Van Ness Avenue	0	0	1,386	117	1,503	205	1,253	0	1,458	67	969	115	1,151	0	0	0	0	,
	Pine Street/Van Ness Avenue	0	156	1,298	0	1,454	0	1,312	207	1,519	0	0	0	0	122	1,487	160	1,769	4,742
	Lombard Street/Van Ness Avenue	0	1,020	227	34	1,281	0	442	98	540	114	112	853	1,079	1	91	9	101	3,001
	The Embarcadero/Howard Street	0	121	1,548	0	1,669	3	1,145	329	1,477	252	0	169	421	0	0	0	0	
44	The Embarcadero/Folsom Street	0	160	1,412	0	1,572	0	1,292	25	1,317	260	0	256	516	0	0	0	0	3,405
		1																	

Table 2
San Francisco Northern Waterfront Model
Weekday PM Peak Hour

	_								TABLE 2	A - INTEI	RSECTI	ON TURN	ING MOVE	MENTS						
	Intersection Name		1	Northbou	ınd				Southbou				Eastbou				Westb	ound		Total All
		U-turn	Left	Thru	Right	t	Total				Total	Left			Total	Left	Thru	Right	Total	Approach
								JRH (Cruise Ter	minal Pr	roject V	olumes [ii	ncludes ne	gative pa	iths]					
	Beach Street/Columbus Avenue		C) ()	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	North Point Street/Columbus Ave		C) ()	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
3	North Point Street/Stockton Street		C) ()	0	0	0	0	0	0	0	1	0	1	0	2	0	2	3
4	Bay Street/Columbus Avenue		C) ()	0	0	0	0	0	0	0	-5	0	-5	0	-19	0	-19	-24
	Bay Street/Stockton Street		C) ()	0	0	0	0	0	0	0	-5	0	-5	0	-19	0	-19	-24
6	Bay Street/Kearny Street		C) ()	0	0	0	0	0	0	0	-5	0	-5	14	-19	14	8	3
7	Broadway/Sansome Street		C) .	4	0	4	0	0	0	0	0	4	0	4	0	7	0	7	15
	Broadway/Battery Street		C) ()	0	0	0	5	0	5	0	4	0	4	0	7	0	7	16
9	The Embarcadero/Beach Street/Grant Av	2	C) ()	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	The Embarcadero/N. Point St./Kearny St.	5	2	! :	2	0	9	0	2	0	2	0	1	0	1	14	0	0	14	26
11	The Embarcadero/Bay Street	0	8	;	9	0	17	0	22	0	22	0	0	-5	-5	0	0	0	0	34
	The Embarcadero/Chestnut St./Sansome	5	C	1	7	0	22	0	17	0	17	0	0	14	14	0	0	0	0	52
	The Embarcadero/Lombard St./Battery	0				11	15	-4	34	5	35	2	-7	0	-5	-40	-30	-28	-98	-53
	The Embarcadero/Green Street	0				0	13	0	-6	0	-6	2	0	0	2	0	0	0	0	9
	The Embarcadero/Broadway	0				0	9	0	-13	7	-6	4	0	0	4	0	0	0	0	7
	The Embarcadero/Washington Street	0				0	9	0	-13	0	-13	0	0	0	0	0	0	0	0	-4
	The Embarcadero/Mission Street	0				0	9	0	-13	0	-13	0	0	0	0	0	0	0	0	-4
	The Embarcadero/Harrison Street	0				0	-1	0	-31	9	-22	0	0	0	0	0	0	0	0	-23
	The Embarcadero/Bryant Street	0				0	-1 -1	0	-31	0	-31	0	0	0	0	0	0	0	0	-32
	The Embarcadero/Brannan Street	0				0	-1	0	-31	0	-31	0	0	0	0	0	0	0	0	-32
	The Embarcadero/Howard Street	0					9			0					0	0	0		0	
						0		0	-13		-13	0	0	0	-			0		-4
44	The Embarcadero/Folsom Street	0	C	· -	1	0	-1	0	-22	9	-13	10	0	0	10	0	0	0	0	-4

Table 2
San Francisco Northern Waterfront Model
Weekday PM Peak Hour

								TABLE	2A - INT	ERSECTI	ON TURN	ING MOVI	EMENTS						
#	Intersection Name		No	orthboun	nd			Southb	ound			Eastbo	und			Westl	oound		Total All
		U-turn	Left	Thru	Right	Total	Left		Right	Total	Left			Total	Left	Thru	Right	Total	Approache
							ı	Existing B	Base plus	JRH Cru	uise Termi	nal Projec	ct Volum	ies					
1	Beach Street/Columbus Avenue	-	17	-	8	25	-	-	-	-	-	157	92	249	9	76	-	85	359
2	North Point Street/Columbus Ave	-	62	38	22	122	22	76	58	156	21	132	44	197	28	294	29	351	826
3	North Point Street/Stockton Street	-	23	20	32	75	14	37	22	73	17	236	57	310	7	154	5	166	624
4	Bay Street/Columbus Avenue	-	341	86	66	493	-	145	4	149	1	571	187	759	7	1,015	34	1,056	2,457
5	Bay Street/Stockton Street	-	21	25	58	104	40	33	31	104	22	501	20	543	23	1,070	30	1,123	1,874
6	Bay Street/Kearny Street	-	124	3	24	151	2	3	14	19	10	538	57	605	33	985	16	1,033	1,808
7	Broadway/Sansome Street	-	274	290	39	603	-	-	-	-	76	547	-	623	-	773	107	880	2,106
	Broadway/Battery Street	-	-	-	-	-	54	602	155	811	-	326	257	583	37	726	-	763	2,157
9	The Embarcadero/Beach Street/Grant Av	3	148	335	28	514	4	141	-	145	-	-	308	308	17	73	8	98	1,065
	The Embarcadero/N. Point St./Kearny St.	15	146	470	-	631	1	414	54	469	19	244	13	276	18	25	10	53	1,429
11	The Embarcadero/Bay Street	-	955	615	-	1,570	-	661	30	691	16	-	547	563	-	-	-	-	2,824
	The Embarcadero/Chestnut St./Sansome	10	31	1,232	-	1,273	18	1,183	7	1,208	79	316	29	424	-	_	_	-	2,904
	The Embarcadero/Lombard St./Battery	40	63	1,217	-	1,320	8	862	351	1,221	32	-	250	282	-	-	_	-	2,823
	The Embarcadero/Green Street	13	33	1,269	-	1,315	4	913	11	928	29	-	64	93	-	-	_	-	2,336
15/101	The Embarcadero/Broadway	53	382	1,225	-	1,660	6	932	49	987	73	-	319	392	-	-	_	-	3,039
16/102	The Embarcadero/Washington Street	4	298	1,545	-	1,847	9	1,242	55	1,306	95	-	183	278	_	-	-	-	3,431
	The Embarcadero/Mission Street	_	2	1,809	_	1,811		1,375	179	1,554	162	_	87	249	_	_	_	_	3,614
	The Embarcadero/Harrison Street	_		1,387	_	1,387	_	1,206	319	1,525	182	_	169	351	_	_	_	_	3,263
	The Embarcadero/Bryant Street	_	135	1,272	9	1,416	43	1,294	38	1,375	75	6	168	249	75	62	39	176	3,216
	The Embarcadero/Brannan Street	3	46	1,299		1,348	3	1,262	273	1,538	119	-	15	134	-		-		3,020
	The Embarcadero/Howard Street		121	1,557	_	1,678	3	1,132	329	1,464	252	_	169	421	_	_			3,563
	The Embarcadero/Folsom Street		160	1,411		1,571	-	1,270	34	1,304	270		256	526		_			3,401
- 11	The Embardacion disoni offeet		100	1,711		1,571		1,270	04	1,004	210		200	320			_		0,401

Table 2
San Francisco Northern Waterfront Model
Weekday PM Peak Hour

										ERSECT	ION TURN			5					
	Intersection Name			orthboun				South				Eastbo					oound		Total Al
		U-turn	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Approach
_	D 10: 10: 1								2035	Final Cu	mulative \								
	Beach Street/Columbus Avenue		18	-	9	27	-		-	-	-	181	106	287	10	490	-	500	814
	North Point Street/Columbus Ave		64	39	23	126	23	78	60	161	23	144	48	215	29	304	30	363	865
	North Point Street/Stockton Street		24	21	33	78	15	38	23	76	19	255	61	335	8	162	6	176	665
	Bay Street/Columbus Avenue		348	88	68	504	-	148	5	153	2	774	217	993	8	1,154	35	1,197	2,846
	Bay Street/Stockton Street		22	26	60	108	41	34	32	107	26	707	24	757	24	1,210	31	1,265	2,236 2,173
	Bay Street/Kearny Street		132	4	29	165	3	4	15	22	12	733	69	814	35	1,119	20	1,173	
	Broadway/Sansome Street		280	301	40	621	-	-	-		104	720	- 070	824	- 44	950	110	1,060	2,50
	Broadway/Battery Street The Embarcadero/Beach Street/Grant Av		- 220	- 047		- 047	63	722	209	994	-	481	278	759	44	853	-	897	2,649 1,264
	The Embarcadero/N. Point St./Kearny St.	5 16	336	247	29	617 768	5 2	184 496		189 561	-	-	355 14	355 304	18 22	76 26	9	103 59	1,26
	The Embarcadero/Bay Street		181	571					63		21	269					11	59	
		-	1,138	751	-	1,889	-	768	35	803	19	-	755	774	-	-	-	-	3,46
	The Embarcadero/Chestnut St./Sansome	12	34	1,558	-	1,604	21	1,492	9	1,522	82	334	31	447	-	-		-	3,57
	The Embarcadero/Lombard St./Battery	78	93	1,568	-	1,739	11	1,103	423	1,537	36	-	298	334	-	-	-	-	3,60
	The Embarcadero/Green Street The Embarcadero/Broadway	15	70	1,700	-	1,785	13	1,265	18	1,296	39 91	-	125 422	164	-	-	-	-	3,24
	,	60	513	1,698	-	2,270	7	1,294	104	1,405		-		513	-	-	-	-	4,18
	The Embarcadero/Washington Street	5	433	2,101	-	2,539	10	1,634	133	1,777	170	-	247	417	-	-	-	-	4,73
	The Embarcadero/Mission Street	-	3	2,453	-	2,456	-	1,777	197	1,974	180	-	97	277	-	-	-	-	4,70
	The Embarcadero/Harrison Street	-	-	1,966	-	1,966	-	1,661	380	2,040	201	-	178	379	-	-	-	-	4,38
	The Embarcadero/Bryant Street	14	218	1,815	12	2,059	126	1,642	70	1,838	75	98	162	335	242	111	83	436	4,66
	The Embarcadero/Brannan Street	4	58	1,983	-	2,045	31	1,646	381	2,058	204	-	16	220	-	-	-		4,32
	The Embarcadero/Howard Street	3	159	2,126	-	2,288	4	1,507	362	1,873	323	-	217	540	-	-		-	4,70
44	The Embarcadero/Folsom Street	29	206	1,934	-	2,169	-	1,678	48	1,726	353	-	334	687	-	-	-	-	4,58
	*																		

Table 2San Francisco Northern Waterfront Model
Weekday PM Peak Hour

										RSECTI	ON TURN	ING MOVE							
#	Intersection Name			rthbound				Southbo				Eastbou				Westbo			Total Al
		U-turn	Left	Thru	Right	Total	Left		Right	Total	Left		Right	Total	Left	Thru I	Right	Total	Approach
	D 10: 1/0 1 1											12 Volumes							
	Beach Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	North Point Street/Columbus Ave		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	North Point Street/Stockton Street		0	10	0	10	0	0	0	0	0	32	0	32	0	0	0	0	42
	Bay Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	40	0	40	0	180	0	180	220
	Bay Street/Stockton Street		45	0	0	45	0	0	0	0	0	10	10	20	0	45	10	55	120
	Bay Street/Kearny Street		27	0	32	59	0	0	0	0	0	5	5	10	10	27	0	37	106
	Broadway/Sansome Street		0	12	0	12	0	0	0	0	7	15	0	22	0	86	0	86	120
	Broadway/Battery Street		0	0	0	0	0	36	29	64	0	15	0	15	0	57	0	57	136
	The Embarcadero/Beach Street/Grant Av	0	12	0	0	12	0	0	0	0	0	0	32	32	0	0	0	0	44
	The Embarcadero/N. Point St./Kearny St.	0	12	12	0	24	0	32	0	32	0	0	32	32	0	0	0	0	88
	The Embarcadero/Bay Street	0	19	24	0	43	0	27	37	64	0	0	37	37	0	0	0	0	144
	The Embarcadero/Chestnut St./Sansome	0	0	24	0	24	0	64	0	64	0	19	42	61	0	0	0	0	149
	The Embarcadero/Lombard St./Battery	0	0	24	0	24	0	42	64	106	0	0	42	42	0	0	0	0	172
14	The Embarcadero/Green Street	0	0	24	0	24	0	84	0	84	0	0	0	0	0	0	0	0	108
15	The Embarcadero/Broadway	0	41	9	0	50	0	27	57	84	15	0	0	15	0	0	0	0	149
16	The Embarcadero/Washington Street	0	0	41	0	41	0	0	27	27	9	0	71	80	0	0	0	0	148
17	The Embarcadero/Mission Street	0	0	203	0	203	0	71	0	71	-162	0	-87	-249	0	0	0	0	25
18	The Embarcadero/Harrison Street	0	0	5	0	5	0	83	41	124	1	0	0	1	0	0	0	0	131
19	The Embarcadero/Bryant Street	0	2	4	0	6	0	79	3	83	1	0	0	1	0	0	0	0	90
20	The Embarcadero/Brannan Street	0	2	5	0	8	0	77	2	79	1	0	0	1	0	0	0	0	88
21	Fremont Street/Folsom Street		0	0	0	0	11	0	0	11	0	2	0	2	0	0	0	0	13
22	King Street/Third Street		0	10	2	12	0	0	0	0	6	6	0	12	41	36	0	77	101
	King Street/Fourth Street		0	0	0	0	0	0	0	0	0	12	0	12	0	36	0	36	48
	16th Street/Third Street		0	12	0	12	0	36	5	41	2	0	0	2	0	0	0	0	55
	Cesar Chavez Street/Third Street		0	11	0	11	0	33	3	36		25	0	26	0	25	0	25	98
	Cesar Chavez Street/Illinois Street		0	0	0	0	0	0	0	0	0	25	0	25	0	25	0	25	50
	Lincoln Blvd/25th Av/El Camino del Mar		0	0	32	32	0	0	0	0	0	0	0	0	95	0	0	95	126
	Lake Street/14th Avenue		0	32	0	32	0	0	0	0	0	0	0	0	0	0	0	0	32
	Lake Street/15th Avenue		0	0	0	0	0	95	0	95	0	0	0	0	0	0	0	0	95
	Jackson Street/Arquello Blvd		0	32	0	32	0	95	0	95	0	0	0	0	0	0	0	0	126
	Pacific Avenue/Presidio Blvd		0	32	0	32	0	95	0	95	0	0	0	0	0	0	0	0	126
	Lombard Street/Lyon Street			0					0									-	400
	Lombard Street/Lyon Street Lombard Street/Divisadero Street		0	69	0	0 69	0 165	208	105	0 478	35	300 415	0	300 450	0	100 446	0	100 501	1.499
	Lombard Street/Divisadero Street		0	69	0	69 69	165	208	105	478 478	35	415 545	0	450 580	0	396	55	501 451	, -
-																	55	451 253	1,578
	Bay Street/Laguna Street		80	0	80	159	0	0	0	0	0	0	239	239	239	14	0		651
	Bay Street/Van Ness Avenue		14	0	41	54	0	0	0	0	0	39	41	80	122	239	0	361	495
	Bay Street/Hyde Street		0	0	0	0	0	0	0	0	0	80	0	80	0	361	0	361	441
	Alexander Ave/Bunker Road		0	0	0	0	0	0	8	8	4	0	1	5	0	0	0	0	
	Alexander Ave/Ft. Baker (East) Rd		0	4	0	4	0	8	8	16	0	0	0	0	0	0	45	45	65
	Bush Street/Van Ness Avenue		0	205	0	205	6	918	0	924	0	0	0	0	0	0	0	0	1,12
	Pine Street/Van Ness Avenue		0	205	0	205	0	924	0	924	0	0	0	0	0	0	77	77	1,20
	Lombard Street/Van Ness Avenue		171	35	0	205	0	104	58	162	19	0	820	840	0	0	0	0	
	The Embarcadero/Howard Street	0	0	17	0	17	0	-87	71	-16	186	0	170	356	0	0	0	0	357
44	The Embarcadero/Folsom Street	0	2	5	0	6	0	83	0	83	13	0	41	54	0	0	0	0	143

Table 2San Francisco Northern Waterfront Model
Weekday PM Peak Hour

										ERSECT	ION TURN								
#	Intersection Name			orthboun				Southb				Eastbo				Westb			Total All
		U-turn	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Approache
											C34 Year								
	Beach Street/Columbus Avenue	0	17	0	8	25	0	0	0	0	0	157	92	249	9	76	0	85	359
	North Point Street/Columbus Ave	0	62	38	22	122	22	76	58	156	21	131	44	196	28	292	29	349	823
	North Point Street/Stockton Street	0	23	30	32	85	14	37	22	73	17	267	57	341	7	152	5	164	663
	Bay Street/Columbus Avenue	0	341	86	66	493	0	145	4	149	1	616	187	804	7	1,214	34	1,255	2,701
	Bay Street/Stockton Street	0	66	25	58	149	40	33	31	104	22	516	30	568	23	1,134	40	1,197	2,018
	Bay Street/Kearny Street	0	151	3	56	210	2	3	14	19	10	548	62	620	29	1,031	2	1,062	1,911
	Broadway/Sansome Street	0	274	298	39	611	0	0	0	0	83	558	0	641	0	852	107	959	2,211
8	Broadway/Battery Street	0	0	0	0	0	54	633	184	870	0	337	257	594	37	776	0	813	2,277
	The Embarcadero/Beach Street/Grant Av	1	160	335	28	524	4	141	0	145	0	0	340	340	17	73	8	98	1,107
10	The Embarcadero/N. Point St./Kearny St.	10	156	480	0	646	1	444	54	499	19	243	45	307	4	25	10	39	1,491
11	The Embarcadero/Bay Street	0	966	630	0	1,596	0	666	67	733	16	0	589	605	0	0	0	0	2,934
12	The Embarcadero/Chestnut St./Sansome	5	31	1,239	0	1,275	18	1,230	7	1,255	79	335	57	471	0	0	0	0	3,001
13	The Embarcadero/Lombard St./Battery	40	63	1,215	11	1,329	12	870	410	1,292	30	7	292	329	40	30	28	98	3,048
14	The Embarcadero/Green Street	13	33	1,280	0	1,326	4	1,003	11	1,018	27	0	64	91	0	0	0	0	2,435
5/101	The Embarcadero/Broadway	53	423	1,225	0	1,701	6	972	99	1,077	84	0	319	403	0	0	0	0	3,181
6/102	The Embarcadero/Washington Street	4	298	1,577	0	1,879	9	1,255	82	1,346	104	0	254	358	0	0	0	0	3,583
17	The Embarcadero/Mission Street	0	2	2,003	0	2,005	0	1,459	179	1,638	0	0	0	0	0	0	0	0	3,643
18	The Embarcadero/Harrison Street	0	0	1,393	0	1,393	0	1,320	351	1,671	183	0	169	352	0	0	0	0	3,417
19	The Embarcadero/Bryant Street	0	137	1,277	9	1,423	43	1,404	41	1,489	76	6	168	250	75	62	39	176	3,338
20	The Embarcadero/Brannan Street	3	48	1,305	0	1,357	3	1,370	275	1,648	120	0	15	135	0	0	0	0	3,140
21	Fremont Street/Folsom Street	0	4	185	73	262	228	39	1	268	167	407	57	631	0	95	66	161	1,322
22	King Street/Third Street	0	76	688	262	1,026	0	0	0	0	841	960	14	1,815	184	1,246	40	1,470	4,311
23	King Street/Fourth Street	0	8	52	50	110	56	304	432	792	116	1,708	17	1,841	24	1,263	34	1,321	4,064
	16th Street/Third Street	0	231	567	0	798	7	322	78	407	89	9	177	275	0	9	5	14	1,494
	Cesar Chavez Street/Third Street	0	223	535	16	774	17	354	99	470	97	204	154	455	13	220	18	251	1,950
	Cesar Chavez Street/Illinois Street	0	130	84	3	217	13	62	37	112	35	94	107	236	1	86	24	111	676
	Lincoln Blvd/25th Av/El Camino del Mar	0	17	24	257	298	14	20	2	36	1	221	23	245	412	208	5	625	1.203
	Lake Street/14th Avenue	0	3	44	18	65	8	0	0	8	30	264	1	295	73	298	27	398	766
	Lake Street/15th Avenue	0	7	5	19	31	31	121	32	184	4	207	4	215	17	263	4	284	714
	Jackson Street/Arquello Blvd	0	0	342	46	388	43	545	0	588	0	0	0	0	85	0	49	134	1,109
	Pacific Avenue/Presidio Blvd	0	5	385	8	398	43	547	30	620	5	8	4	17	23	18	39	80	1,114
	Lombard Street/Lyon Street	0	146	22	7	175	22	56	200	278	164	480	94	738	5	328	19	352	1,543
	Lombard Street/Divisadero Street	0	179	222	27	428	232	348	139	719	35	1.742	172	1.949	1	2.421	175	2.597	5,694
	Lombard Street/Fillmore Street	0	47	195	36	278	179	407	159	745	39	1.612	65	1,716	3	2.296	120	2,419	5,094
-	Bay Street/Laguna Street	0	253	0	114	366	529	151	13	693	0	210	343	553	258	362	1,208	1,828	3,440
	Bay Street/Van Ness Avenue	0	255 87	173	163	422	529	329	191	525	9	620	155	784	161	1,481	21	1,663	3,394
	Bay Street/Hyde Street	0	0	36	103	422	2	69	191	90	2	761	32	795	0	1,726	21	1,747	2,678
	Alexander Ave/Bunker Road	0	54	237	0	291	0	299	25	324	41	0	177	218	0	1,720	0	1,747	834
	Alexander Ave/Ft. Baker (East) Rd	0	0	274	10	284	8	316	13	324	0	0	0	218	4	0	71	75	696
	Bush Street/Van Ness Avenue	0	0	1.591	117	1,708	211	2,171	0	2.382	67	969	115	1,151	0	0	0	0	5.241
	Pine Street/Van Ness Avenue	0	156	1,591	0	1,708		2,171		2,382	0	969	0		122	1.487	237	1.846	5,241
				,		,	0	,	207		_			1.010		, .		,	-,
	Lombard Street/Van Ness Avenue	0	1,191	262	34	1,486	0	546	156	702	133	112	1,673	1,919	1	91	9	101	4,208
	The Embarcadero/Howard Street	0	121	1,565	0	1,686	3	1,058	400	1,461	438	0	339	777	0	0	0	0	3,924
44	The Embarcadero/Folsom Street	0	162	1,417	0	1,578	0	1,375	25	1,400	273	0	297	570	0	0	0	0	3,548

Table 2
San Francisco Northern Waterfront Model
Weekday PM Peak Hour

#										RSECTI	ON TURN	ING MOVE				101			
:	Intersection Name	U-turn		thbound Thru	Right	Total	Left	Southbo Thru		Total	Left	Eastbou Thru F	ınd Right	Total	Left	Westbou Thru F	und Right	Total	Total Al Approach
								34	th Amer	ica's Cu	p Year 20	13 Volume	S						
1	Beach Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	North Point Street/Columbus Ave		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	North Point Street/Stockton Street		0	33	0	33	0	0	0	0	0	85	0	85	0	0	0	0	118
4	Bay Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	19	0	19	0	126	0	126	145
5	Bay Street/Stockton Street		31	0	0	31	0	0	0	0	0	5	5	10	0	31	33	64	105
6	Bay Street/Kearny Street		32	0	109	141	0	0	0	0	0	2	2	5	33	32	0	65	210
7	Broadway/Sansome Street		0	40	0	40	0	0	0	0	25	50	0	75	0	290	0	290	405
	Broadway/Battery Street		0	0	0	0	0	121	97	217	0	50	0	50	0	193	0	193	460
9	The Embarcadero/Beach Street/Grant Av	0	40	0	0	40	0	0	0	0	0	0	85	85	0	0	0	0	125
	The Embarcadero/N. Point St./Kearny St.	0	40	40	0	80	0	85	0	85	0	0	85	85	0	0	0	0	251
11	The Embarcadero/Bay Street	0	65	80	0	145	0	106	65	171	0	0	111	111	0	0	0	0	427
	The Embarcadero/Chestnut St./Sansome	0	0	80	0	80	0	217	0	217	0	65	142	207	0	0	0	0	504
	The Embarcadero/Lombard St./Battery	0	0	80	0	80	0	142	217	359	0	0	142	142	0	0	0	0	581
14	The Embarcadero/Green Street	0	0	80	0	80	0	284	0	284	0	0	0	0	0	0	0	0	364
15	The Embarcadero/Broadway	0	138	30	0	169	0	90	193	284	50	0	0	50	0	0	0	0	502
	The Embarcadero/Washington Street	0	0	138	0	138	0	0	90	90	30	0	241	271	0	0	0	0	500
	The Embarcadero/Mission Street	0	0	300	0	300	0	241	0	241	-162	0	-87	-249	0	0	0	0	29
	The Embarcadero/Harrison Street	0	0	18	0	18	0	280	140	420	4	0	0	4	0	0	0	0	44
	The Embarcadero/Bryant Street	0	6	14	0	20	0	269	11	280	4	0	0	4	0	0	0	0	304
-	The Embarcadero/Brannan Street	0	8	18	0	26	0	261	7	269	2	0	0	2	0	0	0	0	29
	Fremont Street/Folsom Street		0	0	0	0	37	0	0	37	0	6	0	6	0	0	0	0	43
	King Street/Third Street		0	35	5	40	0	0	0	0	20	20	0	40	140	121	0	261	342
	King Street/Fourth Street		0	0	0	0	0	0	0	0	0	40	0	40	0	121	0	121	162
	16th Street/Third Street		0	40	0	40	0	121	18	140	6	0	0	6	0	0	0	0	186
	Cesar Chavez Street/Third Street		0	37	0	37	0	110	11	121	4	25	0	29	0	25	0	25	212
	Cesar Chavez Street/Illinois Street		0	0	0	0	0	0	0	0	0	25	0	25	0	25	0	25	50
	Lincoln Blvd/25th Av/El Camino del Mar		0	0	35	35	0	0	0	0	0	0	0	0	106	0	0	106	141
	Lake Street/14th Avenue		0	35	0	35	0	0	0	0	0	0	0	0	0	0	0	0	35
_	Lake Street/15th Avenue		0	0	0	0	0	106	0	106	0	0	0	0	0	0	0	0	106
_	Jackson Street/Arquello Blvd		0	35	0	35	0	106	0	106	0	0	0	0	0	0	0	0	14
	Pacific Avenue/Presidio Blvd		0	35	0	35	0	106	0	106	0	0	0	0	0	0	0	0	14
	Lombard Street/Lyon Street		0	0		35		106	0		0	335	0	335	0	112	0		44
	Lombard Street/Lyon Street Lombard Street/Divisadero Street		0	34	0	34	0 80	101	51	0 233	17	478	0	495	0	539	27	112 566	1,32
	Lombard Street/Divisadero Street Lombard Street/Fillmore Street		0	34	0	34	80	101	51	233	17	541	0	495 558	0	539	27	542	1,32
	Bay Street/Laguna Street		39	0	39	34 78	080	101	0	233	0	0	116	116	116	15	0	131	32
	, ,		39 15	0	45	78 60	0	0	0	0	0	-6	45	39	135	116	0	252	35
	Bay Street/Van Ness Avenue																		
	Bay Street/Hyde Street Alexander Ave/Bunker Road		0	0	0	0	0	0	9	0 12	<u>0</u>	39	0	39 15	0	252 0	0	252 0	29 31
	Alexander Ave/Bunker Road Alexander Ave/Ft. Baker (East) Rd		4	11		5	0	9					11		2	0	0		
	()		0	264	1	5 264	22		10	19	0	0	2	2		0	53	54 0	79
	Bush Street/Van Ness Avenue				0			756		778	0		0	0	0				1,04
	Pine Street/Van Ness Avenue		0	264	0	264	0	778	0	778	0	0	0	0	0	0	260	260	1,30
	Lombard Street/Van Ness Avenue		226	38	0	264	0	115	65	181	22	0	663	684	0	0	0	0	1,12
	The Embarcadero/Howard Street	0	0	58	0	58	0	-87	241	154	242	0	367	609	0	0	0	0	82
44	The Embarcadero/Folsom Street	0	7	15	0	22	0	280	0	280	43	0	140	183	0	0	0	0	484

Table 2
San Francisco Northern Waterfront Model
Weekday PM Peak Hour

ш	Internation Name		- AI	o #4 b b o 1 · · ·						RSECT	ON TURN	IING MOV)		Weeth	aund		Total 6"
#	Intersection Name	U-turn	Left	orthbound Thru	d Right	Total	Left	Southb Thru	ound Right	Total	Left	Eastbo Thru	ound Right	Total	Left	Westbe Thru	ound Right	Total	Total All Approache
												2013 Volu							просоло
1	Beach Street/Columbus Avenue	0	17	0	8	25	0	0	0	0	0	157	92	249	9	76	0	85	359
	North Point Street/Columbus Ave	0	62	38	22	122	22	76	58	156	21	131	44	196	28	292	29	349	823
3	North Point Street/Stockton Street	0	23	53	32	108	14	37	22	73	17	320	57	394	7	152	5	164	739
	Bay Street/Columbus Avenue	0	341	86	66	493	0	145	4	149	1	595	187	783	7	1,160	34	1,201	2,626
	Bay Street/Stockton Street	0	52	25	58	135	40	33	31	104	22	511	25	558	23	1,120	63	1,206	2,003
	Bay Street/Kearny Street	0	156	3	133	292	2	3	14	19	10	545	59	615	52	1,036	2	1,090	2,015
7	Broadway/Sansome Street	0	274	326	39	639	0	0	0	0	101	593	0	694	0	1,056	107	1,163	2,496
3	B Broadway/Battery Street	0	0	0	0	0	54	718	252	1,023	0	372	257	629	37	912	0	949	2,601
	The Embarcadero/Beach Street/Grant Av	1	188	335	28	552	4	141	0	145	0	0	393	393	17	73	8	98	1,188
10	The Embarcadero/N. Point St./Kearny St.	10	184	508	0	702	1	497	54	552	19	243	98	360	4	25	10	39	1,654
11	The Embarcadero/Bay Street	0	1,012	686	0	1,698	0	745	95	840	16	0	663	679	0	0	0	0	3,217
12	The Embarcadero/Chestnut St./Sansome	5	31	1,295	0	1,331	18	1,383	7	1,408	79	381	157	617	0	0	0	0	3,356
13	The Embarcadero/Lombard St./Battery	40	63	1,271	11	1,385	12	970	563	1,545	30	7	392	429	40	30	28	98	3,457
14	The Embarcadero/Green Street	13	33	1,336	0	1,382	4	1,203	11	1,218	27	0	64	91	0	0	0	0	
5/101	The Embarcadero/Broadway	53	520	1,246	0	1,820	6	1,035	235	1,277	119	0	319	438	0	0	0	0	3,534
6/102	The Embarcadero/Washington Street	4	298	1,674	0	1,976	9	1,255	145	1,409	125	0	424	549	0	0	0	0	3,935
17	The Embarcadero/Mission Street	0	2	2,100	0	2,102	0	1,629	179	1,808	0	0	0	0	0	0	0	0	3,910
18	The Embarcadero/Harrison Street	0	0	1,406	0	1,406	0	1,517	450	1,967	186	0	169	355	0	0	0	0	3,727
19	The Embarcadero/Bryant Street	0	141	1,287	9	1,437	43	1,594	49	1,686	79	6	168	253	75	62	39	176	3,552
20	The Embarcadero/Brannan Street	3	54	1,318	0	1,375	3	1,554	280	1,838	121	0	15	136	0	0	0	0	3,349
	Fremont Street/Folsom Street	0	4	185	73	262	254	39	1	294	167	411	57	635	0	95	66	161	1,352
22	King Street/Third Street	0	76	713	265	1,054	0	0	0	0	855	974	14	1,843	283	1,331	40	1,654	4,552
	King Street/Fourth Street	0	8	52	50	110	56	304	432	792	116	1,736	17	1,869	24	1,348	34	1,406	4,178
	1 16th Street/Third Street	0	231	595	0	826	7	407	91	506	93	9	177	279	0	9	5	14	1,625
	Cesar Chavez Street/Third Street	0	223	561	16	800	17	431	107	555	100	204	154	458	13	220	18	251	2.064
26	Cesar Chavez Street/Illinois Street	0	130	84	3	217	13	62	37	112	35	94	107	236	1	86	24	111	676
	Lincoln Blvd/25th Av/El Camino del Mar	0	17	24	260	301	14	20	2	36	1	221	23	245	423	208	5	636	1,218
	Lake Street/14th Avenue	0	3	47	18	68	8	0	0	8	30	264	1	295	73	298	27	398	769
	Lake Street/15th Avenue	0	7	5	19	31	31	132	32	195	4	207	4	215	17	263	4	284	725
	Jackson Street/Arguello Blvd	0	0	345	46	391	43	556	0	599	0	0	0	0	85	0	49	134	1,124
	Pacific Avenue/Presidio Blvd	0	5	388	8	401	43	558	30	631	5	8	4	17	23	18	39	80	1,129
	Lombard Street/Lyon Street	0	146	22	7	175	22	56	200	278	164	515	94	773	5	340	19	364	1,590
	B Lombard Street/Divisadero Street	0	179	187	27	393	147	241	85	474	17	1,805	172	1,994	1	2,514	147	2,662	5,522
	Lombard Street/Fillmore Street	0	47	160	36	243	94	300	105	500	21	1.608	65	1.694	3	2,415	92	2.510	4.946
	Bay Street/Laguna Street	0	212	0	73	285	529	151	13	693	0	210	220	430	135	363	1,208	1,706	3,115
	Bay Street/Van Ness Avenue	0	88	173	167	428	5	329	191	525	9	575	159	743	174	1.358	21	1,554	3.250
	Bay Street/Hyde Street	0	0	36	10	46	2	69	19	90	2	720	32	754	0	1,617	21	1,638	2,528
	Alexander Ave/Bunker Road	0	58	238	0	296	0	302	26	328	41	0	187	228	0	0	0	0	851
	Alexander Ave/Ft. Baker (East) Rd	0	0	274	11	285	8	317	15	340	0	0	2	2	6	0	79	84	710
	Bush Street/Van Ness Avenue	0	0	1,650	117	1,767	227	2,009	0	2,236	67	969	115	1,151	0	0	0	0	5,155
	Pine Street/Van Ness Avenue	0	156	1,562	0	1,718	0	2,090	207	2,297	0	0	0	0	122	1.487	420	2,029	6,044
	Lombard Street/Van Ness Avenue	0	1.246	265	34	1,545	0	557	163	721	136	112	1,516	1,763	1	91	9	101	4,130
	The Embarcadero/Howard Street	0	121	1,606	0	1,727	3	1,058	570	1,631	494	0	536	1,030	0	0	0	0	4,388
	The Embarcadero/Folsom Street	0	167	1,427	0	1,594	0	1,572	25	1,597	303	0	396	699	0	0	0	0	3,889
			107	1, 141		1,007		1,012	20	1,001	300		550	333	- 0	<u> </u>	- 0	0	0,000

Saturday Midday Peak Hour

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

								TABLE	3A - INTE	ERSECT	ION TURN	ING MOV	EMENTS						
#	Intersection Name		No	rthboun	d			Southb	ound			Eastbo	und			Westb	ound		Total All
		U-turn	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Approache
									E:	xisting E	Base Volun	nes							
1	Beach Street/Columbus Avenue		39	0	23	62	0	0	0	0	0	269	95	364	14	82	0	96	522
2	North Point Street/Columbus Ave		42	98	33	173	31	75	50	156	28	171	50	249	41	188	44	273	851
3	North Point Street/Stockton Street		16	54	52	122	15	25	17	57	22	209	63	294	17	81	13	111	584
4	Bay Street/Columbus Avenue		173	125	69	367	1	157	8	166	13	575	130	718	32	442	36	510	1,761
5	Bay Street/Stockton Street		55	42	59	156	24	44	38	106	37	561	33	631	29	447	47	523	1,416
6	Bay Street/Kearny Street		58	7	14	79	7	9	30	46	20	568	62	650	20	436	9	465	1,240
7	Broadway/Sansome Street		145	152	18	315	0	0	0	0	72	417	0	489	0	421	38	459	1,263
8	Broadway/Battery Street		0	0	0	0	15	261	83	359	0	276	161	437	34	376	0	410	1,206
9	The Embarcadero/Beach Street/Grant Av	1	348	484	48	881	0	155	0	155	0	0	315	315	9	59	9	77	1,428
10	The Embarcadero/N. Point St./Kearny St.	13	99	826	0	938	1	313	166	480	24	148	50	222	4	34	14	52	1,692
11	The Embarcadero/Bay Street	0	459	902	0	1,361	0	442	36	478	36	0	552	588	0	0	0	0	2,427
12	The Embarcadero/Chestnut St./Sansome	6	22	1,141	0	1,169	38	939	17	994	83	222	16	321	0	0	0	0	2,484
	The Embarcadero/Lombard St./Battery	3	24	1,130	29	1,186	17	756	189	962	29	4	130	163	9	4	15	28	2,339
14	The Embarcadero/Green Street	11	19	1,190	0	1,220	9	749	15	773	17	0	7	24	0	0	0	0	2,017
15	The Embarcadero/Broadway	74	285	1,193	0	1,552	6	726	30	762	52	0	245	297	0	0	0	0	2,611
16	The Embarcadero/Washington Street	0	235	1,440	0	1,675	11	925	108	1,044	97	0	125	222	0	0	0	0	2,941
17	The Embarcadero/Mission Street	0	0	1,443	0	1,443	0	896	188	1,084	266	0	53	319	0	0	0	0	2,846
18	The Embarcadero/Harrison Street	0	0	876	0	876	0	767	219	986	183	0	74	257	0	0	0	0	2,119
19	The Embarcadero/Bryant Street	0	54	812	14	880	31	744	64	839	58	5	85	148	4	11	5	20	1,887
20	The Embarcadero/Brannan Street	9	24	821	0	854	2	721	108	831	60	0	43	103	0	0	0	0	1,788
21	Fremont Street/Folsom Street		0	108	28	136	254	38	0	292	75	297	9	381	0	15	75	90	899
22	King Street/Third Street		50	331	122	503	0	0	0	0	534	786	29	1,349	123	727	56	906	2,758
23	King Street/Fourth Street		24	35	23	82	64	193	161	418	81	1,263	0	1,344	41	680	56	777	2,621
24	16th Street/Third Street	0	103	236	0	339	4	140	32	176	38	0	105	143	0	0	0	0	658
25	Cesar Chavez Street/Third Street		133	219	8	360	2	146	56	204	83	88	130	301	10	86	8	104	969
26	Cesar Chavez Street/Illinois Street		29	27	3	59	9	17	11	37	27	27	45	99	3	65	7	75	270
27	Lincoln Blvd/25th Av/El Camino del Mar	0	20	22	280	322	25	16	2	43	1	239	27	267	256	166	13	435	1,067
28	Lake Street/14th Avenue	0	2	9	10	21	3	0	0	3	16	175	6	197	68	151	14	233	454
29	Lake Street/15th Avenue	0	3	3	15	21	19	20	11	50	1	160	2	163	10	134	6	150	384
30	Jackson Street/Arguello Blvd	0	0	347	27	374	30	363	0	393	0	0	0	0	39	0	49	88	855
31	Pacific Avenue/Presidio Blvd	0	3	353	11	367	14	356	18	388	10	1	1	12	15	11	31	57	824
32	Lombard Street/Lyon Street	0	88	29	21	138	27	34	159	220	186	205	91	482	8	229	18	255	1,095
33	Lombard Street/Divisadero Street	0	207	186	39	432	80	139	42	261	20	1,313	197	1,530	22	1,608	89	1,719	3,942
34	Lombard Street/Fillmore Street	0	68	155	25	248	32	173	69	274	15	1,261	62	1,338	12	1,459	65	1,536	3,396
	Bay Street/Laguna Street	0	157	0	30	187	621	137	19	777	0	215	106	321	13	239	752	1,004	2,289
36	Bay Street/Van Ness Avenue	0	63	220	138	421	9	233	175	417	59	738	139	936	100	539	12	651	2,425
	Bay Street/Hyde Street	0	7	44	19	70	3	92	36	131	1	762	26	789	0	612	14	626	1,616
	Alexander Ave/Bunker Road	0	182	265	0	447	0	221	35	256	106	0	346	452	0	0	0	0	1,155
39	Alexander Ave/Ft. Baker (East) Rd	0	2	313	54	369	14	216	7	237	0	0	0	0	38	0	46	84	690
40	Bush Street/Van Ness Avenue	0	0	1,115	117	1,232	198	1,250	0	1,448	65	773	88	926	0	0	0	0	3,606
41	Pine Street/Van Ness Avenue	0	96	1,107	0	1,203	0	1,319	146	1,465	0	0	0	0	86	689	105	880	3,548
42	Lombard Street/Van Ness Avenue	0	779	250	41	1,070	0	443	110	553	160	140	829	1,129	0	88	5	93	2,845
43	The Embarcadero/Howard Street	12	100	1,291	0	1,403	6	764	177	947	147	0	86	233	0	0	0	0	2,583
44	The Embarcadero/Folsom Street	17	120	1,075	0	1,212	0	842	20	862	330	0	127	457	0	0	0	0	2,531

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

	ay Midday Peak Hour							TABLE 3	BA - INTE	RSECTI	ON TURN	ING MOVE	MENTS						
#	Intersection Name		No	rthbound	d			Southbo	und			Eastbou	nd			Westb	ound		Total All
		U-turn	Left	Thru	Right	Total	Left	Thru I	Right	Total	Left	Thru F	Right	Total	Left	Thru	Right	Total	Approache
							JRH	Cruise Te	rminal P	roject V	olumes [ir	ncludes ne	gative pa	aths]					
1	Beach Street/Columbus Avenue		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
2	North Point Street/Columbus Ave		0	0	0	0	0	0	0	0	0	10	0	10	0	10	0	10	20
3	North Point Street/Stockton Street		0	0	0	0	0	0	0	0	0	10	0	10	0	10	0	10	20
4	Bay Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	39	0	39	0	38	0	38	77
5	Bay Street/Stockton Street		0	0	0	0	0	0	0	0	0	39	0	39	0	38	0	38	77
	Bay Street/Kearny Street		0	0	0	0	0	0	0	0	0	39	0	39	73	38	73	183	222
	Broadway/Sansome Street		0	29	0	29	0	0	0	0	0	41	0	41	0	39	0	39	109
8	Broadway/Battery Street		0	0	0	0	0	27	0	27	0	41	0	41	0	39	0	39	107
9	The Embarcadero/Beach Street/Grant Av	13	0	0	0	13	0	0	0	0	0	0	0	0	0	0	0	0	13
	The Embarcadero/N. Point St./Kearny St.	26	10	13	0	49		13	0	13	0	10	0	10	73	0	0	73	145
11	The Embarcadero/Bay Street	0	183	49	0	232	0	122	0	122	0	0	39	39	0	0	0	0	393
	The Embarcadero/Chestnut St./Sansome	27	0	232	0	259		161	0	161	0	0	73	73	0	0	0	0	
	The Embarcadero/Lombard St./Battery	0	0	212	-29	183	49	184	27	260	15	-4	0	11	-9	-4	-15	-28	425
	The Embarcadero/Green Street	0	0	168	0	168	0	175	0	175	15	0	0	15	0	0	0	0	358
	The Embarcadero/Broadway	0	0	127	0	127	0	136	39	175	41	0	0	41	0	0	0	0	343
16	The Embarcadero/Washington Street	0	0	127	0	127	0	136	0	136	0	0	0	0	0	0	0	0	263
	The Embarcadero/Mission Street	0	0	127	0	127	0	136	0	136	0	0	0	0	0	0	0	0	263
	The Embarcadero/Harrison Street	0	0	49	0	49		39	48	88	0	0	0	0	0	0	0	0	
	The Embarcadero/Bryant Street	0	0	49	0			39	0	39	0	0	0	0	0	0	0	0	
	The Embarcadero/Brannan Street	0	0	49	0	49		39	0	39	0	0	0	0	0	0	0	0	
	The Embarcadero/Howard Street	0	0	127	0	127	0	136	0	136	0	0	0	0	0	0	0	0	
	The Embarcadero/Folsom Street	0	0	49	0	49		88	48	136	78	0	0	78	0	0	0	0	263
	The Empareacord Cloth Creek			10		10			10	100	70			7.0					200
		1																	

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

	y Midday Peak Hour							TABLE	3A - INT	ERSECT	ION TURN	ING MOVE	MENTS						
#	Intersection Name		No	orthbour	nd			Southb				Eastbo				Westk	ound		Total All
		U-turn	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Approache
								Existing E	Base plu	s JRH Cr	uise Term	inal Projec	ct Volum	es					
1	Beach Street/Columbus Avenue	_	39	-	23	62	-	-	- -	-	-	269	95	364	14	82	-	96	522
	North Point Street/Columbus Ave	-	42	98	33	173	31	75	50	156	28	181	50	259	41	198	44	283	871
3	North Point Street/Stockton Street	-	16	54	52	122	15	25	17	57	22	219	63	304	17	91	13	121	604
	Bay Street/Columbus Avenue	-	173	125	69	367	1	157	8	166	13	614	130	757	32	480	36	548	1,838
	Bay Street/Stockton Street	-	55	42	59	156	24	44	38	106	37	600	33	670	29	485	47	561	1,493
	Bay Street/Kearny Street	-	58	7	14	79	7	9	30	46	20	607	62	689	93	474	82	648	1,462
	Broadway/Sansome Street	-	145	181	18	344	-	-	-	-	72	458	_	530	-	460	38	498	1,372
	Broadway/Battery Street	-	-	-	_		15	288	83	386	-	317	161	478	34	415	-	449	1,313
	The Embarcadero/Beach Street/Grant Av	14	348	484	48	894	-	155	-	155	-	-	315	315	9	59	9	77	1,441
	The Embarcadero/N. Point St./Kearny St.	39	109	839		987	1	326	166	493	24	158	50	232	77	34	14	125	1,837
	The Embarcadero/Bay Street	-	642	951		1,593	-	564	36	600	36		591	627			_	_	2,820
	The Embarcadero/Chestnut St./Sansome	33	22	1,373	-	1,428	38	1,100	17	1,155	83	222	89	394	_	_		_	2,976
	The Embarcadero/Lombard St./Battery	3	24	1,342	_		66	940	216	1,222	44	-	130	174	_	_	_	_	2,764
	The Embarcadero/Green Street	11	19	1,358	_	1,388	9	924	15	948	32	_	7	39	_	_		_	2,375
	The Embarcadero/Broadway	74	285	1,320	_	1,679	6	862	69	937	93	_	245	338	_	_	_		2,954
	The Embarcadero/Washington Street	-	235	1,567	-	1,802	11	1,061	108	1,180	97	_	125	222	_	_	_		3,204
	The Embarcadero/Mission Street	_	-	1,570	_	1,570	-	1,032	188	1,220	266	_	53	319	_	_	_		3,109
	The Embarcadero/Harrison Street	_	_	925	_	925	_	806	267	1,074	183	_	74	257	_	_	_		2,256
	The Embarcadero/Bryant Street	-	54	861	14	929	31	783	64	878	58	5	85	148	4	11	5	20	1,975
	The Embarcadero/Brannan Street	9	24	870		903	2	760	108	870	60	-	43	103	-		-	20	1,876
	The Embarcadero/Howard Street	12	100	1,418		1,530	6	900	177	1,083	147		86	233					2,846
	The Embarcadero/Folsom Street	17	120	1,124		1,261	-	930	68	998	408		127	535					2,794
	The Embarcadero/Folsom Street	17	120	1,124		1,201	-	930	00	990	400		127	555					2,194
		ĺ																	

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

										EKSECI	ION TURN			<u> </u>					
	Intersection Name	11 4		orthboun		Tarret	1.00	Southl		Tetal	1.5"	Eastbo		Tatal	1.00		oound	T-1-1	Total All
		U-turn	Left	Thru	Right	lotal	Left	Thru	Right	Total Cu	Left	Thru	Right	Total	Left	Thru	Right	Total	Approach
1	Beach Street/Columbus Avenue		40	_	24	64	_	_	2035	rinai Cu	mulative \	70iumes 310	110	420	15	578	_	593	1,077
	North Point Street/Columbus Ave		43	105	34	182	32	77	51	160	30	198	54	282	42	207	45	294	918
	North Point Street/Stockton Street Bay Street/Columbus Avenue		17 177	61 128	54 71	132 376	16 2	26 161	18 9	60 172	24 16	239 823	68 151	331 990	18 33	98 592	14	130 662	653
	,		57	43	61	161		50	39	114	43	823	39	990	33	682	37 48	760	2,199 1,943
	Bay Street/Stockton Street		65	8	25	98	25	12	39	51	24	805	82	909		671	86	852	1,943
	Bay Street/Kearny Street						8			51					95				
	Broadway/Sansome Street Broadway/Battery Street		148	192	19 -	359	18	352	- 420	500	107	638 486	- 474	745 660	- 44	622	39	661 574	1,764 1,733
	The Embarcadero/Beach Street/Grant Av	45					18		130				174		41	533			
	The Embarcadero/Beach Street/Grant Av The Embarcadero/N. Point St./Kearny St.	15 40	553 114	296	49	913		185 377	-	185	26	- 470	363 54	363 252	10 79	61 35	10 15	81 129	1,542
	The Embarcadero/Bay Street			856		1,010	2		193	572		172						129	1,963
		-	864	973	-	1,837	-	624	42	666	42	-	797	839	-	-	-	-	3,341
	The Embarcadero/Chestnut St./Sansome	35	24	1,597	-	1,656	45	1,357	20	1,422	89	241	91	421	-	-		-	3,499
	The Embarcadero/Lombard St./Battery	14	46	1,609	-	1,669	70	1,150	266	1,486	48	-	165	213	-	-	-	-	3,36
	The Embarcadero/Green Street	12	63	1,634	-	1,709	14	1,168	25	1,207	42	-	73	115	-	-	-		3,030
	The Embarcadero/Broadway	84	385	1,628	-	2,096	7	1,153	91	1,251	116	-	340	456	-	-	-		3,802
_	The Embarcadero/Washington Street	-	302	2,025	-	2,327	13	1,432	131	1,576	102	-	133	235	-	-	-	-	4,138
	The Embarcadero/Mission Street	-	-	2,133	-	2,133	-	1,461	207	1,668	296	-	59	355	-	-	-	-	4,156
	The Embarcadero/Harrison Street	-	-	1,416	-	1,416	-	1,244	335	1,580	214	-	78	292	-	-	-		3,287
	The Embarcadero/Bryant Street	29	119	1,274	18	1,440	105	1,096	119	1,320	52	97	58	207	242	111	83	436	3,40
	The Embarcadero/Brannan Street	12	30	1,326	-	1,368	30	1,180	214	1,424	144	-	44	188	-	-	-	-	2,980
	The Embarcadero/Howard Street	21	142	1,944	-	2,107	7	1,316	195	1,518	189	-	111	300	-	-	-	-	3,92
44	The Embarcadero/Folsom Street	34	152	1,603	-	1,789	-	1,374	74	1,448	500	-	172	672	-	-	-	-	3,908
-																			
-																			

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

2 No 3 No 4 Ba 5 Ba 6 Ba 7 Br 8 Br 9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th	Intersection Name each Street/Columbus Avenue orth Point Street/Columbus Ave orth Point Street/Stockton Street ay Street/Columbus Avenue ay Street/Stockton Street ay Street/Kearny Street	U-turn	Left 0	Thru 0		Total	Left The Emb		Right	Total	Left		Right	Total	Left	Westb Thru	ound Right	Total	Total All Approache
2 No 3 No 4 Ba 5 Ba 6 Ba 7 Br 8 Br 9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th	orth Point Street/Columbus Ave orth Point Street/Stockton Street ay Street/Columbus Avenue ay Street/Stockton Street	U-turn	0													Thru	Right	Total	Approache
2 No 3 No 4 Ba 5 Ba 6 Ba 7 Br 8 Br 9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th	orth Point Street/Columbus Ave orth Point Street/Stockton Street ay Street/Columbus Avenue ay Street/Stockton Street			0			The Emb	arcadero	Northho	vers all acres al									
2 No 3 No 4 Ba 5 Ba 6 Ba 7 Br 8 Br 9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th	orth Point Street/Columbus Ave orth Point Street/Stockton Street ay Street/Columbus Avenue ay Street/Stockton Street			0	_				INOI LI IDU	una ana	Marina Bi	lvd Closur	es Base	Volume	S				
3 Node 4 Base 5 Base 6 Base 7 Brown 5 Base 7 Brown 5 Brown 5 Base 7 Brown 5 Base 7 Brown 5 Bro	orth Point Street/Stockton Street ay Street/Columbus Avenue ay Street/Stockton Street		0		U	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Ba 5 Ba 6 Ba 7 Brr 8 Brr 9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	ay Street/Columbus Avenue ay Street/Stockton Street			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Ba 6 Ba 7 Brr 8 Brr 9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th	ay Street/Stockton Street		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Ba 7 Brr 8 Brr 9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 20 Th	,		298	0	69	367	1	0	0	1	0	482	33	515	32	34	0	66	949
7 Brr 8 Brr 9 Th 10 Th 11 Th 12 Th 13 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th 20 Th	ay Street/Kearny Street		97	0	59	156	0	0	0	0	0	505	33	538	29	35	0	64	758
8 Brd 9 Th 10 Th 11 Th 12 Th 13 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th 17 Th 20 Th 19 Th 20 Th 1			65	0	14	79	0	0	0	0	0	508	62	570	0	0	0	0	649
9 Th 10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	roadway/Sansome Street		367	0	18	385	0	0	0	0	72	365	0	437	0	136	38	174	996
10 Th 11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	roadway/Battery Street		0	0	0	0	15	261	83	359	0	224	161	385	34	91	0	125	869
11 Th 12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	ne Embarcadero/Beach Street/Grant Av	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 Th 13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	ne Embarcadero/N. Point St./Kearny St.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	ne Embarcadero/Bay Street	0	0	0	0	0	0	0	0	0	0	0	521	521	0	0	0	0	521
13 Th 14 Th 15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	ne Embarcadero/Chestnut St./Sansome	0	0	0	0	0	0	504	17	521	83	0	16	99	0	0	0	0	620
15 Th 16 Th 17 Th 18 Th 19 Th 20 Th	ne Embarcadero/Lombard St./Battery	0	0	0	0	0	0	332	189	521	0	4	130	134	9	4	0	13	668
16 Th 17 Th 18 Th 19 Th 20 Th	ne Embarcadero/Green Street	0	0	0	0	0	0	331	15	346	0	0	7	7	0	0	0	0	353
17 Th 18 Th 19 Th 20 Th	ne Embarcadero/Broadway	0	0	0	0	0	0	303	30	333	0	0	245	245	0	0	0	0	578
18 Th 19 Th 20 Th	ne Embarcadero/Washington Street	0	0	0	0	0	0	439	108	547	0	0	125	125	0	0	0	0	672
19 Th 20 Th	ne Embarcadero/Mission Street	0	0	0	0	0	0	376	188	564	0	0	0	0	0	0	0	0	564
20 Th	ne Embarcadero/Harrison Street	0	0	101	0	101	0	253	219	472	183	0	74	257	0	0	0	0	830
20 Th	ne Embarcadero/Bryant Street	0	248	37	14	299	31	230	64	325	58	5	85	148	4	11	5	20	792
	ne Embarcadero/Brannan Street	9	153	240	0	402	2	207	108	317	60	0	43	103	0	0	0	0	822
	remont Street/Folsom Street		0	108	28	136	254	38	0	292	75	297	9	381	0	15	269	284	1,093
22 Kir	ing Street/Third Street		50	331	122	503	0	0	0	0	986	334	29	1,349	123	213	56	392	2,244
	ing Street/Fourth Street		24	35	23	82	64	193	161	418	81	1,263	0	1,344	41	166	56	263	2,107
	6th Street/Third Street	0	103	236	0	339	4	140	32	176	38	0	105	143	0	0	0	0	658
	esar Chavez Street/Third Street		133	219	8	360	2	146	56	204	83	88	130	301	10	86	8	104	969
	esar Chavez Street/Illinois Street		29	27	3	59	9	17	11	37	27	27	45	99	3	65	7	75	270
	ncoln Blvd/25th Av/El Camino del Mar	0	20	22	280	322	25	16	2	43	1	239	27	267	256	166	13	435	1,067
	ake Street/14th Avenue	0	2	9	10	21	3	0	0	3	16	175	6	197	68	151	14	233	454
	ake Street/15th Avenue	0	3	3	15	21	19	20	11	50	1	160	2	163	10	134	6	150	384
	ackson Street/Arguello Blvd	0	0	347	27	374	30	363	0	393	0	0	0	0	39	0	49	88	855
	acific Avenue/Presidio Blvd	0	3	353	11	367	14	356	18	388	10	1	1	12	15	11	31	57	824
	ombard Street/Lyon Street	_	88	29	21	138	27	34	159	220	186	205	91	482	8	229	18	255	1,095
	ombard Street/Divisadero Street		186	186	39	411	80	139	38	257	18	1,492	177	1,688	22	1,833	89	1,944	4,300
	ombard Street/Fillmore Street		61	155	25	241	32	173	260	465	14	1,445	56	1,515	12	1,501	65	1,578	3,799
	ay Street/Laguna Street		157	0	30	187	0	0	0	0	0	250	106	356	107	437	0	544	1,087
	ay Street/Van Ness Avenue		173	0	326	499	0	0	0	0	0	315	35	350	194	144	0	338	1,186
	ay Street/Hyde Street		7	0	63	70	0	0	0	0	0	518	27	545	0	335	0	335	950
	exander Ave/Bunker Road	0	182	265	0	447	0	221	35	256	106	0	346	452	0	0	0	000	1,155
	exander Ave/Ft. Baker (East) Rd	0	2	313	54	369	14	216	7	237	0	0	0	0	38	0	46	84	690
	ush Street/Van Ness Avenue		0	1,004	117	1,121	198	1,021	0	1,219	65	773	88	926	0	0	0	0	3,265
	ine Street/Van Ness Avenue		96	996	0	1,092	0	1,083	146	1,229	0	0	0	0_0	86	689	105	880	3,201
	ombard Street/Van Ness Avenue		701	250	41	992	0	106	193	299	222	126	979	1,327	0	79	5	84	2,702
	ne Embarcadero/Howard Street	12	423	0	0	435	0	197	177	374	0	0	139	139	0	0	0	0	948
	a. Jaaoi o/i iomai a Otioot																		
	ne Embarcadero/Folsom Street	17	314	107	0	437	()	328	20	3481	330	()	127	457	Ω	()	Ω	() I	1,747
	ne Embarcadero/Folsom Street	17	314	107	0	437	0	328	20	348	330	0	127	457	0	0	0	0	1,242
	ne Embarcadero/Folsom Street	17	314	107	0	437	0	328	20	348	330	0	127	457	0	0	0	0	1,242

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

	ay Midday Peak Hour 							TABLE 3	BA - INTE	RSECTI	ON TURNI	NG MOVE	MENTS						
#	Intersection Name		No	rthboun	d			Southbo	und			Eastbou	nd			Westb	ound		Total All
		U-turn	Left	Thru	Right	Total	Left	Thru I	Right	Total	Left	Thru I	Right	Total	Left	Thru	Right	Total	Approache
								34	th Amer	ica's Cu	p Year 201	12 Volume	S						
1	Beach Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	North Point Street/Columbus Ave		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	North Point Street/Stockton Street		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	Bay Street/Columbus Avenue		0	0	0	0		0	0	0	0	473	0	473	0	122	0	122	596
	Bay Street/Stockton Street		31	0	0	31	0	0	0	0	0	118	118	237	0	31	0	31	298
	Bay Street/Kearny Street		31	0	0	31	0	0	0	0	0	59	59	118	0	0	0	0	
	Broadway/Sansome Street		0	100	0	100	0	0	0	0	42	84	0	125	0	39	0	39	264
	Broadway/Battery Street		0	0	0	0		25	13	38	0	84	0	84	0	26	0	26	
	The Embarcadero/Beach Street/Grant Av	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/N. Point St./Kearny St.	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Bay Street	0	0	0	0	0		0	0	0	0	0	59	59	0	0	0	0	
	The Embarcadero/Chestnut St./Sansome	0	0	0	0	0		0	59	59	0	0	0	0	0	0	0	0	
	The Embarcadero/Lombard St./Battery	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Combard St./Battery The Embarcadero/Green Street	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Broadway	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Washington Street	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Mission Street	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Harrison Street	0	0	45	0	45		58	29	87	13	0	0	13	0	0	0	0	
	The Embarcadero/Bryant Street	0	15	36	0	51	0	56	29	58	9	0	0	9	0	0	0	0	
	The Embarcadero/Brannan Street	0	20		0	65		54	1	56	6	0	0	6	0	0	0	0	
	Fremont Street/Folsom Street	U	0	46	0	00		0	0		0		0		0	0	0	0	
	King Street/Third Street		0	87		101	88	0	0	88	51	14 51	0	14	29	25	0		102 257
			0	0	15		-	0		0	0	101		101 101		25		54	127
	King Street/Fourth Street				0	0			0				0		0		0	25	
	16th Street/Third Street		0	101	0	101	0	25	4	29	14	0	0	14	0	0	0	0	145
	Cesar Chavez Street/Third Street		0	88	0	88	0	22	3	25	13	50	0	63	0	50	0	50	227
	Cesar Chavez Street/Illinois Street		0	0	0	0	-	0	0	0		50	0	50	0	50	0	50	100
	Lincoln Blvd/25th Av/El Camino del Mar		0	0	526	526		0	0	0	0	0	0	0	132	0	0	132	658
	Lake Street/14th Avenue		0	526	0	526		0	0	0	0	0	0	0	0	0	0	0	
	Lake Street/15th Avenue		0	0	0	0		132	0	132	0	0	0	0	0	0	0	0	
	Jackson Street/Arguello Blvd		0	526	0	526		132	0	132	0	0	0	0	0	0	0	0	
	Pacific Avenue/Presidio Blvd		0	526	0	526	0	132	0	132	0	0	0	0	0	0	0	0	
	Lombard Street/Lyon Street		0	0	0	0		0	0	0	0	453	0	453	0	1,810	0	1,810	2,263
	Lombard Street/Divisadero Street		0	547	0	547	118	137	43	298	173	1,059	0	1,232	0	1,962	470	2,432	4,508
	Lombard Street/Fillmore Street		0	547	0	547	118	137	43	298	173	1,003	0	1,176	0	2,389	470	2,859	4,879
	Bay Street/Laguna Street		595	0	595	1,190	0	0	0	0	0	0	149	149	149	128	0	277	1,615
	Bay Street/Van Ness Avenue		128	0	383	511	0	0	0	0	0	563	32	595	96	149	0	245	1,351
	Bay Street/Hyde Street		0	0	0	0		0	0	0	0	946	0	946	0	245	0	245	1,191
	Alexander Ave/Bunker Road		65	183	0	248		28	23	50	2	0	16	18	0	0	0	0	
	Alexander Ave/Ft. Baker (East) Rd		0	30	155	184	0	29	68	97	0	0	11	11	11	0	38	48	340
	Bush Street/Van Ness Avenue		0	2,008	0	2,008	32	998	0	1,030	0	0	0	0	0	0	0	0	3,038
	Pine Street/Van Ness Avenue		0	2,008	0	2,008	0	1,030	0	1,030	0	0	0	0	0	0	32	32	3,071
	Lombard Street/Van Ness Avenue		1,627	381	0	2,008	0	95	32	128	130	0	935	1,065	0	0	0	0	-,-
	The Embarcadero/Howard Street	0	41	0	0	41	0	0	0	0	0	0	58	58	0	0	0	0	
44	The Embarcadero/Folsom Street	0	17	41	0	58	0	58	0	58	0	0	29	29	0	0	0	0	145
											· · ·	-					-		

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

	AC34 Traffic Reduction on West Side = 20%									ERSECTI	ON TURN								
#	Intersection Name	U-turn	No Left	rthbound		Total	Left	Southb		Total	Left	Eastbo Thru		Total	Left	Westbe Thru		Total	Total All
		U-turn	Lett	Thru	Right			Thru	Right				Right	Total			Right	Total	Approache
							rcadero No												_
	Beach Street/Columbus Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	_
	North Point Street/Columbus Ave	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
-	North Point Street/Stockton Street	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	_
	Bay Street/Columbus Avenue	0	298	0	69	367	1	0	0	1	0	955	33	988	32	156	0	188	
	Bay Street/Stockton Street	0	128	0	59	187	0	0	0	0	0	623	151	775	29	66	0	95	
	Bay Street/Kearny Street	0	96	0	14	110	0	0	0	0	0	567	121	688	0	0	0	0	
	Broadway/Sansome Street	0	367	100	18	485	0	0	0	0	114	449	0	562	0	175	38	213	,
	Broadway/Battery Street	0	0	0	0	0		286	96	397	0	308	161	469	34	117	0	151	1,017
	The Embarcadero/Beach Street/Grant Av	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/N. Point St./Kearny St.	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	_
	The Embarcadero/Bay Street	0	0	0	0	0		0	0	0	0	0	580	580	0	0	0	0	
	The Embarcadero/Chestnut St./Sansome	0	0	0	0	0		504	76	580	83	0	16	99	0	0	0	0	
	The Embarcadero/Lombard St./Battery	0	0	0	0	0		332	189	521	0	4	130	134	9	4	0	13	
	The Embarcadero/Green Street	0	0	0	0	0		331	15	346	0	0	7	7	0	0	0	0	
	The Embarcadero/Broadway	0	0	0	0	0		303	30	333	0	0	245	245	0	0	0	0	
	The Embarcadero/Washington Street	0	0	0	0	0		439	108	547	0	0	125	125	0	0	0	0	
	The Embarcadero/Mission Street	0	0	0	0	0		376	188	564	0	0	0	0	0	0	0	0	
	The Embarcadero/Harrison Street	0	0	146	0	146	0	311	248	559	196	0	74	270	0	0	0	0	
	The Embarcadero/Bryant Street	0	263	73	14	350	31	286	66	383	67	5	85	157	4	11	5	20	
	The Embarcadero/Brannan Street	9	173	286	0	467	2	261	109	373	66	0	43	109	0	0	0	0	
	Fremont Street/Folsom Street	0	0	108	28	136	342	38	0	380	75	311	9	395	0	15	269	284	1,195
	King Street/Third Street	0	50	418	137	604	0	0	0	0	1,037	385	29	1,450	152	238	56	446	2,501
	King Street/Fourth Street	0	24	35	23	82	64	193	161	418	81	1,364	0	1,445	41	191	56	288	2,234
	16th Street/Third Street	0	103	337	0	440	4	165	36	205	52	0	105	157	0	0	0	0	803
	Cesar Chavez Street/Third Street	0	133	307	8	448	2	168	59	229	96	138	130	364	10	136	8	154	
	Cesar Chavez Street/Illinois Street	0	29	27	3	59	9	17	11	37	27	77	45	149	3	115	7	125	370
	Lincoln Blvd/25th Av/El Camino del Mar	0	20	22	701	743	25	16	2	43	1	239	27	267	361	166	13	540	1,593
28	Lake Street/14th Avenue	0	2	430	10	442	3	0	0	3	16	175	6	197	68	151	14	233	875
29	Lake Street/15th Avenue	0	3	3	15	21	19	125	11	155	1	160	2	163	10	134	6	150	489
30	Jackson Street/Arguello Blvd	0	0	768	27	795	30	468	0	498	0	0	0	0	39	0	49	88	1,381
31	Pacific Avenue/Presidio Blvd	0	3	774	11	788	14	461	18	493	10	1	1	12	15	11	31	57	1,350
32	Lombard Street/Lyon Street	0	88	29	21	138	27	34	159	220	186	567	91	844	8	1,677	18	1,703	2,905
33	Lombard Street/Divisadero Street	0	186	733	39	958	198	276	81	554	191	2,551	177	2,920	22	3,795	559	4,376	8,808
34	Lombard Street/Fillmore Street	0	61	702	25	788	150	310	303	763	187	2,449	56	2,691	12	3,890	535	4,437	8,679
35	Bay Street/Laguna Street	0	752	0	625	1,377	0	0	0	0	0	250	255	504	256	565	0	821	2,702
36	Bay Street/Van Ness Avenue	0	301	0	709	1,010	0	0	0	0	0	878	67	945	290	293	0	583	2,537
37	Bay Street/Hyde Street	0	7	0	63	70	0	0	0	0	0	1,464	27	1,491	0	580	0	580	2,141
38	Alexander Ave/Bunker Road	0	247	448	0	695	0	249	58	306	108	0	362	470	0	0	0	0	1,471
39	Alexander Ave/Ft. Baker (East) Rd	0	2	343	209	553	14	245	75	334	0	0	11	11	49	0	84	132	1,030
40	Bush Street/Van Ness Avenue	0	0	3,011	117	3,128	230	2,019	0	2,249	65	773	88	926	0	0	0	0	6,303
41	Pine Street/Van Ness Avenue	0	96	3,004	0	3,100	0	2,113	146	2,259	0	0	0	0	86	689	137	912	6,272
42	Lombard Street/Van Ness Avenue	0	2,328	631	41	3,000	0	201	225	427	352	126	1,914	2,392	0	79	5	84	5,902
43	The Embarcadero/Howard Street	12	463	0	0	475	0	197	177	374	0	0	197	197	0	0	0	0	1,046
44	The Embarcadero/Folsom Street	17	331	147	0	495	0	386	20	406	330	0	156	486	0	0	0	0	1,387

Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

_							1			RSECTI	ON TURN	ING MOVI							
#	Intersection Name	U-turn	No Left	rthbound Thru	Right	Total	Left	Southbo Thru	ound Right	Total	Left	Eastbo Thru	und Right	Total	Left	Westbo Thru	und Right	Total	Total All Approache
								3.	4th Ame	rica's Cu	p Year 20	13 Volume	es						
1	Beach Street/Columbus Avenue		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	North Point Street/Columbus Ave		0	0	0	0	_	0	0	0	0	0	0	0	0	0	0	0	0
	North Point Street/Stockton Street		0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	Bay Street/Columbus Avenue		0	0	0	0		0	0	0	0	600	0	600	0	157	0	157	757
	Bay Street/Stockton Street		39	0	0	39		0	0	0	0	150	150	300	0	39	0	39	379
	Bay Street/Kearny Street		39	0	0	39	_	0	0	0	0	75	75	150	0	0	0	0	
	Broadway/Sansome Street		0	704	0	704	0	0	0	0	295	590	0	886	0	279	0	279	1,869
	Broadway/Battery Street		0	0	0	0		176	93	269	0	590	0	590	0	186	0	186	1,045
	The Embarcadero/Beach Street/Grant Av	0	0	0	0	0		0	0	0	0	0	0	090	0	0	0	100	0
	The Embarcadero/N. Point St./Kearny St.	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Bay Street	0	0	0	0	0		0	0	0	0	0	75	75	0	0	0	0	
	The Embarcadero/Chestnut St./Sansome	0	0	0	0	0		0	75	75	0	0	0	75	0	0	0	0	
	The Embarcadero/Cnestnut St./Sansonie	0	0	0	0	0		0	75	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Green Street	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Green Street The Embarcadero/Broadway	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Washington Street	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	
	The Embarcadero/Washington Street	0	0	0	0	0			0	0	0	0	0	0	0	0	0		
								0						·				0	
	The Embarcadero/Harrison Street	0	0	316	0	316	_	409	205	614	95	0	0	95	0	0	0	0	,
	The Embarcadero/Bryant Street	0	109	254	0	364	0	394	15	409	61	0	0	61	0	0	0	0	
	The Embarcadero/Brannan Street	0	138	323	0	461	0	384	10	394	41	0	0	41	0	0	0	0	
	Fremont Street/Folsom Street		0	0	0	0		0	0	622	0	102	0	102	0	0	0	0	
	King Street/Third Street		0	614	103	717	0	0	0	0	358	358	0	717	205	179	0	384	1,817
	King Street/Fourth Street		0	0	0	0		0	0	0	0	717	0	717	0	179	0	179	896
	16th Street/Third Street		0	717	0	717	0	179	26	205	102	0	0	102	0	0	0	0	, , ,
	Cesar Chavez Street/Third Street		0	622	0	622	0	156	24	179	95	50	0	145	0	50	0	50	996
	Cesar Chavez Street/Illinois Street		0	0	0	0		0	0	0	0	50	0	50	0	50	0	50	100
	Lincoln Blvd/25th Av/El Camino del Mar		0	0	560	560	0	0	0	0	0	0	0	0	140	0	0	140	700
	Lake Street/14th Avenue		0	560	0	560	0	0	0	0	0	0	0	0	0	0	0	0	
	Lake Street/15th Avenue		0	0	0	0		140	0	140	0	0	0	0	0	0	0	0	
	Jackson Street/Arguello Blvd		0	560	0	560	0	140	0	140	0	0	0	0	0	0	0	0	700
31	Pacific Avenue/Presidio Blvd		0	560	0	560	0	140	0	140	0	0	0	0	0	0	0	0	700
32	Lombard Street/Lyon Street		0	0	0	0	0	0	0	0	0	482	0	482	0	1,928	0	1,928	2,410
33	Lombard Street/Divisadero Street		0	565	0	565	121	141	45	307	179	1,975	0	2,154	0	2,301	486	2,787	5,813
	Lombard Street/Fillmore Street		0	565	0	565	121	141	45	307	179	1,917	0	2,096	0	2,742	486	3,228	6,196
	Bay Street/Laguna Street		615	0	615	1,230	0	0	0	0	0	0	154	154	154	213	0	367	1,750
	Bay Street/Van Ness Avenue		213	0	639	852	0	0	0	0	0	562	53	615	160	154	0	313	1,780
37	Bay Street/Hyde Street		0	0	0	0	0	0	0	0	0	1,201	0	1,201	0	313	0	313	1,514
	Alexander Ave/Bunker Road		64	255	0	319	0	28	22	50	2	0	16	18	0	0	0	0	387
39	Alexander Ave/Ft. Baker (East) Rd		0	13	244	257	0	25	144	169	0	0	13	13	13	0	76	88	527
40	Bush Street/Van Ness Avenue		0	2,443	0	2,443	230	1,694	0	1,923	0	0	0	0	0	0	0	0	4,366
	Pine Street/Van Ness Avenue		0	2,443	0	2,443	0	1,923	0	1,923	0	0	0	0	0	0	230	230	4,596
	Lombard Street/Van Ness Avenue		1,807	635	0	2,443	0	159	54	213	217	0	1,765	1,981	0	0	0	0	
	The Embarcadero/Howard Street	0	287	0	0	287	0	0	0	0	0	0	409	409	0	0	0	0	697
	The Embarcadero/Folsom Street	0	123	287	0	410	0	409	0	409	0	0	205	205	0	0	0	0	
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Table 3
San Francisco Northern Waterfront Model
Saturday Midday Peak Hour

	AC34 Traffic Reduction except Marin = 20%								-	ERSECT	ION TURN	ING MOV							
#	Intersection Name			orthbound				Southb				Eastbo				Westbo			Total All
		U-turn	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Approache
						ne Embai	rcadero N												
	Beach Street/Columbus Avenue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	North Point Street/Columbus Ave	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	North Point Street/Stockton Street	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Bay Street/Columbus Avenue	0	298	0	69	367	1	0	0	1	0	962	33	995	32	159	0	191	1,554
	Bay Street/Stockton Street	0	128	0	59	187	0	0	0	0	0	625	153	778	29	66	0	95	1,061
	Bay Street/Kearny Street	0	96	0	14	110	0	0	0	0	0	568	122	690	0	0	0	0	800
7	Broadway/Sansome Street	0	367	564	18	949	0	0	0	0	308	837	0	1,145	0	359	38	397	2,491
8	Broadway/Battery Street	0	0	0	0	0	15	402	157	574	0	696	161	857	34	240	0	274	1,705
	The Embarcadero/Beach Street/Grant Av	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	The Embarcadero/N. Point St./Kearny St.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	The Embarcadero/Bay Street	0	0	0	0	0	0	0	0	0	0	0	581	581	0	0	0	0	581
12	The Embarcadero/Chestnut St./Sansome	0	0	0	0	0	0	504	77	581	83	0	16	99	0	0	0	0	680
13	The Embarcadero/Lombard St./Battery	0	0	0	0	0	0	332	189	521	0	4	130	134	9	4	0	13	668
14	The Embarcadero/Green Street	0	0	0	0	0	0	331	15	346	0	0	7	7	0	0	0	0	353
115	The Embarcadero/Broadway	0	0	0	0	0	0	303	30	333	0	0	245	245	0	0	0	0	578
6/102	The Embarcadero/Washington Street	0	0	0	0	0	0	439	108	547	0	0	125	125	0	0	0	0	672
17	The Embarcadero/Mission Street	0	0	0	0	0	0	376	188	564	0	0	0	0	0	0	0	0	564
18	The Embarcadero/Harrison Street	0	0	354	0	354	0	581	383	963	259	0	74	333	0	0	0	0	1,650
19	The Embarcadero/Bryant Street	0	335	241	14	590	31	545	76	653	107	5	85	197	4	11	5	20	1,460
20	The Embarcadero/Brannan Street	9	264	498	0	771	2	514	116	632	93	0	43	136	0	0	0	0	1,539
21	Fremont Street/Folsom Street	0	0	108	28	136	752	38	0	790	75	379	9	463	0	15	269	284	1,672
22	King Street/Third Street	0	50	822	204	1,076	0	0	0	0	1,273	621	29	1,922	287	356	56	699	3,698
	King Street/Fourth Street	0	24	35	23	82	64	193	161	418	81	1,836	0	1,917	41	309	56	406	2,824
	16th Street/Third Street	0	103	809	0	912	4	283	52	340	120	0	105	225	0	0	0	0	1,477
	Cesar Chavez Street/Third Street	0	133	717	8	858	2	270	75	347	159	128	130	417	10	126	8	144	1,766
	Cesar Chavez Street/Illinois Street	0	29	27	3	59	9	17	11	37	27	67	45	139	3	105	7	115	350
	Lincoln Blvd/25th Av/El Camino del Mar	0	20	22	728	770	25	16	2	43	1	239	27	267	368	166	13	547	1.627
	B Lake Street/14th Avenue	0	2	457	10	469	3	0	0	3	16	175	6	197	68	151	14	233	902
	Lake Street/15th Avenue	0	3	3	15	21	19	132	11	162	1	160	2	163	10	134	6	150	496
	Jackson Street/Arguello Blvd	0	0	795	27	822	30	475	0	505	0	0	0	0	39	0	49	88	1,415
	Pacific Avenue/Presidio Blvd	0	3	801	11	815	14	468	18	500	10	1	1	12	15	11	31	57	1,384
	Lombard Street/Lyon Street	0	88	29	21	138	27	34	159	220	186	591	91	868	8	1,771	18	1,797	3,023
	Lombard Street/Divisadero Street	0	186	638	39	863	177	252	74	503	161	3.072	177	3.411	22	3.674	478	4.174	8.950
	Lombard Street/Fillmore Street	0	61	607	25	693	129	286	296	711	157	2.979	56	3,411	12	3,695	454	4,160	8,756
-	Bay Street/Laguna Street	0	649	007	522	1,171	0	0	0	0	0	250	229	479	230	607	0	837	2,487
	Bay Street/Van Ness Avenue	0	343	0	837	1,171	0	0	0	0	0	764	77	842	322	267	0	589	2,467
	Bay Street/Hyde Street	0	7	0	63	70	0	0	0	0	0	1.478	27	1.505	322	586	0	589	2,161
	Bay Street/Hyde Street Blay Street/Hyde Street					766	0							,		0 586	0		
		0	246	520 326	298	626	14	249 241	57 151	306 406	108	0	362 13	470 13	0 51	0	122	0 172	1,542 1,217
	Alexander Ave/Ft. Baker (East) Rd Bush Street/Van Ness Avenue	0	0	2.958	117	3,075	382			2.757	65	773	88	926		0	122	1/2	6.758
				,				2,376	0	, -					0			•	-,
	Pine Street/Van Ness Avenue	0	96	2,951	0	3,047	0	2,621	146	2,767	0	0	0	0	86	689	289	1,064	6,878
	Lombard Street/Van Ness Avenue	0	2,147	758	41	2,946	0	233	236	469	395	126	2,391	2,911	0	79	5	84	6,411
	The Embarcadero/Howard Street	12	653	0	0	665	0	197	177	374	0	0	467	467	0	0	0	0	1,505
44	The Embarcadero/Folsom Street	17	412	337	0	766	0	656	20	676	330	0	291	621	0	0	0	0	2,062
							1												

Intersection Lane Geometries



SOURCE: Adavant Consulting/LCW Consulting

Case No. 2010.0493E: AC34 / Cruise Terminal and Northeast Wharf Plaza (210317)

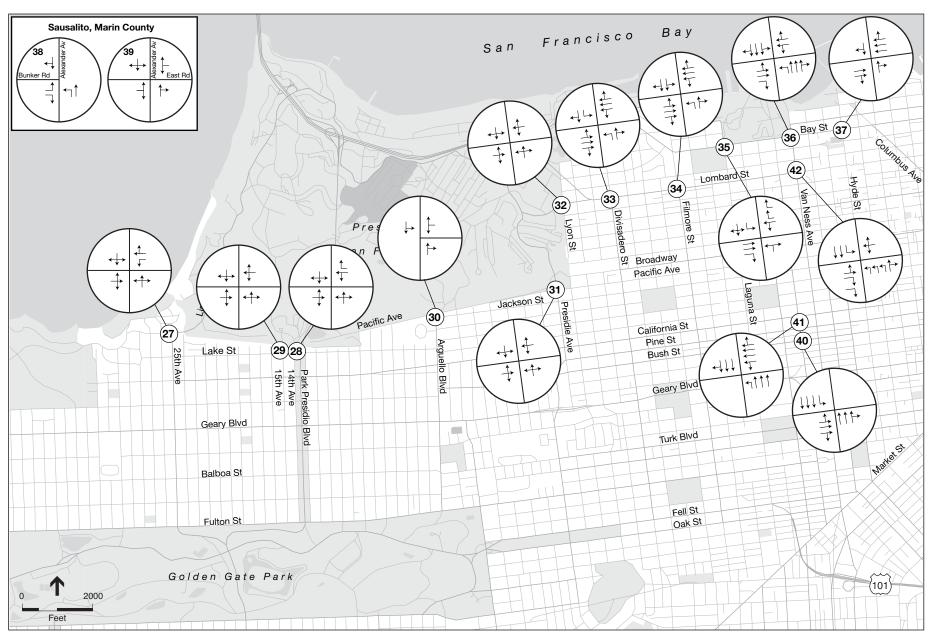
Figure TR-1
Existing Study Intersection Lane ConfigurationsPiers 27-29 Vicinity



SOURCE: Adavant Consulting/LCW Consulting

Case No. 2010.0493E: AC34 / Cruise Terminal and Northeast Wharf Plaza (210317)

Figure TR-2
Existing Study Intersection Lane Configurations—
South of Bay Bridge



SOURCE: Adavant Consulting/LCW Consulting

Case No. 2010.0493E: AC34 / Cruise Terminal and Northeast Wharf Plaza (210317)

Figure TR-3
Existing Study Intersection Lane Configurations
Northwest San Francisco

SECTION 4

Intersection Level of Service Calculations

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Existing Conditions

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Existing Conditions

Weekday AM Peak Hour

XXXXXX

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative) ************************ Intersection #1 Beach St/Columbus Ave ************************* Average Delay (sec/veh): 1.4 Worst Case Level Of Service: A[9.8] ************************** Street Name: Columbus Ave Beach St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Rights: Include Include Include Include Lanes: 0 0 1! 0 0 0 0 0 0 0 0 1 1 0 0 0 -----| Volume Module: Base Vol: 30 0 4 0 0 0 0 127 36 6 65 0 Initial Bse: 30 0 4 0 0 0 127 36 6 65 0 PHF Volume: 31 0 4 0 0 0 0 132 38 6 68 0 0 0 0 -----| Critical Gap Module: FollowUpTim: 3.5 4.0 3.3 xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxx xxxxx _____| Capacity Module: Potent Cap.: 761 672 980 xxxx xxxx xxxxx xxxx xxxx xxxx 1420 xxxx xxxxx Move Cap.: 759 669 980 xxxx xxxx xxxx xxxx xxxx xxxx 1420 xxxx xxxx -----| Level Of Service Module: LOS by Move: * * * * * * * * A * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

SharedOueue:xxxxx 0.1 xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 0.0 xxxx xxxxx

Shared LOS: * A * * * * * * A * *

ApproachDel: 9.8 xxxxx xxxxx ApproachLOS: A * *

Note: Oueue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #2 North Point St/Columbus Ave ************************* 11.9 Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: Street Name: Columbus Ave North Point St Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-RControl: Permitted Permitted Permitted Rights: Include Include Include Include Rights: Min. Green: 18 18 18 18 18 18 63 63 63 63 63 63 -----| Volume Module: Base Vol: 24 66 10 13 50 15 20 204 36 32 115 35 Initial Bse: 24 66 10 13 50 15 20 204 36 32 115 3.5 PHF Volume: 27 74 11 15 56 17 22 229 40 36 129 Reduct Vol: 0 0 0 0 0 0 Reduced Vol: 27 74 11 15 56 0 0 0 0 0 0 Ω 17 22 229 40 FinalVolume: 27 74 11 15 56 17 22 229 40 36 129 39 ------| Saturation Flow Module: Adjustment: 0.82 0.82 0.82 0.84 0.84 0.84 0.95 0.95 0.95 0.80 0.80 0.80 Lanes: 0.48 1.32 0.20 0.33 1.29 0.38 0.08 0.78 0.14 0.35 1.27 0.38 Final Sat.: 752 2068 313 531 2043 613 139 1421 251 536 1927 586 -----|----| Capacity Analysis Module: Vol/Sat: 0.04 0.04 0.04 0.03 0.03 0.03 0.16 0.16 0.16 0.07 0.07 Crit Moves: **** *** Volume/Cap: 0.18 0.18 0.18 0.14 0.14 0.14 0.23 0.23 0.23 0.10 0.10 0.10 Uniform Del: 29.9 29.9 29.9 29.6 29.6 29.6 4.8 4.8 4.8 4.3 4.3 4.3 Delay/Veh: 30.0 30.0 30.0 29.7 29.7 29.7 4.9 4.9 4.4 4.4 4.4 AdjDel/Veh: 30.0 30.0 30.0 29.7 29.7 29.7 4.9 4.9 4.4 4.4 4.4 LOS by Move: C C C C C A A A A A HCM2kAvqQ: 1 1 1 1 1 1 3 3 3 1 1 1 ******************* Note: Queue reported is the number of cars per lane.

Existing Weekday AM

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ********************* Intersection #3 North Point St/Stockton St Loss Time (sec): 8 Average Delay (sec/veh): 11.7 Optimal Cycle: 90 Level Of Service: B ******************* Street Name: Stockton St North Point St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____| Control: Permitted Permitted Permitted Permitted Include Include Include Include Rights: Min. Green: 25 25 25 25 25 25 57 57 57 57 57 -----| Volume Module: Base Vol: 30 34 33 5 25 13 23 216 64 6 95 8 Initial Bse: 30 34 33 5 25 13 23 216 64 6 95 8 PHF Volume: 33 38 37 6 28 14 26 240 71 7 106 9
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 33 38 37 6 28 14 26 240 71 7 106 9 FinalVolume: 33 38 37 6 28 14 26 240 71 7 106 9 ------| Saturation Flow Module: Adjustment: 0.87 0.87 0.87 0.94 0.94 0.94 0.95 0.95 0.95 0.88 0.88 Lanes: 0.31 0.35 0.34 0.12 0.58 0.30 0.08 0.71 0.21 0.11 1.74 0.15 Final Sat.: 511 579 562 207 1035 538 137 1285 381 185 2928 247 Capacity Analysis Module: Vol/Sat: 0.07 0.07 0.07 0.03 0.03 0.03 0.19 0.19 0.19 0.04 0.04 0.04 Crit Moves: **** Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.63 0.63 0.63 0.63 0.63 0.63 Volume/Cap: 0.23 0.23 0.23 0.10 0.10 0.10 0.29 0.29 0.29 0.06 0.06 0.06 Uniform Del: 25.1 25.1 25.1 24.1 24.1 24.1 7.4 7.4 6.3 6.3 6.3 IncremntDel: 0.3 0.3 0.3 0.1 0.1 0.1 0.1 0.1 0.0 0.0 0.0 Delay/Veh: 25.4 25.4 25.4 24.2 24.2 24.2 7.6 7.6 7.6 6.3 6.3 6.3 AdjDel/Veh: 25.4 25.4 25.4 24.2 24.2 24.2 7.6 7.6 7.6 6.3 6.3 LOS by Move: C C C C C A A A A A HCM2kAvqQ: 2 2 2 1 1 1 4 4 4 1 1 ***** Note: Queue reported is the number of cars per lane.

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*****	2000	HCM C	perati	ons Me	ethod	Computa (Base	Volume	e Alte	ernativ	re)	****	****
ntersection												

ycle (sec): oss Time (se optimal Cycle		S	0						o.(X):			575
oss Time (se	ec):		9			Averag	re Dela	ay (se	ec/veh)	:	3	
)ptimal Cycle	∋: 		9			Level	Of Sei	rvice	: 			C
	****					. * * * * * *	****	****			****	****
treet Name:	No		Columb			und	F	et B	ьау ound	7 St ™	act B	ound
			– R						– R			
	l			1		1	1			1		
ontrol:	Pı	rotect	ed	Pı	rotect	ed	· I	Permi	tted ude	' I	Permi	
ights:		Inclu	de		Inclu	ıde		Incl	ıde		Incl	
lin. Green:		31	31	19		19	47	47	47	50	50	5
+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.
anes:			1 0			1 0			0 1			
olume Module			6.5		100				0.75	0.5	010	
Base Vol:	112		65	1		6		1373			313	
rowth Adj:		1.00	1.00	1.00	1.00	1.00		1.00	1.00 375	25	1.00	1.0
nitial Bse:		1.00	1.00		109	6 1.00		1.00			313	
ser Adj: HF Adj:		0.97	0.97		0.97	0.97		0.97			0.97	
HF Volume:	115	75	67	1		6		1415	387	26	323	2
educt Vol:	0		0		0	0		1413			0	
educed Vol:			67	1		6		1415		26		
	1.00		1.00		1.00	1.00		1.00			1.00	
ILF Adj:		1.00	1.00		1.00	1.00		1.00			1.00	
inalVolume:			67		112	6		1415			323	2
aturation Fl												
at/Lane:					1900	1900		1900			1900	
djustment:				0.94		0.94		0.91			0.67	
anes:			0.47		1.88			1.99			1.74	
inal Sat.:			831		3365		15				2227	
apacity Anal												
ol/Sat:				0.03	0.03	0.03	0.41	0.41	0.24	0.14	0.14	0.1
rit Moves:		****		****				***				
reen/Cycle:	0.14	0.28	0.28	0.17	0.32	0.32	0.46	0.46	0.46	0.46	0.46	0.4
olume/Cap:			0.28	0.19	0.10	0.10	0.90	0.90	0.52	0.32	0.32	0.3
niform Del:			30.4	38.4	25.9	25.9	27.2	27.2	21.0	18.7	18.7	18.
ncremntDel:	0.3	0.3	0.3	0.2	0.0	0.0		7.5	0.7		0.2	0.
nitQueuDel:			0.0	0.0		0.0		0.0			0.0	0.
elay Adj:			1.00		1.00	1.00		1.00			1.00	
elay/Veh:			30.7		25.9	25.9		34.7			18.8	18.
ser DelAdj:			1.00		1.00	1.00		1.00			1.00	1.0
djDel/Veh:			30.7		25.9	25.9		34.7			18.8	18.
OS by Move:			C		C	C	С	C	C	В		
CM2kAvgQ:			4	2		1	27			4		

Intersection #6 Bay St/Kearny St

Reduct Vol: 0 0 0 0 0 0 Reduced Vol: 38 2 12 1 12

Volume Module:

Saturation Flow Module:

Capacity Analysis Module:

Crit Moves: ****

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.534

Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 36 Level Of Service:

 Street Name:
 Kearny St
 Bay St

 Approach:
 North Bound
 South Bound
 East Bound
 West Bound

 Movement:
 L - T - R
 L - T - R
 L - T - R
 L - T - R

Control: Permitted Permitted Permitted Rights: Include Include Include Include

Min. Green: 0 0 0 0 0 0 0 0 0 0 0

Base Vol: 37 2 12 1 12 14 9 1265 176 10 446 2

Initial Bse: 37 2 12 1 12 14 9 1265 176 10 446 2

PHF Volume: 38 2 12 1 12 14 9 1304 181 10 460 2

FinalVolume: 38 2 12 1 12 14 9 1304 181 10 460 2

-----|

Adjustment: 0.73 0.73 0.73 0.92 0.92 0.92 0.89 0.89 0.89 0.87 0.87

Lanes: 0.73 0.04 0.23 0.04 0.44 0.52 0.01 1.75 0.24 0.04 1.95 0.01

Final Sat.: 1010 55 328 65 775 904 21 2947 410 72 3227 14

_____|

Green/Cycle: 0.07 0.07 0.07 0.07 0.07 0.07 0.83 0.83 0.83 0.83 0.83 0.83

Volume/Cap: 0.53 0.53 0.53 0.23 0.23 0.23 0.53 0.53 0.53 0.17 0.17

Uniform Del: 40.4 40.4 40.4 39.5 39.5 39.5 2.4 2.4 2.4 1.5 1.5 1.5

Delay/Veh: 46.0 46.0 46.0 40.4 40.4 40.4 2.6 2.6 2.6 1.6 1.6 1.6

AdjDel/Veh: 46.0 46.0 46.0 40.4 40.4 40.4 2.6 2.6 2.6 1.6 1.6 1.6

LOS by Move: D D D D D A A A A A

HCM2kAvqQ: 2 2 2 1 1 1 7 7 7 1 1

IncremntDel: 5.6 5.6 5.6 0.9 0.9 0.9 0.2 0.2 0.0 0.0

0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 0 1 0 1

0

0 0 0

14 9 1304 181

4.0

0 0

10 460

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ****************** Intersection #5 Bay St/Stockton St ****************** 10.0 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: ************************ Street Name: Stockton St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L-T-R L-T-R L-T-R------| Control: Permitted Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 20 20 20 20 20 20 63 63 63 63 63 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 0 1 0 1 -----| Volume Module: Base Vol: 35 20 101 33 16 48 32 1311 18 26 425 51 Initial Bse: 35 20 101 33 16 48 32 1311 18 26 425 51 PHF Volume: 39 22 112 37 18 53 36 1457 20 29 472 57 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 39 22 112 37 18 53 36 1457 20 29 472 FinalVolume: 39 22 112 37 18 53 36 1457 20 29 472 57 -----| Saturation Flow Module: Adjustment: 0.84 0.84 0.84 0.82 0.82 0.82 0.88 0.88 0.88 0.78 0.78 0.78 Lanes: 0.22 0.13 0.65 0.34 0.16 0.50 0.05 1.93 0.02 0.10 1.70 0.20 Final Sat.: 356 203 1028 527 256 767 79 3227 44 153 2505 301 _____|__| Capacity Analysis Module: Vol/Sat: 0.11 0.11 0.11 0.07 0.07 0.07 0.45 0.45 0.45 0.19 0.19 **** Crit Moves: **** Volume/Cap: 0.49 0.49 0.49 0.31 0.31 0.31 0.64 0.64 0.64 0.27 0.27 0.27 Uniform Del: 30.6 30.6 30.6 29.3 29.3 29.3 7.4 7.4 7.4 5.0 5.0 5.0 IncremntDel: 1.1 1.1 1.1 0.5 0.5 0.5 0.6 0.6 0.6 0.1 0.1 0.1 Delay/Veh: 31.6 31.6 31.6 29.8 29.8 29.8 8.0 8.0 5.1 5.1 5.1 AdjDel/Veh: 31.6 31.6 31.6 29.8 29.8 29.8 8.0 8.0 5.1 5.1 5.1 LOS by Move: C C C C C A A A A A HCM2kAvqQ: 5 5 5 2 2 2 11 11 11 3 3 3 ****************** Note: Queue reported is the number of cars per lane.

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Note: Queue reported is the number of cars per lane.

SAN FRANCISCO

Tue May 31, 2011 09:22:39

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Existing Weekday AM Tue May 31, 2011 09:22:39

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ***************** Intersection #7 Broadway St/Sansome St ***************** 19.4 Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 80 Level Of Service: ************************ Street Name: Sansome St Broadway St East Bound West Bound Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____| Control: Split Phase Split Phase Permitted Permitted Rights: Include Include Include Include Min. Green: 27 27 27 0 0 0 44 44 0 0 44 44 0 1 0 1 0 0 0 0 0 0 0 1 1 0 0 0 0 1 1 0 -----| Volume Module: Base Vol: 115 226 57 0 0 0 228 1021 0 0 391 131 Initial Bse: 115 226 57 0 0 0 228 1021 0 0 391 131 FinalVolume: 117 231 58 0 0 0 233 1042 0 0 399 134 ------| Saturation Flow Module: Adjustment: 0.89 0.89 0.89 1.00 1.00 1.00 0.68 0.68 1.00 1.00 0.91 0.91 Lanes: 0.58 1.13 0.29 0.00 0.00 0.00 0.37 1.63 0.00 0.00 1.50 0.50 Final Sat.: 977 1921 484 0 0 0 474 2125 0 0 2601 872 -----| Capacity Analysis Module: Vol/Sat: 0.12 0.12 0.12 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.15 0.15 Crit Moves: **** **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Volume/Cap: 0.36 0.36 0.36 0.00 0.00 0.00 0.89 0.89 0.00 0.00 0.28 0.28 Uniform Del: 20.0 20.0 20.0 0.0 0.0 15.9 15.9 0.0 0.0 9.6 9.6 IncremntDel: 0.2 0.2 0.2 0.0 0.0 0.0 7.4 7.4 0.0 0.0 0.1 0.1 Delay/Veh: 20.1 20.1 20.1 0.0 0.0 23.3 23.3 0.0 0.0 9.6 9.6 AdjDel/Veh: 20.1 20.1 20.1 0.0 0.0 0.0 23.3 23.3 0.0 0.0 9.6 9.6 LOS by Move: C C C A A A C C A A A A HCM2kAvqQ: 4 4 4 0 0 0 19 19 0 0 4 **************************

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Note: Queue reported is the number of cars per lane.

	2000					Computa		-				
*****									ernativ *****		****	*****
Intersection	#8 Bi	roadwa	y St/E	atter	/ St							
Cvcle (sec):		0	0						o.(X):			617
Loss Time (se	ec):		9						ec/veh)			8.7
Optimal Cycle		8	0			Level		-				В
******						****	****	****	*****	****	****	*****
Street Name:			Batte	ry St					Broadw	ay St		
Approach:	Noi	rth Bo	und	Soi	ıth Bo	ound	Εá	ast Bo	ound	We	est B	ound
Movement:			- R			- R			- R			- R
Control:	Sp.		ase	Spi	lit Ph	nase]	Permit	ted	I	Permi	tted
Rights:		Inclu			THET	ide		THET	lue			
Min. Green:		0				37		34	34		34	0
Y+R:			4.0		4.0	4.0			4.0		4.0 1 1	4.0
Lanes:												
Volume Module	'											
Base Vol:	0	0	0	59	601	83	0	614	464	2.2	437	0
Growth Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		0	0	59	601	83	0	614	464	22	437	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	0	0	0	61	620	86	0	633	478	23	451	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		0	0	61	620	86	0	633	478	23	451	0
PCE Adj:	1.00		1.00		1.00	1.00		1.00			1.00	1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			0		620	86		633	478 I		451	0
Saturation Fl	'											
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			1.00		0.92	0.92		0.89	0.89		0.81	1.00
Lanes:		0.00	0.00		1.62	0.22		1.14	0.86		1.90	0.00
Final Sat.:	0	0	0	278	2836	392	0	1925	1454	148	2942	0
Capacity Anal	-											
Vol/Sat:	0.00	0.00	0.00	0.22	0.22	0.22	0.00	0.33	0.33	0.15	0.15	0.00
Crit Moves:	0 00	0 00	0 00	0.46	****	0 46	0 00	****	0 40	0 10	0 40	0 00
Green/Cycle:			0.00		0.46	0.46		0.43	0.43		0.43	0.00
Volume/Cap: Uniform Del:		0.00	0.00		0.47	0.47		0.77	0.77 19.7		0.36 15.6	0.00
IncremntDel:	0.0	0.0	0.0	0.2		0.2	0.0	2.7	2.7		0.2	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Delay Adj:	0.00		0.00		1.00	1.00		1.00	1.00		1.00	0.00
Delay/Veh:	0.0	0.0	0.0		15.0	15.0		22.4	22.4		15.8	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	15.0	15.0	15.0	0.0	22.4	22.4	15.8	15.8	0.0
LOS by Move:			A	В	_	В	A	-		В	_	A
HCM2kAvgQ:	0	0	0	7	7	7	0		12	4	4	0
*****	****	*****	*****	****	*****	*****	lane	****	*****	****	****	*****

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ****************** Intersection #9 Embarcadero/ Beach St / Grant St **************************** 20.9 Loss Time (sec): 4 Average Delay (sec/veh):
Optimal Cycle: 60 Level Of Service: ****************** Street Name: Embarcadero Beach St (EB)/Grant St (WB)
Approach: North Bound South Bound East Bound West Bound Approach: L - T - R L - T - R L - T - R Movement: _____| Control: Split Phase Split Phase Split Phase Split Phase Include Include Include Include Rights: Min. Green: 15 15 15 0 11 11 0 0 11 19 19 19 0 1 0 1 0 0 0 1 0 0 0 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 131 87 22 0 16 0 0 0 156 6 8 16 Initial Bse: 131 87 22 0 16 0 0 156 6 8 16 PHF Volume: 151 100 25 0 18 0 0 0 179 7 9 18 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 18 0 0 0 179 Reduced Vol: 151 100 25 7 9 FinalVolume: 151 100 25 0 18 0 0 0 179 7 9 18 Saturation Flow Module: Adjustment: 0.91 0.91 0.91 1.00 1.00 1.00 1.00 0.87 0.92 0.92 Final Sat.: 1732 1382 350 0 1900 0 0 1644 349 465 931 _____| Capacity Analysis Module: Green/Cycle: 0.25 0.25 0.25 0.00 0.18 0.00 0.00 0.00 0.18 0.32 0.32

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Note: Queue reported is the number of cars per lane.

Uniform Del: 18.5 18.2 18.2 0.0 20.2 0.0 0.0 0.0 22.5 14.3 14.3 14.3

IncremntDel: 0.3 0.2 0.2 0.0 0.1 0.0 0.0 0.0 3.2 0.0 0.0 0.0

Delay Adj: 1.00 1.00 1.00 0.00 1.00 0.00 0.00 1.00 1.00 1.00 1.00

Delay/Veh: 18.7 18.4 18.4 0.0 20.3 0.0 0.0 0.0 25.7 14.3 14.3 14.3

AdjDel/Veh: 18.7 18.4 18.4 0.0 20.3 0.0 0.0 0.0 25.7 14.3 14.3 14.3

LOS by Move: B B B A C A A A C B B B

HCM2kAvqQ: 3 2 2 0 0 0 0 0 4 0 0 0

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #10 Embarcadero/ North Point St / Kearny St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.236 Loss Time (sec): 14 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: ____ Street Name: Embarcadero North Point St (EB) / Kearny St (W Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Permitted Split Phase Split Phase Rights: Include Include Include Include Rights: Min. Green: 15 36 0 0 17 17 20 20 20 20 20 20 1 0 2 0 0 0 0 1 1 0 0 0 1! 0 1 0 1 0 1 -----| Volume Module: Base Vol: 131 232 0 0 157 19 2 229 29 1 5 17 Initial Bse: 131 232 0 0 157 19 2 229 29 1 5 17 PHF Volume: 131 232 0 0 157 19 2 229 29 1 5 17 Reduct Vol: 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 131 232 0 0 157 19 2 229 29 1 5 17 FinalVolume: 131 232 0 0 157 19 2 229 29 1 5 17 -----| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 1.00 0.93 0.93 0.98 0.98 0.98 0.99 0.99 0.85 Lanes: 1.00 2.00 0.00 0.00 1.78 0.22 0.01 0.93 1.06 0.17 0.83 1.00 Final Sat.: 1805 3610 0 0 3169 383 15 1742 1978 314 1571 1615 _____| Capacity Analysis Module: Vol/Sat: 0.07 0.06 0.00 0.00 0.05 0.05 0.13 0.13 0.01 0.00 0.00 0.01 Crit Moves: **** **** Green/Cycle: 0.21 0.40 0.00 0.00 0.19 0.19 0.22 0.22 0.22 0.22 0.22 0.22 Volume/Cap: 0.34 0.16 0.00 0.00 0.26 0.26 0.59 0.59 0.07 0.01 0.01 0.05 Uniform Del: 30.2 17.3 0.0 0.0 31.1 31.1 31.3 31.3 27.6 27.3 27.3 27.5 IncremntDel: 0.5 0.1 0.0 0.0 0.2 0.2 2.1 2.1 0.0 0.0 0.1 Delay/Veh: 30.7 17.4 0.0 0.0 31.4 31.4 33.5 33.5 27.6 27.3 27.3 27.6 AdjDel/Veh: 30.7 17.4 0.0 0.0 31.4 31.4 33.5 33.5 27.6 27.3 27.3 27.6 LOS by Move: C B A A C C C C C C C HCM2kAvqQ: 3 2 0 0 2 2 6 6 1 0 0 0 ***************************** Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ***************** Intersection #11 Embarcadero / Bay St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.302 18.9 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 81 Level Of Service: ******************* Street Name: Embarcadero Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____| Control: Protected Protected Split Phase Split Phase Include Include Ovl Include Rights: Min. Green: 42 53 0 0 25 25 7 0 42 0 0 2 0 2 0 0 0 0 1 1 0 1 0 0 0 2 0 0 0 0 0 -----| Volume Module: Base Vol: 463 339 0 0 376 26 21 0 1259 0 0 Initial Bse: 463 339 0 0 376 26 21 0 1259 0 0 PHF Volume: 503 368 0 0 409 28 23 0 1368 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 Reduced Vol: 503 368 0 0 409 28 23 0 1368 0 0 FinalVolume: 503 368 0 0 409 28 23 0 1368 0 0 _____ Saturation Flow Module: Adjustment: 0.92 0.95 1.00 1.00 0.94 0.94 0.95 1.00 0.75 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 0.00 1.87 0.13 1.00 0.00 2.00 0.00 0.00 0.00 Final Sat.: 3502 3610 0 0 3343 231 1805 0 2842 0 0 _____| Capacity Analysis Module: Vol/Sat: 0.14 0.10 0.00 0.00 0.12 0.12 0.01 0.00 0.48 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.47 0.84 0.00 0.00 0.38 0.38 0.08 0.00 0.54 0.00 0.00 0.00 Volume/Cap: 0.31 0.12 0.00 0.00 0.32 0.32 0.16 0.00 0.88 0.00 0.00 0.00 Uniform Del: 14.9 1.2 0.0 0.0 19.8 19.8 38.8 0.0 18.0 0.0 0.0 0.0 IncremntDel: 0.1 0.0 0.0 0.0 0.1 0.1 0.5 0.0 6.4 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 15.1 1.2 0.0 0.0 20.0 20.0 39.3 0.0 24.5 0.0 0.0 0.0 AdjDel/Veh: 15.1 1.2 0.0 0.0 20.0 20.0 39.3 0.0 24.5 0.0 0.0 0.0 LOS by Move: B A A A B B D A C A A A HCM2kAvqQ: 4 1 0 0 4 4 1 0 20 0 0 ****************** Note: Queue reported is the number of cars per lane.

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	2000					Computa (Base			t ernativ	re)		
******	****	*****	****	****	*****	*****	****	****			****	*****
Intersection *****									*****	****	****	*****
Cycle (sec):		9	0			Critic	al Vol	l./Cap	o.(X):		0.	569
Loss Time (se	ec):	1	3			Averag	ge Dela	ay (s	ec/veh)	:	1	4.2
Optimal Cycle			9			Level						В
******	****				*****	*****						
Street Name:			Embaro			,			St (EB)			e (WB)
Approach:		rth Bo				ound		ast Bo			est B	
Movement:		- T			- T			- T	– K l			- R
Control:		rotect			rotect				nase	'	lit P	
Rights:		Inclu			Inclu		~		ıde	-1-	Incl	
Min. Green:	10	40	0	10	40	0	16	16	16	7	7	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lanes:	1 (0 0	1 (-	1 0	0 2		1 0	0 (0 0
Volume Module		600	0	^	1600	10	120	111	1.0	0	^	^
Base Vol: Growth Adj:	94	692 1.00	1.00		1623	13		111	10	1 00	1.00	1.00
Initial Bse:	94	692	0		1623	13	132	111	1.00	0	1.00	1.00
User Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.92	0.92		0.92	0.92		0.92	0.92		0.92	0.92
PHF Volume:	102	752	0.52		1764	14	143	121	11	0.52	0.52	0.52
Reduct Vol:	0	0	0	0	0	0	143	0	0	0	0	0
Reduced Vol:	102	752	0		1764	14	143	121	11	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
FinalVolume:	102	752	0	0	1764	14	143	121	11	0	0	0
Saturation Fl				1000	1000	1000	1000	1000	1000	1000		
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment: Lanes:		2.00	1.00		2.98	0.91		0.87	0.87		0.00	1.00
Final Sat.:		3610	0.00		5141	41		1518	137	0.00	0.00	0.00
Capacity Anal	ysis	Modul	e:									
Vol/Sat:		0.21	0.00	0.00	0.34	0.34		0.08	0.08	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.00		0.57	0.57		0.18	0.18		0.00	0.00
Volume/Cap:		0.31	0.00	0.00		0.61		0.45	0.45		0.00	0.00
Uniform Del:		5.9	0.0		12.9	12.9		33.0	33.0	0.0	0.0	0.0
IncremntDel:	2.2	0.1	0.0	0.0	0.4	0.4	0.7	0.5	0.5	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj: Delay/Veh:	39.9	1.00	0.00	0.00	13.2	1.00		1.00	1.00	0.00	0.00	0.00
Jelay/ven: Jser DelAdj:			1.00	1.00		13.2		1.00	1.00		1.00	1.00
AdjDel/Veh:		6.0	0.0		13.2	13.2		33.6	33.6	0.0	0.0	0.0
LOS by Move:		0.0 A	0.0 A	0.0 A	13.2	13.2 B	24.0 C	33.0 C	33.0 C	0.0 A	0.0 A	0.0 A
HCM2kAvqO:	3	4	0	0	12	12	4	4	4	0	0	0
							****				-	-

Existing Weekday AM

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #13 Embarcadero / Lombard St / Battery St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.506 Loss Time (sec): 11 Average Delay (sec/veh): 21.7 Optimal Cycle: 82 Level Of Service: C ******************* Street Name: Embarcadero Lombard St (EB) / Battery (WB)
Approach: North Bound South Bound East Bound West Bound Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ______| Control: Protected Protected Split Phase Split Phase Include Include Include Include Rights: Min. Green: 9 35 35 9 35 35 21 21 21 6 6 6 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 66 773 77 21 1042 573 9 12 175 2 4 4 Initial Bse: 66 773 77 21 1042 573 9 12 175 2 4 4 FinalVolume: 72 840 84 23 1133 623 10 13 190 2 4 4 ------| Saturation Flow Module: Adjustment: 0.95 0.94 0.94 0.95 0.95 0.85 0.98 0.98 0.85 0.94 0.94 0.94 Lanes: 1.00 1.82 0.18 1.00 2.00 1.00 0.43 0.57 1.00 0.20 0.40 0.40 Final Sat.: 1805 3237 322 1805 3610 1615 797 1063 1615 356 712 712 Capacity Analysis Module: Vol/Sat: 0.04 0.26 0.26 0.01 0.31 0.39 0.01 0.01 0.12 0.01 0.01 0.01 Green/Cycle: 0.10 0.46 0.46 0.12 0.48 0.48 0.23 0.23 0.23 0.07 0.07 0.07 Volume/Cap: 0.40 0.56 0.56 0.11 0.66 0.81 0.05 0.05 0.50 0.09 0.09 0.09 Uniform Del: 38.0 17.7 17.7 35.4 17.9 20.0 26.8 26.8 30.0 39.4 39.4 39.4 IncremntDel: 1.4 0.5 0.5 0.2 0.9 6.3 0.1 0.1 1.1 0.3 0.3 0.3 Delay/Veh: 39.4 18.2 18.2 35.7 18.8 26.3 26.8 26.8 31.1 39.8 39.8 39.8 AdjDel/Veh: 39.4 18.2 18.2 35.7 18.8 26.3 26.8 26.8 31.1 39.8 39.8 39.8 LOS by Move: D B B D B C C C D D D HCM2kAvqQ: 2 10 10 1 12 15 0 0 5 0 0 ******************* Note: Queue reported is the number of cars per lane.

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*****		HCM C	evel O perati *****	ons Me	ethod	(Base	Volume	e Ālte	rnativ		****	****
Intersection								*****	*****	*****	****	****
Cycle (sec):		9	0			Critic	al Vol	l./Cap	(X):		0.3	358
Loss Time (se	ec):	1	. 4			Averag	re Dela	ay (se	c/veh)	:	1	9.6
Optimal Cycle		8	19			Level						В
*****	****					*****	****	*****			****	****
Street Name:			rcader			,	-			en St		,
Approach:			und			und		ast Bo			est B	ouna - R
Movement:		- T				- R		- T		_	_	
Control:	'	rotect				ed			ase	' '	lit Pl	
Rights:		Inclu			Inclu		op.			op.		
Min. Green:	8		0	7		0	24		24		24	
Y+R:	4.0	4.0	4.0		4.0	4.0			4.0		4.0	4.
Lanes:	1 (2	0 0	1 () 1	1 0	0 (1!	0 0	0 1	. 0	0 0
Volume Module	∋:											
Base Vol:		911	0		989	62	6		21	0	0	
Growth Adj:		1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.0
Initial Bse:		911	0	7	989	62	6	0	21	0	0	
Jser Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.0
PHF Adj:		0.90	0.90		0.90	0.90		0.90	0.90	0.90		0.9
PHF Volume:		1012	0	-	1099	69	7	0	23	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:		1012	0		1099	69	7	0	23	0	1 00	1 0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.0
MLF Adj: FinalVolume:		1.00	1.00		1099	69		1.00	23	1.00	1.00	
			-	1		1	1			-		
Saturation Fi	'			'		'	'			' '		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Adjustment:	0.95	0.95	1.00	0.95	0.94	0.94	0.89	1.00	0.89	1.00	1.00	1.0
Lanes:	1.00	2.00	0.00	1.00	1.88	0.12	0.22	0.00	0.78	0.00	1.00	0.0
Final Sat.:	1805	3610	0	1805	3366	211	374	0	1308	0	1900	
Capacity Ana												
Vol/Sat: Crit Moves:	0.07	0.28	0.00	****	0.33	0.33	0.02 ****	0.00	0.02	0.00	0.00	0.0
Green/Cycle:	0 00		0.00	0.08	0 40	0.48		0.00	0.27	0.00	0 00	0.0
Jolume/Cap:		0.56	0.00		0.68	0.68		0.00	0.07	0.00		0.0
Jniform Del:			0.0		17.8	17.8	24.6	0.0	24.6	0.0	0.0	0.0
IncremntDel:		0.4	0.0	0.2	1.1	1.1	0.1	0.0	0.1	0.0	0.0	0.
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Delay Adj:		1.00	0.00	1.00		1.00		0.00	1.00	0.00		0.0
Delay/Veh:		16.0	0.0	38.6	18.9	18.9	24.7	0.0	24.7	0.0	0.0	0.
Jser DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
AdjDel/Veh:	52.7	16.0	0.0	38.6	18.9	18.9	24.7	0.0	24.7	0.0	0.0	0.
LOS by Move:		В	A		В	В	C	A	C	A	A	
HCM2kAvgQ:	3		0	0		13	1	0	*****	0	0	

Level Of Service Computation Report Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #15 Embarcadero / Broadway St ******************** 32.9 Loss Time (sec): 17 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: ******************* Street Name: Embarcadero Broadway St Approach: North Bound South Bound East Bound West Bound L - T - R L-T-R L-T-R L-T-R Movement: _____| Control: Protected Protected Split Phase Split Phase Include Include Include Include Rights: Min. Green: 16 37 0 7 28 28 29 0 29 0 0 2 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 549 970 0 2 987 25 52 0 417 0 0 Initial Bse: 549 970 0 2 987 25 52 0 417 0 0 PHF Volume: 549 970 0 2 987 25 52 0 417 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 549 970 0 2 987 25 52 0 417 0 FinalVolume: 549 970 0 2 987 25 52 0 417 0 0 Saturation Flow Module: Adjustment: 0.92 0.95 1.00 0.95 0.95 0.95 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 1.00 1.95 0.05 1.00 0.00 1.00 0.00 0.00 0.00 _____| Capacity Analysis Module: Vol/Sat: 0.16 0.27 0.00 0.00 0.28 0.28 0.03 0.00 0.26 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.18 0.41 0.00 0.08 0.31 0.45 0.00 0.45 0.00 0.00 0.00 Volume/Cap: 0.88 0.65 0.00 0.01 0.90 0.90 0.06 0.00 0.58 0.00 0.00 0.00 Uniform Del: 36.1 21.3 0.0 38.3 29.7 29.7 14.1 0.0 18.5 0.0 0.0 0.0 IncremntDel: 13.9 1.1 0.0 0.0 10.4 10.4 0.0 0.0 1.1 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 50.0 22.4 0.0 38.4 40.1 40.1 14.1 0.0 19.6 0.0 0.0 0.0 AdjDel/Veh: 50.0 22.4 0.0 38.4 40.1 40.1 14.1 0.0 19.6 0.0 0.0 0.0

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Note: Queue reported is the number of cars per lane.

LOS by Move: D C A D D B A B A A

HCM2kAvqQ: 8 11 0 0 15 15 1 0 8 0 0

2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #16 Embarcadero / Washington St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.590 34.9 Loss Time (sec): 17 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service:
 Street Name:
 Embarcadero
 Washington
 St

 Approach:
 North Bound
 South Bound
 East Bound
 West Bound

 Movement:
 L - T - R
 L - T - R
 L - T - R
 L - T - R
 Control: Protected Protected Protected Protected Rights: Include Include Include Include Min. Green: 12 30 0 10 28 28 33 0 33 0 0 2 0 3 0 0 1 0 2 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 384 1466 0 6 1358 68 53 0 149 0 0 Initial Bse: 384 1466 0 6 1358 68 53 0 149 0 0 PHF Volume: 384 1466 0 6 1358 68 53 0 149 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 384 1466 0 6 1358 68 53 0 149 0 0 -----| Saturation Flow Module: Adjustment: 0.92 0.91 1.00 0.95 0.90 0.90 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 3.00 0.00 1.00 2.86 0.14 1.00 0.00 1.00 0.00 0.00 0.00 _____| Capacity Analysis Module: Vol/Sat: 0.11 0.28 0.00 0.00 0.28 0.28 0.03 0.00 0.09 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.13 0.33 0.00 0.11 0.31 0.31 0.37 0.00 0.37 0.00 0.00 0.00 Volume/Cap: 0.82 0.85 0.00 0.03 0.89 0.89 0.08 0.00 0.25 0.00 0.00 0.00 Uniform Del: 38.0 27.9 0.0 35.7 29.5 29.5 18.6 0.0 19.9 0.0 0.0 0.0 IncremntDel: 11.2 4.1 0.0 0.1 6.6 6.6 0.1 0.0 0.2 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 49.2 32.0 0.0 35.7 36.1 36.1 18.6 0.0 20.1 0.0 0.0 0.0 AdjDel/Veh: 49.2 32.0 0.0 35.7 36.1 36.1 18.6 0.0 20.1 0.0 0.0 0.0 LOS by Move: D C A D D B A C A A A HCM2kAvqQ: 5 13 0 0 14 14 1 0 3 0 0 ***************************** Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #17 Embarcadero / Mission St ************************* 25.4 Loss Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: ******************* Street Name: Embarcadero MIssion St North Bound South Bound East Bound West Bound Approach: L - T - R L - T - R L - T - R Movement: _____| Control: Permitted Permitted Split Phase Split Phase Rights: Include Include Include Include Min. Green: 0 52 0 0 52 52 28 28 28 0 0 0 0 0 3 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 -----| Base Vol: 0 1755 0 0 1362 148 97 0 80 0 0 Initial Bse: 0 1755 0 0 1362 148 97 0 80 0 0 PHF Volume: 0 1887 0 0 1465 159 104 0 86 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1887 0 0 1465 159 104 86 0 0 0 FinalVolume: 0 1887 0 0 1465 159 104 0 86 0 0 ______ Saturation Flow Module: Adjustment: 1.00 0.59 1.00 1.00 0.58 0.90 0.91 1.00 0.91 1.00 1.00 1.00 Lanes: 0.00 3.00 0.00 0.00 2.80 0.20 0.55 0.00 0.45 0.00 0.00 0.00 Final Sat.: 0 3372 0 0 3102 337 951 0 785 0 0 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.56 0.00 0.00 0.47 0.47 0.11 0.00 0.11 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.00 0.58 0.00 0.00 0.58 0.58 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.00 0.97 0.00 0.00 0.82 0.82 0.35 0.00 0.35 0.00 0.00 0.00 Uniform Del: 0.0 18.2 0.0 0.0 15.2 15.2 24.0 0.0 24.0 0.0 0.0 0.0 IncremntDel: 0.0 13.8 0.0 0.0 2.8 2.8 0.4 0.0 0.4 0.0 0.0 0.0 Delay Adj: 0.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 Delay/Veh: 0.0 32.0 0.0 0.0 18.0 18.0 24.4 0.0 24.4 0.0 0.0 0.0 AdjDel/Veh: 0.0 32.0 0.0 0.0 18.0 18.0 24.4 0.0 24.4 0.0 0.0 0.0 LOS by Move: A C A A B B C A C A A A HCM2kAvqQ: 0 21 0 0 12 19 4 0 4 0 0 0 ******************* Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #18 Embarcadero / Harrison St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.779
Loss Time (sec): 10 Average Delay (sec/veh): 25.7
Optimal Cycle: 100 Level Of Service: C Street Name: Embarcadero Harrison St East Bound West Bound Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 0 63 0 0 63 63 27 0 27 0 0 0 0 2 0 0 0 0 1 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 0 1361 0 0 1138 262 205 0 155 0 0 Initial Bse: 0 1361 0 0 1138 262 205 0 155 0 0 PHF Volume: 0 1463 0 0 1224 282 220 0 167 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1463 0 0 1224 282 220 0 167 0 0 FinalVolume: 0 1463 0 0 1224 282 220 0 167 0 0 -----| Saturation Flow Module: Adjustment: 1.00 0.66 1.00 1.00 0.65 0.92 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 0.00 2.00 0.00 0.00 1.72 0.28 1.00 0.00 1.00 0.00 0.00 0.00 Final Sat.: 0 2527 0 0 2115 487 1805 0 1615 0 0 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.58 0.00 0.00 0.58 0.58 0.12 0.00 0.10 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.00 0.92 0.00 0.00 0.92 0.92 0.45 0.00 0.38 0.00 0.00 0.00 Uniform Del: 0.0 16.3 0.0 0.0 16.2 16.2 30.4 0.0 29.7 0.0 0.0 0.0 IncremntDel: 0.0 9.0 0.0 0.0 8.7 8.7 0.7 0.0 0.6 0.0 0.0 Delay Adj: 0.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00 Delay/Veh: 0.0 25.2 0.0 0.0 24.9 24.9 31.0 0.0 30.3 0.0 0.0 0.0 AdjDel/Veh: 0.0 25.2 0.0 0.0 24.9 24.9 31.0 0.0 30.3 0.0 0.0 0.0 LOS by Move: A C A A C C C A A A A HCM2kAvqQ: 0 21 0 0 19 27 6 0 4 0 0 ***************************** Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #19 Embarcadero / Bryant St Cycle (sec): 100 Critical Vol./Cap.(X): 0.606
Loss Time (sec): 10 Average Delay (sec/veh): 30.0
Optimal Cycle: 95 Level Of Service: C ******************* Street Name: Embarcadero Bryant St North Bound South Bound East Bound West Bound Approach: L - T - R L-T-R L-T-R L-T-R Movement: _____| Control: Protected Protected Permitted Permitted Rights: Include Include Include Include Min. Green: 21 41 41 16 36 36 28 28 28 28 28 28 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 156 1236 84 48 1190 54 121 43 174 3 8 4 Initial Bse: 156 1236 84 48 1190 54 121 43 174 3 8 4 FinalVolume: 161 1274 87 49 1227 56 125 44 179 3 8 4 Saturation Flow Module: Adjustment: 0.95 0.94 0.94 0.95 0.95 0.85 0.76 0.76 0.85 0.93 0.93 Lanes: 1.00 1.87 0.13 1.00 2.00 1.00 0.74 0.26 1.00 0.20 0.53 0.27 Final Sat.: 1805 3346 227 1805 3610 1615 1068 380 1615 353 943 471 _____| Capacity Analysis Module: Vol/Sat: 0.09 0.38 0.38 0.03 0.34 0.03 0.12 0.12 0.11 0.01 0.01 0.01 Crit Moves: **** **** Green/Cycle: 0.21 0.45 0.45 0.17 0.41 0.41 0.28 0.28 0.28 0.28 0.28 0.28 Volume/Cap: 0.42 0.85 0.85 0.16 0.83 0.08 0.42 0.42 0.40 0.03 0.03 0.03 Uniform Del: 34.3 24.8 24.8 35.1 26.4 18.0 29.3 29.3 29.2 26.1 26.1 26.1 IncremntDel: 0.8 4.7 4.7 0.2 4.1 0.1 0.7 0.7 0.6 0.0 0.0 0.0 Delay/Veh: 35.0 29.5 29.5 35.3 30.4 18.1 30.0 30.0 29.7 26.2 26.2 26.2 AdjDel/Veh: 35.0 29.5 29.5 35.3 30.4 18.1 30.0 30.0 29.7 26.2 26.2 26.2 LOS by Move: D C C D C B C C C C HCM2kAvqQ: 4 19 19 1 17 1 5 5 5 0 0 0 *******************

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Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #20 Embarcadero / Brannan St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.546
Loss Time (sec): 11 Average Delay (sec/veh): 28.7
Optimal Cycle: 90 Level Of Service: C Street Name: Embarcadero Brannan St East Bound West Bound Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 10 37 0 14 37 37 28 28 28 28 28 28 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 7 1309 0 1 1190 174 167 0 36 0 0 Initial Bse: 7 1309 0 1 1190 174 167 0 36 0 0 PHF Volume: 7 1378 0 1 1253 183 176 0 38 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 7 1378 0 1 1253 183 176 0 38 0 0 -----| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.38 0.00 0.00 0.35 0.11 0.10 0.00 0.02 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.12 0.41 0.00 0.16 0.45 0.45 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.03 0.93 0.00 0.00 0.78 0.25 0.31 0.00 0.08 0.00 0.00 0.00 Uniform Del: 34.9 25.2 0.0 32.1 21.1 15.6 23.7 0.0 21.9 0.0 0.0 0.0 IncremntDel: 0.1 10.5 0.0 0.0 2.5 0.2 0.3 0.0 0.1 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 35.0 35.7 0.0 32.1 23.6 15.8 24.0 0.0 21.9 0.0 0.0 0.0 AdjDel/Veh: 35.0 35.7 0.0 32.1 23.6 15.8 24.0 0.0 21.9 0.0 0.0 0.0 LOS by Move: D D A C C B C A C A A A HCM2kAvqQ: 0 24 0 0 15 3 4 0 1 0 0 **************************** Note: Queue reported is the number of cars per lane.

Existing Weekday AM

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #43 Embarcadero / Howard St ************************* Loss Time (sec): 10 Average Delay (sec/veh): 25.0 Optimal Cycle: 95 Level Of Service: C ******************* Street Name: Embarcadero Howard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____| Control: Protected Protected Split Phase Rights: Include Include Include Include Min. Green: 15 45 0 10 40 40 30 0 30 0 0 1 0 3 0 0 1 0 2 0 1 1 0 1! 0 0 0 0 0 0 -----| Volume Module: Base Vol: 228 1618 0 2 1219 217 136 0 99 0 0 PHF Volume: 235 1668 0 2 1257 224 140 0 102 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 235 1668 0 2 1257 224 140 0 102 0 0 _____ Saturation Flow Module: Adjustment: 0.95 0.91 1.00 0.95 0.95 0.85 0.91 1.00 0.91 1.00 1.00 Lanes: 1.00 3.00 0.00 1.00 2.00 1.00 1.41 0.00 0.59 0.00 0.00 0.00 _____| Capacity Analysis Module: Vol/Sat: 0.13 0.32 0.00 0.00 0.35 0.14 0.06 0.00 0.10 0.00 0.00 0.00 Crit Moves: **** **** Volume/Cap: 0.80 0.66 0.00 0.01 0.80 0.32 0.19 0.00 0.33 0.00 0.00 0.00 Uniform Del: 40.2 19.1 0.0 39.7 24.3 18.4 26.0 0.0 27.2 0.0 0.0 0.0 IncremntDel: 14.1 0.6 0.0 0.0 2.9 0.3 0.1 0.0 0.3 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 Delay/Veh: 54.3 19.7 0.0 39.8 27.3 18.7 26.1 0.0 27.5 0.0 0.0 0.0 AdjDel/Veh: 54.3 19.7 0.0 39.8 27.3 18.7 26.1 0.0 27.5 0.0 0.0 0.0 LOS by Move: D B A D C B C A A A HCM2kAvqQ: 7 13 0 0 17 4 2 0 4 0 0 0 ******* Note: Queue reported is the number of cars per lane.

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	2000					Computa (Base			: ernativ	re)		
*****											****	****
Intersection		****	****	****			****	****	*****	****	****	****
Cycle (sec):		9	0 0 0			Critic	al Voi	l./Cap	o.(X):		0.	707
Loss Time (se	ec):	1	0			Averag	e Dela	ay (se	ec/veh) :	:	4	8.4
Optimal Cycle		9	0									D
*****					*****	*****	****	****			****	****
Street Name:			Embarc						Folso			
Approach:			und					ast Bo		We		
Movement:			- R			- R			- R		- T	
Control: Rights:	Ρ.	rotect	ea	PI	Incli	.ea	Sp.	IIL PI	nase ude	sp.	IIL PI	nase
Min. Green:		49	49		32	32		31	31		0	uue
Min. Green: Y+R:		4.0	4.0		4.0				4.0		4.0	
Lanes:			0 0			1 0			0 1		0 (
Volume Module						'			,			
Base Vol:		1472	0	0	1288	32	375	0	116	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
Initial Bse:	96	1472	0	0	1288	32	375	0	116	0	0	
Jser Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.9
PHF Volume:	101	1549	0	0	1356	34	395	0	122	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	101	1549	0	0	1356	34	395	0	122	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
FinalVolume:		1549	0		1356	34	395	0	122	0	0	
Saturation Fi												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	190
Adjustment:			1.00		0.82	0.82		1.00	0.65	1.00		1.0
Lanes: Final Sat.:		2.00	0.00		1.95	0.05 76	3152	0.00	1.00 1227	0.00	0.00	0.0
			0				3132		122 <i>1</i> 			
Capacity Anal	•			1		'	1		'	1		
Vol/Sat:		0.52		0.00	0.44	0.44	0.13	0.00	0.10	0.00	0.00	0.0
Crit Moves:	****	0.02	0.00	0.00	****	0.11	****	0.00	0.10	0.00	0.00	0.0
Green/Cycle:	0.13	0.54	0.00	0.00	0.41	0.41	0.34	0.00	0.34	0.00	0.00	0.0
Volume/Cap:			0.00		1.08	1.08		0.00	0.29	0.00		0.0
Jniform Del:			0.0		26.5	26.5	22.1	0.0	21.5	0.0	0.0	0.
ncremntDel:		13.5	0.0		49.1	49.1	0.9	0.0	1.7	0.0	0.0	0.
nitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
_	1.00		0.00		1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.0
Delay/Veh:			0.0		75.6	75.6	23.1	0.0	23.2	0.0	0.0	0.
Jser DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
AdjDel/Veh:	42.4	32.9	0.0	0.0	75.6	75.6	23.1	0.0	23.2	0.0	0.0	0.
LOS by Move:			A	A	E	E	С	A	С	A	A	
HCM2kAvgO:	2	23	0	0	29	28	4	0	3	0	0	

Existing Conditions

Weekday PM Peak Hour

Existing Weekday PM Fri Jun 3, 2011 14:14:21 Page 3-1 34th America's Cup Races Transportation Impact Analysis Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) ****************** Intersection #1 Beach St/Columbus Ave ************************* Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.0] ************************ Street Name: Columbus Ave Beach St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Rights: Include Include Include Include Include Lanes: 0 0 1! 0 0 0 0 0 0 0 0 0 1 1 0 0 0 Volume Module: Base Vol: 17 0 8 0 0 0 157 92 9 76 0 Initial Bse: 17 0 8 0 0 0 157 92 9 76 0 PHF Volume: 18 0 9 0 0 0 0 167 98 10 81 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 FinalVolume: 18 0 9 0 0 0 0 167 98 10 81 _____| Critical Gap Module: FollowUpTim: 3.5 4.0 3.3 xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxx xxxxx Capacity Module: Potent Cap.: 681 603 922 xxxx xxxx xxxxx xxxx xxxx xxxx 1311 xxxx xxxxx -----|----|-----| Level Of Service Module: LOS by Move: * * * * * * * * * A * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: * B * * * * * * A * * ApproachDel: 10.0 xxxxxx xxxxxx ApproachLOS: B * * XXXXXX

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Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

****************** Intersection #2 North Point St/Columbus Ave *************************

Cycle (sec): 90 Critical Vol./Cap.(X): 0.210 Loss Time (sec): 9 Average Delay (sec/veh): 13.8 Optimal Cycle: 90 Level Of Service: B

************************** Street Name: Columbus Ave North Point St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R

-----|

Control: Permitted Permitted Permitted Permitted

Rights:		Incl	ude		Incl	ude		Incl	ıde		Incl	ude
Min. Green:	28	28	28	28	28	28	53	53	53	53	53	53
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 (0 0	1 0	0 3	1 0	1 0	0	1!	0 0	0 :	1 0	1 0
Volume Module	∋:											
Base Vol:	62	38	22	22	76	58	21	131	44	28	292	29
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	38	22	22	76	58	21	131	44	28	292	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	71	44	25	25	87	67	24	151	51	32	336	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	71	44	25	25	87	67	24	151	51	32	336	33

FinalVolume: 71 44 25 25 87 67 24 151 51 32 336 33 _____| Saturation Flow Module: Adjustment: 0.64 0.95 0.95 0.82 0.82 0.82 0.91 0.91 0.91 0.86 0.86 0.86 Lanes: 1.00 0.63 0.37 0.28 0.98 0.74 0.11 0.67 0.22 0.16 1.67 0.17

Final Sat.: 1212 1137 658 440 1519 1159 186 1159 389 263 2739 272 _____|__|__| Capacity Analysis Module:

Vol/Sat: 0.06 0.04 0.04 0.06 0.06 0.06 0.13 0.13 0.13 0.12 0.12 Crit Moves: **** **** Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.31 0.59 0.59 0.59 0.59 0.59 0.59

Volume/Cap: 0.19 0.12 0.12 0.18 0.18 0.18 0.22 0.22 0.22 0.21 0.21 0.21 Delay/Veh: 23.8 22.7 22.7 23.1 23.1 23.1 9.2 9.2 9.2 8.9 8.9 8.9 AdjDel/Veh: 23.8 22.7 22.7 23.1 23.1 23.1 9.2 9.2 9.2 8.9 8.9 LOS by Move: C C C C C A A A A A HCM2kAvgO: 1 1 1 2 2 2 3 3 3 3 3 3

************************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

******************* Intersection #3 North Point St/Stockton St *************************

Cycle (sec): 90 Critical Vol./Cap.(X): 0.266 Loss Time (sec): 8 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 11.9 *************************

Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L}

Street Name: Stockton St North Point St Approach: North Bound South Bound East Bound West Bound

Control: Permitted Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 25 25 25 25 25 25 57 57 57 57 57 Volume Module: Base Vol: 23 20 32 14 37 22 17 235 57 7 152 5 Initial Bse: 23 20 32 14 37 22 17 235 57 7 152 5 PHF Volume: 26 22 36 16 42 25 19 264 64 8 171 6 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 Ω Reduced Vol: 26 22 36 16 42 25 19 264 64 8 171

Saturation Flow Module: Adjustment: 0.86 0.86 0.86 0.91 0.91 0.91 0.96 0.96 0.96 0.89 0.89 Lanes: 0.31 0.26 0.43 0.19 0.51 0.30 0.06 0.76 0.18 0.09 1.85 0.06 Final Sat.: 501 435 696 332 877 522 100 1382 335 145 3139 103 _____|__|__|

FinalVolume: 26 22 36 16 42 25 19 264 64 8 171 6

_____|

Capacity Analysis Module: Vol/Sat: 0.05 0.05 0.05 0.05 0.05 0.09 0.19 0.19 0.05 0.05 0.05 Crit Moves: **** **** Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.63 0.63 0.63 0.63 0.63 0.63 Volume/Cap: 0.19 0.19 0.19 0.17 0.17 0.17 0.30 0.30 0.30 0.09 0.09 0.09 Delay/Veh: 25.7 25.7 25.7 25.4 25.4 25.4 8.2 8.2 8.2 6.5 6.5 AdjDel/Veh: 25.7 25.7 25.7 25.4 25.4 25.4 8.2 8.2 8.2 6.5 6.5 LOS by Move: C C C C C A A A A A

HCM2kAvgO: 2 2 2 2 2 4 4 4 1 1 1

************************** Note: Queue reported is the number of cars per lane.

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Existing Weekday PM

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

	DCACT OF D	CI VICC (compace	CTOIL ICC	-Porc	
2000 HCM	Operations	Method	(Base	Volume	Alternative)	

*****						(Dase					****	*****
Intersection	#4 B	ay St,	/Columb	us Ave	e *****	*****	****	****	*****	****	****	*****
Cycle (sec):		Ģ	90			Critica Average Level	al Vo	l./Car	o.(X):		0.4	125
Loss Time (se	ec):		9			Average	e Dela	av (se	ec/veh)	:	2:	1.2
Optimal Cycle	,		90			Level	Of Se	rvice				C
*****		****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Columb	us Ave	Э				Bay	St		
Approach:	No	rth Bo	ound	Soi	ath Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	P:	rotect	ted	Pi	rotect	ed	1	Permit	ted	I	Permit	ted
Rights:		Ignoi	re		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	8	31	31	0	19	19	47	47	47	50	50	50
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	2	0 0	1 0	0 (0 1	1 0	0 :	1 1	0 1	0 :	1 0	1 0
Volume Module												
Base Vol:	341	86	66	0	145	4	1	576	187	7	1034	34
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	341	86	66	0	145	4	1	576	187	7	1034	34
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:					0.94			0.94			0.94	
PHF Volume:			0	0	154	4	1	613	199	7	1100	36
Reduct Vol:	0	0		0	0						0	0
Reduced Vol:		91	0	0	154	0 4	1	613	199	7	1100	36
PCE Adj:	1.00					1.00				1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00			1.00					1.00	1.00
FinalVolume:				0	154	4	1	613	199	7	1100	36
Saturation F	low M	odule										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	1.00	1.00	1.00	0.95	0.95	0.91	0.91	0.85	0.90	0.90	0.90
Lanes:	2.00	1.00	0.00	0.00	1.95	0.05	0.01	1.99	1.00	0.01	1.93	0.06
Final Sat.:						97						
Capacity Ana	lysis	Modu:	le:									
Vol/Sat:			0.00	0.00	0.04	0.04	0.18	0.18	0.12	0.33	0.33	0.33
Crit Moves:		****		****							****	
Green/Cycle:	0.11	0.34	0.00	0.00	0.23	0.23	0.56	0.56	0.56	0.56	0.56	0.56
Volume/Cap:			0.00	0.00	0.19	0.19	0.32	0.32	0.22	0.60	0.60	0.60
Delay/Veh:	64.6	20.4	0.0	0.0	27.9	27.9	10.9	10.9	10.3	13.9	13.9	13.9
User DelAdj:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:						27.9		10.9			13.9	13.9
LOS by Move:				A		C				В	В	В
HCM2kAvgQ:	8	2	0	0	2	2	5	5	3	11	11	11

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

	2000					Computa			t ernative			
*******											****	*****
Intersection	#5 Ba	ay St/	Stockt	on St								
Cycle (sec):		0				Costtio		1 /0-	o (V).		0	170
Loss Time (se		_	7			Averso	ra Dal:	1./Caj	ec/veh):		0.	2 / O
Optimal Cycle	,	c	,			Laval	Of Sa	ay (st	•	•		Α.

Street Name:			Stockt	on St					Bav	St		
Approach:						nınd	E	ast Bo			est B	nınd
Movement:			- R			- R			- R		- T	
									tted			
Rights:			ide			ıde			ıde		Incl	
Min. Green:			20			20					63	
Y+R:									4.0			
									1 0		1 0	
	l =====		1	1		1	1			I		
Volume Module						'			'	1		'
Base Vol:		25	58	40	33	31	2.2	506	20	2.3	1089	30
Growth Adj:					1.00			1.00			1.00	
Initial Bse:				40		31	22				1089	30
User Adj:								1.00			1.00	
PHF Adj:								0.92			0.92	
PHF Volume:				43		34	24		22		1184	
Reduct Vol:	0							0			0	
Reduced Vol:				43		34	24				1184	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:							1.00				1.00	
FinalVolume:							24			25		33
Saturation Fl				'		'	'		'	'		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86	0.86	0.86	0.83	0.83	0.83	0.83	0.83	0.83	0.89	0.89	0.89
Lanes:	0.20	0.24	0.56	0.38	0.32	0.30	0.08	1.85	0.07	0.04	1.91	0.05
Final Sat.:	331	395	915	606	500	470	127	2922	115	68	3209	88
Capacity Anal	Lysis	Modul	e:									
Vol/Sat:	0.07	0.07	0.07	0.07		0.07	0.19	0.19	0.19	0.37		0.37
Crit Moves:					****						****	
Green/Cycle:							0.70	0.70	0.70		0.70	
Volume/Cap:	0.31	0.31	0.31	0.32	0.32	0.32	0.27	0.27	0.27	0.53	0.53	0.53
Delay/Veh:							5.3			7.3		7.3
User DelAdj:							1.00					
AdjDel/Veh:							5.3					7.3
LOS by Move: HCM2kAvgQ:	С	С	С	С	С	С	A	A	A 3	A	A	A
*****									*****	****	****	*****
Note: Queue	report	ted is	the n	umber	of ca	ars per						

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Loss Time (sec): 9 Average Delay (sec/veh): 10.0 Optimal Cycle: 90 Level Of Service: B

Street Name: Approach:	27	D	Kearn	y St	-+- D			-+ D	Bay	St	-+ D	
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control: Rights:	·	Permi	ted	I	Permit	tted	·	Permi	tted	·	Permi	ted
Min. Green:	20	20	20	20	20	20	61	61	61	61	61	61
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	0 (0 1!	0 0	0 (1!	0 0	0 2	L 0	1 0	0 1	. 0	1 0
Volume Module	'											
Base Vol:		3	24	2	3	1.4	1.0	543	5.7	19	1004	2
Growth Adj:								1.00			1.00	
Initial Bse:					3			543			1004	
User Adi:				1.00				1.00			1.00	
PHF Adj:				0.90			0.90				0.90	
PHF Volume:							11	603			1116	2
Peduct Vol:	130	0		<u>د</u>	0	10	11		0		0	0
Reduct Vol: Reduced Vol:	138	3	27	2	3	16	11	603	63	21	1116	2
PCE Adi:	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1.00		1.00	
MLF Adj:	1 00	1 00	1 00			1.00						
FinalVolume:						1.00						2
Saturation F	'											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.72	0.72	0.72	0.88	0.88	0.88	0.87	0.87	0.87	0.89	0.89	0.89
Lanes:	0.82	0.02	0.16	0.10	0.16	0.74	0.03	1.78	0.19	0.03	1.96	0.01
Final Sat.:				176	265	1235	54	2956	310	63	3317	7
Capacity Anal	lysis	Modu.	le:									
Vol/Sat:	0.12	0.12	0.12	0.01	0.01	0.01	0.20	0.20	0.20	0.34	0.34	0.34
Crit Moves:		****									****	
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.68	0.68	0.68	0.68	0.68	0.68
Volume/Cap:	0.55	0.55	0.55	0.06	0.06	0.06	0.30	0.30	0.30	0.50	0.50	0.50
Delay/Veh:			38.0	27.9	27.9	27.9	6.2	6.2	6.2	7.8	7.8	7.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:				27.9	27.9	27.9	6.2	6.2	6.2	7.8	7.8	7.8
				С	С	С	A	A	A	A	A	A
LOS by Move: HCM2kAvgQ:	5	5	5	0	0	0		4				9

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 Broadway St/Sansome St ************* Cycle (sec): 80 Critical Vol./Cap.(X): 0.506 14.3 Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 80 Level Of Service: Level Of Service: ************************* Street Name: Sansome St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Split Phase Split Phase Permitted Permitted Include Include Rights: Include Include Min. Green: 27 27 27 0 0 0 44 44 0 0 44 44 0 1 0 1 0 0 0 0 0 0 0 1 1 0 0 0 0 1 1 0 -----|----|-----||-------| Volume Module: Base Vol: 274 286 39 0 0 0 76 543 0 0 766 107 Initial Bse: 274 286 39 0 0 0 76 543 0 0 766 107 PHF Volume: 288 301 41 0 0 0 80 572 0 0 806 113 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 288 301 41 0 0 0 80 572 0 0 806 113 FinalVolume: 288 301 41 0 0 0 80 572 0 0 806 113 _____| Saturation Flow Module: Adjustment: 0.88 0.88 0.88 1.00 1.00 1.00 0.70 0.70 1.00 1.00 0.93 0.93 Lanes: 0.91 0.96 0.13 0.00 0.00 0.00 0.25 1.75 0.00 0.00 1.75 0.25 Final Sat.: 1522 1589 217 0 0 0 328 2340 0 0 3111 434 _____| Capacity Analysis Module: Vol/Sat: 0.19 0.19 0.19 0.00 0.00 0.00 0.24 0.24 0.00 0.00 0.26 0.26 Crit Moves: ****

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

************* Intersection #8 Broadway St/Battery St *******************

Cycle (sec): 80 Critical Vol./Cap.(X): 0.535 Loss Time (sec): 9 Average Delay (sec/veh): 18.8 Optimal Cycle: 70 Level Of Service: B

************************* Street Name: Battery St Broadway St Approach: North Bound South Bound East Bound West Bound

Movement:	L -	Т -	R	L -	T	- R	L -	Т -	- R	L -	Т -	R
Control:	Spli	it Pha	se	Spl	it Ph	nase	P	ermit	ted	P	ermitt	.ed
Rights:		Includ	е		Inclu	ıde		Inclu	de		Includ	le
Min. Green:	0	0	0	44	44	44	17	17	17	17	17	17
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 0	0	0 1	0	1 0	0 0	1	1 0	0 1	1 0	0
Volume Module	:											
Base Vol:	0	0	0	5.4	597	1.5.5	0	322	257	3.7	719	0

Initial Bse: 0 0 0 54 597 155 0 322 257 37 719 0 PHF Volume: 0 0 0 55 609 158 0 329 262 38 734 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 0 0 0 55 609 158 0 329 262 38 734 0

FinalVolume: 0 0 0 55 609 158 0 329 262 38 734 0 _____| Saturation Flow Module:

Adjustment: 1.00 1.00 1.00 0.91 0.91 0.91 1.00 0.89 0.89 0.86 0.86 1.00 Lanes: 0.00 0.00 0.00 0.13 1.49 0.38 0.00 1.11 0.89 0.10 1.90 0.00 Final Sat.: 0 0 0 232 2570 667 0 1873 1495 159 3090 0

_____| Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.00 0.24 0.24 0.24 0.00 0.18 0.18 0.24 0.24 0.00 *** Crit Moves: Green/Cycle: 0.00 0.00 0.00 0.55 0.55 0.55 0.00 0.34 0.34 0.34 0.00 Volume/Cap: 0.00 0.00 0.00 0.43 0.43 0.43 0.00 0.52 0.52 0.70 0.70 0.00 Delay/Veh: 0.0 0.0 0.0 10.8 10.8 10.8 0.0 21.7 21.7 25.1 25.1 0.0 AdjDel/Veh: 0.0 0.0 0.0 10.8 10.8 10.8 0.0 21.7 21.7 25.1 25.1 0.0 LOS by Move: A A A B B B A C C C A HCM2kAvgO: 0 0 0 6 6 6 0 6 6 9 9 0

************************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 Embarcadero/ Beach St/ Grant St

************************* Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 101 Level Of Service: 51.2 Level Of Service: *************************

Street Name: Embarcadero Beach St (EB)/Grant St (WB)
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R Control: Split Phase Split Phase Split Phase Include Include Include Include Rights: Min. Green: 17 17 17 26 26 0 0 0 26 19 19 19 0 1 0 1 0 0 1 0 0 0 0 0 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 149 335 28 4 141 0 0 0 308 17 73 8 Initial Bse: 149 335 28 4 141 0 0 0 308 17 73 8 PHF Volume: 162 364 30 4 153 0 0 0 335 18 79 9 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 Ω Reduced Vol: 162 364 30 4 153 0 0 0 335 18 79

Saturation Flow Module: Adjustment: 0.93 0.93 0.93 1.00 1.00 1.00 1.00 1.00 0.87 0.98 0.98 Lanes: 0.58 1.31 0.11 0.03 0.97 0.00 0.00 0.00 1.00 0.17 0.75 0.08 Final Sat.: 1028 2310 193 52 1846 0 0 0 1644 323 1387 152

FinalVolume: 162 364 30 4 153 0 0 0 335 18 79 9

_____|

_____|__|__| Capacity Analysis Module: Vol/Sat: 0.16 0.16 0.16 0.08 0.08 0.00 0.00 0.00 0.20 0.06 0.06 0.06 Green/Cycle: 0.17 0.17 0.17 0.26 0.26 0.00 0.00 0.00 0.26 0.19 0.19 0.19

Volume/Cap: 0.94 0.94 0.94 0.32 0.32 0.00 0.00 0.00 0.79 0.30 0.30 0.30 Delay/Veh: 63.9 63.9 63.9 30.8 30.8 0.0 0.0 44.7 35.8 35.8 35.8 AdjDel/Veh: 63.9 63.9 63.9 30.8 30.8 0.0 0.0 44.7 35.8 35.8 35.8 LOS by Move: E E E C C A A A D D D HCM2kAvgO: 13 13 13 4 4 0 0 0 12 3 3 3 *************************

Note: Queue reported is the number of cars per lane.

Existing Weekday PM Fri Jun 3, 2011 14:14:21

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection	****	****	*****	****	****	*****	****	****				
Cvcle (sec):			90			Critic	al Vo	l./Car	o.(X):		0.3	359
Loss Time (se	ec):		1.4			Averac	re Dela	av (se	ec/veh)	:	28	3.8
Cycle (sec): Loss Time (se Optimal Cycle	e:		90			Level	Of Se	rvice	:			С
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Embaro	adero			North	Point	st (E	B)/ K	earny	St (W
Approach:	No	rth Bo	ound	Soi	uth Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:	L	- T	- R	L -	- T	- R	L -	- T	- R	L ·	- T	- R
Control:												
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	15	36	0	0	17	17	20	20	20	20	20	20
Y+R: Lanes:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0 :	1 0	1 0	0 (0 1!	0 1	0	1 0	0 1
Volume Module												
Base Vol:												
Growth Adj:												
Initial Bse:						54	19					10
User Adj:							1.00				1.00	
PHF Adj:			0.95	0.95	0.95	0.95		0.95			0.95	
PHF Volume:	162	493	0	1	434	57	20	256	14	4	26	11
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
												11
PCE Adj:									1.00			
MLF Adj:												
FinalVolume:						57						
Saturation F												
Saturation F.				1000	1000	1000	1000	1000	1000	1000	1000	1900
Adjustment:									0.99			
Lanes:	1 00	2 00	0.00	0.09	1 76	0.03						
Final Sat.:	1805	3610	0.00	7	2990	392	133	1702	1927	260	1626	1615
Capacity Ana						'	1		'	1		'
Vol/Sat:					0.15	0.15	0.15	0.15	0.01	0.02	0.02	0.01
Crit Moves:												
Green/Cycle:				0.27	0.27	0.27						

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************** Intersection #11 Embarcadero / Bay St ***************** Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 81 Level Of Service: 14.7 ************************* Street Name: Embarcadero Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Ovl Include Rights: Include Min. Green: 42 53 0 0 25 25 7 0 42 0 0 2 0 2 0 0 0 0 1 1 0 1 0 0 0 2 0 0 0 0 Volume Module: Base Vol: 947 606 0 0 639 30 16 0 552 0 0 Initial Bse: 947 606 0 0 639 30 16 0 552 0 0 PHF Volume: 1029 659 0 0 695 33 17 0 600 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 1029 659 0 0 695 33 17 0 600 0 0 FinalVolume: 1029 659 0 0 695 33 17 0 600 0 0 _____| Saturation Flow Module: Adjustment: 0.92 0.87 1.00 1.00 0.87 0.87 0.95 1.00 0.69 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 0.00 1.91 0.09 1.00 0.00 2.00 0.00 0.00 0.00 Final Sat.: 3502 3321 0 0 3150 148 1805 0 2615 0 0 _____| Capacity Analysis Module: Vol/Sat: 0.29 0.20 0.00 0.00 0.22 0.22 0.01 0.00 0.23 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.48 0.84 0.00 0.00 0.36 0.36 0.08 0.00 0.56 0.00 0.00 0.00 Volume/Cap: 0.61 0.23 0.00 0.00 0.61 0.61 0.12 0.00 0.41 0.00 0.00 0.00 Delay/Veh: 17.7 1.4 0.0 0.0 24.4 24.4 39.0 0.0 11.5 0.0 0.0 0.0 AdjDel/Veh: 17.7 1.4 0.0 0.0 24.4 24.4 39.0 0.0 11.5 0.0 0.0 0.0 LOS by Move: B A A A C C D A B A A A HCM2kAvgO: 10 2 0 0 8 8 0 0 5 0 0 ************************** Note: Queue reported is the number of cars per lane.

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34th America's Cup Races

Transportation Impact Analysis

HCM2kAvgO: 4 5 0 6 6 6

Note: Queue reported is the number of cars per lane.

Volume/Cap: 0.71 0.34 0.00 0.53 0.53 0.68 0.68 0.03 0.07 0.07 0.03

Delay/Veh: 47.6 18.9 0.0 28.4 28.4 28.4 36.3 36.3 27.4 27.7 27.7 27.4

AdjDel/Veh: 47.6 18.9 0.0 28.4 28.4 28.4 36.3 36.3 27.4 27.7 27.7 27.4

LOS by Move: D B A C C C D D C C C

7 7 0 1 1 0

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #1	.2 Embarcadero / Cl	hestnut St / Sansome St	
*****	*****	*********	*****
Cycle (sec):	90	Critical Vol./Cap.(X):	0.603
Loss Time (sec)	: 13	Average Delay (sec/veh):	18.0

Optimal Cycle								
Street Name:								
Approach:								
Movement:								
Control:	Protec	ted	Pro	tected	Split P	hase	Split Ph	nase
Rights:								
Min. Green:	10 40	0	10	40 0	16 16	16	7 7	7
Y+R:								
Lanes:	1 0 2	0 0	1 0	2 1 0	0 1 0	1 0	0 0 0	0 0
Volume Module	∋:							
Base Vol:	36 1215	0	18 1	166 7	79 316	15	0 0	0
Growth Adj:	1.00 1.00	1.00	1.00 1	.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
Initial Bse:	36 1215	0	18 1	166 7	79 316	15	0 0	0
User Adj:	1.00 1.00	1.00	1.00 1	.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.90 0.90	0.90	0.90 0	.90 0.90	0.90 0.90	0.90	0.90 0.90	0.90
PHF Volume:	40 1350	0	20 1	296 8	88 351	17	0 0	0
Reduct Vol:	0 0	0	0	0 0	0 0	0	0 0	0
Reduced Vol:	40 1350	0	20 1	296 8	88 351	17	0 0	0
PCE Adj:	1.00 1.00	1.00	1.00 1	.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
MLF Adj:	1.00 1.00	1.00	1.00 1	.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
FinalVolume:	40 1350	0	20 1	296 8	88 351	17	0 0	0
Saturation Fi	low Module	:						

 Sat/Lane:
 1900
 1900
 1900
 1900
 1900
 1900
 1900
 1900
 1900
 1900
 1900
 1900
 1900
 1900
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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

******	****	****	*****	****	*****	*****	****	****	*****	~ / * * * * * * :	****	*****
Intersection	#13 1	Embaro	adero/	Lomba	ard St	/ Bat	terv S	St				
*****									*****	****	****	*****
Cvcle (sec):		9	90			Critic	al Vol	L./Car	o.(X):		0.5	514
Cycle (sec): Loss Time (se Optimal Cycle	ec):	1	1			Averag	e Dela	av (se	ec/veh)	:	33	2.7
Optimal Cycle	_·	2	32			Level	Of Sei	cvice	•	•	٠.	C
******	* * * * * *	****	· * * * * * *	*****	****	*****	****	****	*****	****	****	*****
Street Name: Approach:	No	rth Bo	nind	Sol	ıth Bo	nind	E.	ast Bo	nund	We	est Bo	ound
Movement:	T.	- Т	– R	Ι	- Т	- R	Τ	- Т	- R	Τ	- T	– R
Control:	' Pi	rotect	ed	' Pr	otect	ed	Sp.	lit Pl	nase	Sp.	lit Pl	nase
Rights:	-	Incli	ıde		Incli	ıde	Op.	Incli	ıde	Op.	Incli	ıde
Rights: Min. Green:	9	35	35	9	35	35	21	21	21	6	6	6
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 1	1 0	1 () 2	0 1	0 .	1 0	0 1	0 1	1 1 1	0 0
	I ————		1	1	, <u>.</u>	I	1			1		
Volume Module			1	1		'	1		'	1		1
Base Vol:		1191	11	12	828	346	30	7	250	40	30	28
Growth Adj:								1.00			1.00	
Initial Bse:									250			
User Adj:									1.00		1.00	
PHF Adj:									0.92			
PHF Volume:									272			2.0
Reduct Vol: Reduced Vol:	112	1295	12	13	900	376	33	8	272	43	33	3.0
PCE Adj:									1.00			1.00
MLF Adj:												
FinalVolume:									272			
Saturation F				1		'	1		1	1		1
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Anal				1		'	1		1	1		1
Vol/Sat:				0 01	0 25	0 23	0 02	0 02	0 17	0 06	0.06	0.06
Crit Moves:				****	0.23	0.23		****		****		0.00
Green/Cycle:					U 30	U 30						0.07
Volume/Cap:									0.51		0.89	
Delay/Veh:							20.9					
User DelAdj:												
AdjDel/Veh:							20.9					
LOS by Move:												
HCM2kAvq0:												
********												-

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34th America's Cup Races

			Trans			Impact I						
				f Serv	vice (Computa	tion 1	Report				
******									ernativ			
Intersection												
******								****	*****	****	****	*****
Cycle (sec):		9()			Critic	al Vo	l./Cap	o.(X):		0.5	509
Loss Time (se	ec):	1	J 4 9			Average	e Dela	ay (se	ec/veh)	:	19	9.2
Optimal Cycle		Ο.	-			Level						В
******							****	****			****	*****
Street Name: Approach:						ound	T.	-a+ D	Gree:		est Bo	ann d
Movement:			- R			– R				L -		
Control:									nase			
Rights:	I	nclu	de		Inclu	ıde		Incl	ıde		Incl	ude
Min. Green:	8		0			0			24			0
Y+R:									4.0			
Lanes:			0 0			1 0			0 0			
Volume Module												
Base Vol:	46 1	256	0	4	919	11	27	0	64	0	0	0
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		256	0	4	919	11	27	0	64	0	0	0
User Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
_	0.94 0		0.94		0.94	0.94		0.94			0.94	0.94
PHF Volume:			0	4		12	29	0	68	0	0	0
Reduct Vol:	0		0		0	0	0	0	0	0	0	0
Reduced Vol: PCE Adj:	1.00 1		1.00		978 1.00	12	1 00	1.00	68 1.00	1 00	1.00	1.00
	1.00 1		1.00		1.00	1.00		1.00			1.00	1.00
FinalVolume:			0		978	12		0	68	0	0	0
Saturation F	low Mod	dule:										
Sat/Lane:					1900	1900		1900			1900	1900
Adjustment:			1.00		0.95	0.95		1.00			1.00	
Lanes: Final Sat.:	1.00 2		0.00		1.98	0.02 43		0.00			1.00	0.00
rinai Sat.:										1	1900	
Capacity Anal	'			ı		1	1		1	1		1
Vol/Sat:				0.00	0.27	0.27	0.06	0.00	0.06	0.00	0.00	0.00
Crit Moves:	*	***		***			***					
Green/Cycle:	0.09 0	.50	0.00	0.08	0.48	0.48	0.27	0.00	0.27	0.00	0.00	0.00
Volume/Cap:			0.00		0.57	0.57		0.00			0.00	0.00
Delay/Veh:			0.0		17.0	17.0		0.0			0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00			1.00	1.00
AdjDel/Veh: LOS by Move:			0.0 A	38.5 D	17.0	17.0 B	25.9 C	0.0			0.0 A	0.0 A
HCM2kAvqO:				0		10		0		A 0		A 0
*******										-	-	-
Note: Queue :	reporte	ed is	the ni	umber	of ca	ars per	lane					

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #15 Embarcadero / Broadway St / Drumm St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.539 Loss Time (sec): 17 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 31.8 ************************* Street Name: Embarcadero-Drumm St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Include Rights: Include Include Min. Green: 16 37 0 7 28 28 29 0 29 0 0 0 2 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 Volume Module: Base Vol: 435 1216 0 6 945 42 69 0 319 0 0 PHF Volume: 435 1216 0 6 945 42 69 0 319 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 Ω 0 0 0 _____| Saturation Flow Module: Adjustment: 0.92 0.95 1.00 0.95 0.94 0.94 0.95 1.00 0.85 1.00 1.00 1.00 _____| Capacity Analysis Module: Vol/Sat: 0.12 0.34 0.00 0.00 0.28 0.28 0.04 0.00 0.20 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.18 0.41 0.00 0.08 0.31 0.31 0.37 0.00 0.37 0.00 0.00 0.00 Volume/Cap: 0.70 0.82 0.00 0.04 0.88 0.88 0.10 0.00 0.54 0.00 0.00 0.00 Delay/Veh: 38.3 27.3 0.0 38.5 38.1 38.1 18.9 0.0 23.5 0.0 0.0 0.0 AdjDel/Veh: 38.3 27.3 0.0 38.5 38.1 38.1 18.9 0.0 23.5 0.0 0.0 0.0 LOS by Move: D C A D D D B A C A A A HCM2kAvgO: 6 15 0 0 15 15 1 0 7 0 0 **************************

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HCM2kAvq0:

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #16 Em		hington St ************	*****
Cycle (sec):	90	Critical Vol./Cap.(X):	0.484
Loss Time (sec):	17	Average Delay (sec/veh):	32.9
Ontimal Cycle:	9.0	Level Of Service.	C

Loss lime (s	ec):		1 /			Averag	е петя	ay (se	ec/ven)	:	34	2.9
Optimal Cycl	e:		90			Level	Of Se	rvice	:			С

Street Name:			Embarc	adero				I	Washing	ton St	2	
Approach:	Noi	rth B	ound	Soi	uth B	ound	Εċ	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control: Rights: Min. Green:	Pi	rotec	ted	Pi	rotec	ted	Sp.	lit Pl	nase	Sp.	Lit Ph	nase
Rights:		Incl	ude		Incl	ude		Incl	ıde		Incl	ıde
Min. Green:	12	30	0	10	28	0	33	0	33	0	0	0
Y+R:												
Lanes:	2 (0 3	0 0	1 (2	1 0	1 (0 0	0 1	0 (0 (0 0
Volume Modul												
Base Vol:							95	0	183	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	302	1536	0	9	1255	55	95	0	183	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	302	1536	0	9	1255	55	95	0	183	0	0	0
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
Reduced Vol:	302	1536	0	9	1255	55	95	0	183	0	0	0
PCE Adj:							1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	302	1536	0	9	1255	55	95	0	183	0	0	0
Saturation F	low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.91	1.00	0.95	0.90	0.90	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	2.00	3.00	0.00	1.00	2.87	0.13	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:									1615			
Capacity Ana	lysis	Modu	le:									
Vol/Sat:	0.09	0.30	0.00	0.00	0.25	0.25	0.05	0.00	0.11	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:		0.33	0.00	0.11	0.31	0.31	0.37	0.00	0.37	0.00	0.00	0.00
Volume/Cap:	0.65	0.89	0.00	0.04	0.82	0.82	0.14	0.00	0.31	0.00	0.00	0.00
Delay/Veh:							19.2	0.0	20.7	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.1	34.5	0.0	35.8	32.0	32.0	19.2	0.0	20.7	0.0	0.0	0.0
LOS by Move:	D	С	A	D	С	C	В	A	С	A	A	A
			_									_

Note: Queue reported is the number of cars per lane. *****************

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

*****			Operati *****								****	*****
Intersection												
	****			****								
Cycle (sec):			90						o.(X):		0.8	
Loss Time (se			10						ec/veh)	:	3 (0.5
Optimal Cycle			90			Level						C
*****	****	****	*****	****	****	*****	*****	****	*****	****	****	*****
Street Name:			Embarc	adero					MIssi	on St		
Approach:	Noi	rth B	ound	So	uth B	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:			- R	L ·	- T	- R	L -	- T	- R	L -		- R
Control:	I	Permi	tted]	Permi	tted	Sp.	lit Pl	nase	Sp.	lit Pl	nase
Rights:		Incl	ude		Incl	ude	_	Incl	ıde	_	Incl	ıde
Min. Green:	0	52	0	52	52	52	28	0	28	0	0	0
Y+R:	4.0	4.0			4.0		4.0	4.0		4.0	4.0	4.0
Lanes:			0 0			1 0			0 0			0 0
Volume Module			1	1		'	1		ı	1		1
Base Vol:		1800	0	0	1388	179	162	0	87	0	0	0
Growth Adj:		1.00				1.00		1.00	1.00		1.00	1.00
Initial Bse:		1800			1388		162	0	87	0	1.00	0
								1.00	1.00	-	1.00	1.00
User Adj:						1.00					0.93	
PHF Adj:		0.93			0.93			0.93	0.93			0.93
PHF Volume:		1935			1492		174	0	94	0	0	0
Reduct Vol:		0		0		-	0	0	0	0	0	0
Reduced Vol:		1935			1492		174	0		0	0	0
PCE Adj:						1.00		1.00			1.00	1.00
MLF Adj:						1.00			1.00		1.00	1.00
FinalVolume:		1935					174				0	0
Saturation Fi				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:						1900		1900	1900		1900	1900
Adjustment:						0.89					1.00	1.00
Lanes:		2.99				0.24					0.00	0.00
Final Sat.:		3313			3188			0		. 0	-	0
Capacity Anal				0 00	0 47	0 47	0.15	0 00	0.15	0 00	0 00	0 00
Vol/Sat:	0.58			0.00	0.4/	0.4/	U.15	0.00	0.15	0.00	0.00	0.00
Crit Moves:		****										
Green/Cycle:					0.58			0.00			0.00	0.00
Volume/Cap:								0.00			0.00	0.00
Delay/Veh:								0.0	25.9			0.0
User DelAdj:								1.00	1.00		1.00	1.00
AdjDel/Veh:	42.3	42.3					25.9		25.9	0.0	0.0	0.0
LOS by Move:	D	D	A	A	В	B	С	A	С	A	A	A
HCM2kAvgQ:	30	20	0	0	13	19	6	0	6	0	0	0
*****	****	****	*****	****	****	*****	*****	****	*****	****	****	*****

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34th America's Cup Races

Transportation Impact Analysis Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #18 Embarcadero / Harrison St *************************

 Cycle (sec):
 100
 Critical Vol./Cap.(X):
 0.821

 Loss Time (sec):
 10
 Average Delay (sec/veh):
 33.4

 Optimal Cycle:
 100
 Level Of Service:
 C

 Street Name: Embarcadero Harrison St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 0 63 0 0 63 63 27 27 27 0 0 0 0 0 2 0 0 0 0 1 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 0 1388 0 0 1237 310 182 0 169 0 0 Initial Bse: 0 1388 0 0 1237 310 182 0 169 0 0 PHF Volume: 0 1492 0 0 1330 333 196 0 182 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1492 0 0 1330 333 196 0 182 0 0 0 FinalVolume: 0 1492 0 0 1330 333 196 0 182 0 0 _____| Saturation Flow Module: Adjustment: 1.00 0.67 1.00 1.00 0.65 0.92 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 0.00 2.00 0.00 0.00 1.70 0.30 1.00 0.00 1.00 0.00 0.00 Final Sat.: 0 2559 0 0 2111 529 1805 0 1615 0 0 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.58 0.00 0.00 0.63 0.63 0.11 0.00 0.11 0.00 0.00 0.00 **** Crit Moves: Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.00 0.93 0.00 0.00 1.00 1.00 0.40 0.00 0.42 0.00 0.00 0.00 Delay/Veh: 0.0 25.9 0.0 0.0 40.6 40.6 30.4 0.0 30.7 0.0 0.0 0.0 AdjDel/Veh: 0.0 25.9 0.0 0.0 40.6 40.6 30.4 0.0 30.7 0.0 0.0 0.0 LOS by Move: A C A A D D C A C A A A HCM2kAvgO: 0 22 0 0 27 37 5 0 5 0 0 ************************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

******						(Base						
Intersection												
**********	1 CI#	*****	:adero ******	/ Bry	111L 5	L ******	****			****		
		10	20			Cwitia	-1 77-	1 / C = x	- (V) •		0 6	227
Cycle (sec):			10			Critic Averag	ai vo.	.,/cap) · (A) ·		0.0) /
Loss Time (se	,	-	10 95							:	32	
Optimal Cycle						Level						C
			Embarc									
Street Name: Approach:					-+1- D			D.	Bryan		D-	
* *											est bo - T	
Movement:			- R			- R			- R			
Control: Rights:	PI	roteci	_ea	PI	rotec	ted ude	1	ermi	. Lea	1	ermi.	. Lea
-		41					2.0	28				28
	4 0	41	41	10	30	4.0	28	28	28	28	4.0	28
Y+R:												
Lanes:									0 1			
Volume Module	'									1		
Base Vol:		1272	9	12	1325	38	75	6	168	75	62	39
Growth Adj:					1.00			1.00			1.00	1.00
Initial Bse:					1325	38	75		168	75	62	39
User Adj:						1.00		1.00			1.00	1.00
PHF Adj:					0.97			0.97	0.97		0.97	0.97
PHF Volume:			9		1366	39	77	6	173	77		40
Reduct Vol:	0		0	0	0	-	0	0	0	0	0	0
Reduced Vol:					1366	39	77			77		40
PCE Adj:			1.00				1.00				1.00	
MLF Adj:							1.00				1.00	
FinalVolume:										. 77		40
	'											
Saturation Fi				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:			1900				1900				1900	1900
Adjustment:									0.85		0.81	
Lanes:												0.22
Final Sat.:						1615		90			544	342
Capacity Anal				0 00	0 00	0 00	0 07	0 07	0 11	0 10	0 10	0 10
Vol/Sat:		0.3/	0.3/	0.02	0.38 ****	0.02	0.0/	0.0/	0.11	0.12	0.12	0.12
Crit Moves:		0 45	0 45	0 15		0 42	0 00	0 00	0 00	0 00		0 00
Green/Cycle:								0.28			0.28	
Volume/Cap:								0.25			0.42	
Delay/Veh:						17.9	28.2				30.0	30.0
User DelAdj:							1.00				1.00	1.00
AdjDel/Veh:				35.2		17.9		28.2	29.6		30.0	30.0
LOS by Move:					D			C			C	C
HCM2kAvgQ:	3		18	1			2		4	5	5	5
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****

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34th America's Cup Races Transportation Impact Analysis

> Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

******************* Intersection #20 Embarcadero / Brannan St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.508

28.6 Loss Time (sec): 11 Average Delay (sec/veh): Optimal Cycle: 90 Level Of Service: Loss Time (sec): Level Of Service: C

*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Brann	nan St					Embaro	adero		
Approach:	No	rth B	ound	Soi	ith Bo	nund	Ea	ast Bo	ound	We	est Bo	nund
Movement:	T.	– Т	- R	I	- Т	- R	Τ	- Т	– R	T.	- T	– R
Control:	P:	rotec	ted	Pı	rotect	ted	Sp:	lit Pl	nase	Sp:	lit Ph	nase
Rights:		Incl	ude		Incl	ıde	-	Incl	ıde	-	Incl	ıde
Min. Green:	10	37	0	14	37	37	28	28	28	28	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Rights: Min. Green: Y+R: Lanes:	1	0 2	0 0	1 (2	0 1	1 (0 0	0 1	0 (0 0	0 0
Volume Module	∋:											
Base Vol:	49	1300	0	3	1293	273	119	0	15	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	49	1300	0	3	1293	273	119	0	15	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:				0.96				0.96			0.96	
PHF Volume:	51	1354	0	3	1347	284	124	0	16	0	0	0
PHF Volume: Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	1354	0	3	1347	284	124	0	16	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:							1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	51	1354	0	3	1347	284	124	0	16	0	0	0
Saturation Fl	low M	odule	:									
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				0.95				1.00			1.00	
Lanes:						1.00		0.00		0.00		
Final Sat.:	1805	3610	0	1805		1615			1615			
	•											
Capacity Anal												
Vol/Sat:								0.00	0.01	0.00	0.00	0.00
Crit Moves:							***					
Green/Cycle:						0.45		0.00			0.00	
Volume/Cap:				0.01				0.00			0.00	
Delay/Veh:				32.2					21.6			
User DelAdj:									1.00			
AdjDel/Veh:									21.6			
LOS by Move:						В						
HCM2kAvgQ:												0
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #21 Folsom St/Fremont St ************************* Cycle (sec): 75 Critical Vol./Cap.(X): 0.542
Loss Time (sec): 16 Average Delay (sec/veh): 25.9
Optimal Cycle: 77 Level Of Service: C

************************** Street Name: Fremont St (I-80 WB Off Ramp) Folsom St
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 19 19 19 19 19 19 21 21 0 21 21 0 1 0 1 0 1 1 0 1! 0 0 0 1 1 1 0 0 0 0 1 0 Volume Module: Base Vol: 4 185 73 217 39 1 167 405 57 0 95 66 Initial Bse: 4 185 73 217 39 1 167 405 57 0 95 66 PHF Volume: 4 197 78 231 41 1 178 431 61 0 101 70 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 4 197 78 231 41 1 178 431 61 0 101 FinalVolume: 4 197 78 231 41 1 178 431 61 0 101 70 _____| Saturation Flow Module: Adjustment: 0.87 0.87 0.87 0.37 0.58 0.58 0.89 0.89 0.89 1.00 0.95 0.95 Lanes: 0.03 1.41 0.56 1.81 0.18 0.01 0.80 1.93 0.27 0.00 0.59 0.41 Final Sat.: 50 2325 917 1284 206 5 1340 3250 457 0 1059 736 _____| Capacity Analysis Module: Vol/Sat: 0.08 0.08 0.08 0.18 0.20 0.20 0.13 0.13 0.13 0.00 0.10 0.10

Volume/Cap: 0.34 0.34 0.34 0.73 0.82 0.82 0.49 0.49 0.49 0.00 0.35 0.35 Delay/Veh: 24.1 24.1 24.1 33.7 41.6 41.6 23.7 23.7 23.7 0.0 22.9 22.9 AdjDel/Veh: 24.1 24.1 24.1 33.7 41.6 41.6 23.7 23.7 23.7 0.0 22.9 22.9 LOS by Move: C C C C D D C C A C C

HCM2kAvgO: 3 3 3 3 5 5 5 5 0 3 3

Green/Cycle: 0.25 0.25 0.25 0.25 0.25 0.25 0.27 0.27 0.27 0.00 0.27 0.27

**** **** ****

Note: Queue reported is the number of cars per lane.

Crit Moves:

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************* Intersection #22 King St/3rd St *******************

Loss Time (sec): 10 Average Delay (sec/veh): 77.0 Optimal Cycle: 168 Level Of Service: E

************************** Street Name: 3rd St King St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Split Phase Split Phase Protected Protected Ovl Include Include Include Min. Green: 26 26 26 0 0 0 20 46 46 13 39 39 0 1 2 1 1 0 0 0 0 0 3 0 1 1 0 2 0 1 1 0 -----| Base Vol: 76 678 260 0 0 0 835 954 14 143 1210 40 Initial Bse: 76 678 260 0 0 0 835 954 14 143 1210 40 PHF Volume: 78 699 268 0 0 0 861 984 14 147 1247 41 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 Ω Reduced Vol: 78 699 268 0 0 0 861 984 14 147 1247 41 FinalVolume: 78 699 268 0 0 0 861 984 14 147 1247 41 _____| Saturation Flow Module: Adjustment: 0.87 0.87 0.87 1.00 1.00 1.00 0.92 0.95 0.95 0.92 0.57 0.95 Lanes: 0.37 3.35 1.28 0.00 0.00 0.00 3.00 1.97 0.03 2.00 1.96 0.04 Final Sat.: 616 5500 2109 0 0 5253 3551 52 3502 2113 70 _____| Capacity Analysis Module: Vol/Sat: 0.13 0.13 0.13 0.00 0.00 0.00 0.16 0.28 0.28 0.04 0.59 0.59 Crit Moves: **** *** **** Green/Cycle: 0.26 0.26 0.40 0.00 0.00 0.00 0.20 0.50 0.50 0.14 0.44 0.44 Volume/Cap: 0.49 0.49 0.32 0.00 0.00 0.00 0.82 0.56 0.56 0.30 1.34 1.34 Delay/Veh: 31.5 31.5 20.6 0.0 0.0 43.5 17.7 17.7 38.9 189 188.7 AdjDel/Veh: 31.5 31.5 20.6 0.0 0.0 43.5 17.7 17.7 38.9 189 188.7 LOS by Move: C C C A A A D B B D F F HCM2kAvgO: 6 6 5 0 0 0 11 11 11 2 42 69

************************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************* Intersection #23 King St/4th St

****************** Cycle (sec): 100 Critical Vol./Cap.(X): 0.616 Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 125 Level Of Service: 64.6 *************************

Street Name: King St 4th St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Protected Protected Include Include Include Include Rights: Min. Green: 28 28 28 28 28 28 10 42 42 14 45 45 0 1 0 0 1 1 0 1 1 1 1 0 2 1 0 1 0 1 1 0 -----| Volume Module: Base Vol: 8 52 50 56 304 432 116 1696 17 24 1227 34

Initial Bse: 8 52 50 56 304 432 116 1696 17 24 1227 PHF Volume: 8 55 53 59 320 455 122 1785 18 25 1292 Reduct Vol: 0 0 Ω 0 0 0 0 0 Ω 0 0 Ω Reduced Vol: 8 55 53 59 320 455 122 1785 18 25 1292 36 FinalVolume: 8 55 53 59 320 455 122 1785 18 25 1292 36 _____|

Saturation Flow Module: Adjustment: 0.99 0.99 0.85 0.95 0.87 0.87 0.95 0.91 0.91 0.95 0.95 Lanes: 0.13 0.87 1.00 1.00 1.24 1.76 1.00 2.97 0.03 1.00 1.95 0.05 Final Sat.: 252 1635 1615 1805 2040 2899 1805 5130 51 1805 3499 97 _____|

Capacity Analysis Module: Vol/Sat: 0.03 0.03 0.03 0.03 0.16 0.16 0.07 0.35 0.35 0.01 0.37 0.37 Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.08 0.34 0.34 0.11 0.37 0.37 Volume/Cap: 0.15 0.15 0.15 0.15 0.70 0.70 0.85 1.04 1.04 0.12 1.00 1.00

Delay/Veh: 39.1 39.1 39.1 39.1 46.7 46.7 91.1 72.9 72.9 50.3 65.0 65.0 AdjDel/Veh: 39.1 39.1 39.1 46.7 46.7 91.1 72.9 72.9 50.3 65.0 65.0 LOS by Move: D D D D D D F E E D E E HCM2kAvgO: 2 2 2 10 10 7 34 34 1 34 34 *******************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

Intersection #24 16th St/3rd St

************************* Loss Time (sec): 10 Average Delay (sec/veh): 21.3
Optimal Cycle: 100 Level Of Service: C

Street Name: 3rd St 16th St Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R -----| Control: Protected Permitted Permitted Permitted Include Include Include Include Min. Green: 20 56 56 31 31 31 34 34 34 34 34 34 2 0 1 1 0 1 0 1 1 0 1 0 1 1 0 0 1 0 1 0 -----|

Volume Module: Base Vol: 231 555 0 7 286 73 87 9 177 0 9 5

Initial Bse: 231 555 0 7 286 73 87 9 177 0 9 5 PHF Volume: 266 638 0 8 329 84 100 10 203 0 10 6 0 0 Reduct Vol: 0 0 Ω 0 0 0 0 0 0 Reduced Vol: 266 638 0 8 329 84 100 10 203 0 10

FinalVolume: 266 638 0 8 329 84 100 10 203 0 10 6 _____|

Saturation Flow Module:

Adjustment: 0.92 0.95 0.95 0.34 0.92 0.92 0.75 0.81 0.81 0.95 0.90 0.90 Lanes: 2.00 2.00 0.00 1.00 1.59 0.41 1.00 1.00 1.00 0.00 1.29 0.71 Final Sat.: 3502 3610 0 640 2790 712 1433 1547 1547 0 2195 1220 _____|

Capacity Analysis Module:

Vol/Sat: 0.08 0.18 0.00 0.01 0.12 0.12 0.07 0.01 0.13 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.25 0.56 0.00 0.31 0.31 0.31 0.34 0.34 0.34 0.00 0.34 0.34 Volume/Cap: 0.30 0.32 0.00 0.04 0.38 0.38 0.21 0.02 0.39 0.00 0.01 0.01 Delay/Veh: 30.6 11.8 0.0 24.2 27.2 27.2 23.6 21.9 25.5 0.0 21.9 21.9

AdjDel/Veh: 30.6 11.8 0.0 24.2 27.2 27.2 23.6 21.9 25.5 0.0 21.9 21.9 LOS by Move: C B A C C C C C A C C HCM2kAvgO: 3 5 0 0 5 5 2 0 5 0 0

************************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) *************

Intersection #25 Cesar Chavez St/3rd St

************************* Cycle (sec): 100 Critical Vol./Cap.(X): 1.193
Loss Time (sec): 12 Average Delay (sec/veh): 22.7
Optimal Cycle: 97 Level Of Service: C ************************

Street Name: 3rd St Cesar Chavez St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R

Control: Permit+Prot Permit+Prot Permitted Permitted Include Include Include Include Rights: Min. Green: 15 35 35 10 30 30 5 40 40 30 30 30 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 0 1 0 1 -----|

Volume Module: Base Vol: 223 524 16 17 321 96 96 179 154 13 195 18 Initial Bse: 223 524 16 17 321 96 96 179 154 13 195

PHF Volume: 228 535 16 17 328 98 98 183 157 13 199 18 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Ω Reduced Vol: 228 535 16 17 328 98 98 183 157 13 199 18

FinalVolume: 228 535 16 17 328 98 98 183 157 13 199 18 _____|

Saturation Flow Module:

Adjustment: 0.64 0.95 0.95 0.32 0.92 0.92 0.60 0.88 0.88 0.87 0.87 Lanes: 1.00 1.94 0.06 1.00 1.54 0.46 1.00 1.08 0.92 0.11 1.73 0.16 Final Sat.: 1219 3489 107 615 2684 803 1132 1807 1554 191 2865 264 _____|

Capacity Analysis Module:

Vol/Sat: 0.19 0.15 0.15 0.03 0.12 0.12 0.09 0.10 0.10 0.07 0.07 0.07 Crit Moves: **** **** **** Volume/Cap: 0.36 0.41 0.41 0.04 0.41 0.41 0.22 0.25 0.25 0.17 0.17 Delay/Veh: 19.5 23.4 23.4 20.5 28.2 28.2 19.9 20.1 20.1 19.4 19.4 19.4

AdjDel/Veh: 19.5 23.4 23.4 20.5 28.2 28.2 19.9 20.1 20.1 19.4 19.4 19.4 LOS by Move: B C C C C C B C C B B B HCM2kAvgO: 4 7 7 0 5 5 2 4 4 2 2 2 ******

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************* Intersection #26 Cesar Chavez St/Illinois St

************************* Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 100 Level Of Service: 21.5

Street Name: Illinois St Cesar Chavez St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 20 20 20 20 20 20 71 71 71 71 71 71 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 130 84 3 13 62 37 35 69 107 1 61 24

Initial Bse: 130 84 3 13 62 37 35 69 107 1 61 24 PHF Volume: 149 97 3 15 71 43 40 79 123 1 70 28 Reduct Vol: 0 0 Ω 0 0 0 0 0 0 0 0 Ω Reduced Vol: 149 97 3 15 71 43 40 79 123 1 70 28 FinalVolume: 149 97 3 15 71 43 40 79 123 1 70 28 _____|

Saturation Flow Module: Adjustment: 0.65 1.00 1.00 0.68 0.94 0.94 0.79 0.79 0.79 0.96 0.96 0.96 Lanes: 1.00 0.97 0.03 1.00 0.63 0.37 0.34 0.66 1.00 0.01 0.71 0.28 Final Sat.: 1233 1825 65 1296 1123 670 503 993 1496 21 1295 510 _____|

Capacity Analysis Module: Vol/Sat: 0.12 0.05 0.05 0.01 0.06 0.06 0.08 0.08 0.08 0.05 0.05 0.05 Crit Moves: **** **** Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.71 0.71 0.71 0.71 0.71 Volume/Cap: 0.61 0.26 0.26 0.06 0.32 0.32 0.11 0.11 0.12 0.08 0.08 0.08 Delay/Veh: 40.7 34.2 34.2 32.5 34.7 34.7 4.6 4.6 4.6 4.5 4.5 AdjDel/Veh: 40.7 34.2 34.2 32.5 34.7 34.7 4.6 4.6 4.6 4.5 4.5 LOS by Move: D C C C C A A A A A A HCM2kAvgO: 5 3 3 0 3 3 1 1 1 1 1 1

************************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

************************* Intersection #27 Lincoln Blvd/25th St/El Camino del Mar ****************** Cycle (sec): 1 Critical Vol./Cap.(X): 0.591
Loss Time (sec): 0 Average Delay (sec/veh): 13.5
Optimal Cycle: 0 Level Of Service: B ************************ Street Name: 25th St El Camino del Mar (eb) / Lincoln Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 1 0 0 1 0 -----| Volume Module: Base Vol: 17 24 225 14 20 2 1 221 23 317 208 5 Initial Bse: 17 24 225 14 20 2 1 221 23 317 208 5 FinalVolume: 18 26 239 15 21 2 1 235 24 337 221 5 _____|__| Saturation Flow Module: Lanes: 0.06 0.09 0.85 0.39 0.55 0.06 0.01 0.90 0.09 1.00 0.98 0.02 Final Sat.: 40 57 536 193 275 28 3 563 59 571 607 15 _____| Capacity Analysis Module: Vol/Sat: 0.45 0.45 0.45 0.08 0.08 0.08 0.42 0.42 0.42 0.59 0.36 0.36 Crit Moves: *** *** *** *** LOS by Move: B B B A A A B B B C B B A A 12.2 9.9 ApproachDel: 12.2 9.9 12.2 1.00 1.00 14.9 Delay Adj: 1.00 ApprAdjDel: 12.2 9.9 12.2 LOS by Appr: B A B 14.9 В B AllWayAvgQ: 0.7 0.7 0.7 0.1 0.1 0.6 0.6 0.6 1.3 0.5 0.5

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Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

2000 HCM 4-Way Stop Method (Base Volume Alternative)	
Intersection #28 Lake St/14th Ave	
Cycle (sec): 100	
Loss Time (sec): 0 Average Delay (sec/veh): 11.4 Optimal Cycle: 0 Level Of Service: B	
Optimal Cycle: 0 Level Of Service: B	
*************************	:***
Street Name: 14th Ave Lake St	
Approach: North Bound South Bound East Bound West Bound	i
Movement: $L-T-R$ $L-T-R$ $L-T-R$	R
Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include	
Min. Green: 0 0 0 0 0 0 0 0 0 0	-
Lanes: 0 0 1! 0 0 1 0 0 0 0 0 1! 0 0 0 1 0 0	
Volume Module:	
Base Vol: 3 12 18 8 0 0 30 264 1 73 298	27
	.00
Initial Bse: 3 12 18 8 0 0 30 264 1 73 298	27
	.00
	.97
PHF Volume: 3 12 19 8 0 0 31 272 1 75 307	28
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0	0
Reduced Vol: 3 12 19 8 0 0 31 272 1 75 307	28
	.00
	.00
FinalVolume: 3 12 19 8 0 0 31 272 1 75 307	28
Saturation Flow Module:	
	.00
	.00
	366
Capacity Analysis Module:	
	.03
Crit Moves: **** **** ****	
	7.0
	.00
	7.0
LOS by Move: A A A A * * B B B B	A
ApproachDel: 8.4 8.8 10.4 12.5	
Delay Adj: 1.00 1.00 1.00	
ApprAdiDel: 8.4 8.8 10.4 12.5	

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A

AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.0 0.6 0.6 1.1 1.1 0.0

В

В

LOS by Appr:

A

Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

Cycle (sec):		10	0.0							0.	
Loss Time (s	ec):		0 0 0			Averag	re Del	ay (se	ec/veh)	:	9.7
Optimal Cycl	e:		0			Level					Α
Street Name:			15th		****	*****	****	****	Lake		*****
Approach:					ıth Bo	nind	E.	ast Bo			ound
Movement:											
Control:	St	op Si	ign .	St	op S	i.gn .	S	top S:	ign .	Stop S	ian
Rights: Min. Green:		Incl	ıde		Incl	ıde		Incl	ıde	Incl	ude
Min. Green:	0	0	0	0	0	0	0	0	0	0 0	0
Lanes:	0 (1!	0 0	0 0	1!	0 0	0	1!	0 0	0 0 1!	0 0
Volume Module											
Base Vol:							4	207	4		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
Initial Bse:	7	5	19	31	26	32	4	207	4	17 263	4
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
PHF Adj:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91 0.91	0.91
PHF Volume:						35		227		19 289	
Reduct Vol:							0	0	0	0 0	0
Reduced Vol:	8	5	21	34	29	35	4	227	4	19 289	4
PCE Adj:											
MLF Adj:											
FinalVolume:	8	5	21	34	29	35	4		4	19 289	4
Saturation F				1 00	1 00	1 00	1 00	1 00	1 00	1 00 1 00	1 00
Adjustment: Lanes:											
Final Sat.:											
Capacity Ana				1		'	1		1	1	1
Vol/Sat:				0.15	0.15	0.15	0.31	0.31	0.31	0.40 0.40	0.40
Crit Moves:			****		***			***		****	
Delay/Veh:		8.2	8.2	8.8	8.8	8.8	9.5	9.5	9.5	10.3 10.3	10.3
Delay Adi:											1.00
AdjDel/Veh:							9.5				
								A		в в	В
LOS by Move: ApproachDel:		8.2			8.8			9.5		10.3	
Delay Adj:		1.00						1.00		1.00	
ApprAdjDel:		8.2			8.8			9.5		10.3	
Delay Adj: ApprAdjDel: LOS by Appr:		A			A			A		В	
AllWayAvgQ:	0.0	0.0	0.0	0.1			0.4	0.4	0.4	0.6 0.6	0.6
*****							****	****	*****	*****	*****

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection							****	*****	*****	****	*****	*****
Cycle (sec): Loss Time (s Optimal Cycl	ec):		0			Averac	re Dela	av (se	ec/veh)	:	16	5.7
Optimal Cycl	e:		0			Level	Of Se	rvice:				С
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:		1	Arguell	o Blv	d				Jacks	on St		
Approach: Movement:	No	rth Bo	ound	Soi	uth B	ound	Εä	ast Bo	ound	We	est Bo	ound
Movement:	L	– T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	S	top S:	ign	St	top S	ign	St	top Si	ign	St	op Si	Lgn
Rights:		Incl	ude		Incl	ude		Inclu	ıde		Inclu	ıde
Min. Green:												
Lanes:												
Volume Modul												
Base Vol:				13	450	0	0	0	0	85	0	19
Growth Adj:						1.00						
Initial Bse:				43		0		0				
User Adj:					1.00				1.00			
PHF Adj:					0.89				0.89			
PHF Volume:				48	506	0	0	0	0	96	0	55
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:												
FinalVolume:						0						
Saturation F												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes: Final Sat.:	0.00	0.87	0.13	0.09	0.91	0.00	0.00	0.00	0.00	0.63	0.00	0.37
Final Sat.:												
Capacity Ana												
Vol/Sat:				0.75	0.75	V V V V	VVVV	VVVV	VVVV	0 27	xxxx	0.27
Crit Moves:	AAAA	****	0.50	0.75	****	AAAA	AAAA		AAAA	****		0.2/
Delay/Veh:	0.0	13.7	13.7	20.6	20.6	0.0	0.0	0.0	0.0	10.7	0.0	10.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	
AdjDel/Veh:						0.0	0.0				0.0	10.7
TOG M							-	-	+	Б	-	D

******************** Note: Queue reported is the number of cars per lane. *****************

AllWayAvgQ: 1.1 1.1 1.1 2.6 2.6 2.6 0.0 0.0 0.0 0.3 0.3 0.3

* *

XXXXXX

XXXXX

XXXXXX

* B * B

10.7

1.00

10.7

В

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1.00

20.6

С

20.6

LOS by Move: * B B C C

1.00

13.7

В

13.7

ApproachDel:

Delay Adj:

ApprAdjDel:

LOS by Appr:

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

******									ernativ		****	*****
Intersection												
Cycle (sec): Loss Time (se Optimal Cycle		10	00			Critic	al Vol	l./Cap).(X):		0.	716
Loss Time (se	ec):		0			Averag	e Dela	ay (se	ec/veh)	:	15	5.2
Optimal Cycle	e:		0			Level	Of Se	rvice:				C
*****												*****
Street Name:			residi						Pacifi			
Approach:	No	rth Bo	ound	Soi	ath Bo	ound	Εa	ast Bo	ound	W∈	est Bo	ound
Movement:						- R						
Control: Rights:	St	top Si	gn	St	top Si	Lgn	St	top Si	.gn	St	op S:	ign
Rights:		Inclu	ıde		Incl	ıde		Inclu	ıde		Incl	ıde
Min. Green:												
Lanes:												
Volume Module												
Base Vol:	5	353	8	43	452	30	5	8	4	23	18	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:							5	8	4	23	18	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95			0.95	0.95	0.95
PHF Volume:	5	372	8	45	476	32	5	8	4	24	19	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	5	372	8	45	476	32	5	8	4	24	19	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F	low Mo	odule:	:									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:												
Final Sat.:												
Capacity Ana:	lvsis	Modu]	le:									
Vol/Sat:	0.52	0.52	0.52	0.72	0.72	0.72	0.03	0.03	0.03	0.15	0.15	0.15
Crit Moves:						****		***			****	
Delay/Veh:				18.0	18.0	18.0					9.6	9.6
Delay Adj:												
AdjDel/Veh:												9.6
LOS by Move:	В	В	В	С								
ApproachDel:		12.7			18.0			9.2			9.6	
Delay Adj:		1.00			1.00						1.00	
		12.7			18 0			9.2			9.6	
ApprAdjDel: LOS by Appr:		В			C			A			A	
AllWayAvgQ:	1.0	1.0	1.0	2.2	2.2	2.2	0.0			0.1	0.1	0.1

*****	****	****	*****	****	****	*****	****	*****	*****	*****	****	*****

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34th America's Cup Races Transportation Impact Analysis

Saturation Flow Module:

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection							++++			+++++		
Cycle (sec):	,		0					-	o.(X):			
Loss Time (se	ec):		0			_		4	ec/veh)	:	19	9.3
Optimal Cycle			0			Level						С
******	*****	***	****	****	****	*****	****	****	*****	*****	****	****
Street Name:			Lyon	St					Lomba	rd St		
Approach:	Nort	h Bo	und	Sout	th Bo	ound	Εá	ast Bo	ound	W∈	st Bo	und
Movement:	L -	Τ	- R	L -	T	- R	L -	- T	- R	L -	- T	- R
Control:												
Rights:	I	nclu	ıde		Inclu	ıde		Incl	ıde		Inclu	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 (1!	0 0	0 0	1!	0 0
							I					
Volume Module	∋:								·			
Base Vol:	146	22	7	22	56	200	164	180	94	5	228	19
Growth Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	146	22	7	22	56	200	164	180	94	5	228	19
User Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92 0	.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	159	24	8	24	61	217	178	196	102	5	248	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	24	8	24	61	217	178	196	102	5	248	21
PCE Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lanes: 0.83 0.13 0.04 0.08 0.20 0.72 0.37 0.42 0.21 0.02 0.90 0.08 Final Sat.: 385 58 18 43 109 390 222 244 127 10 478 40 _____| Capacity Analysis Module: Vol/Sat: 0.41 0.41 0.41 0.56 0.56 0.56 0.80 0.80 0.80 0.52 0.52 0.52 Delay/Veh: 13.7 13.7 13.7 15.2 15.2 15.2 26.7 26.7 26.7 14.9 14.9 14.9 AdjDel/Veh: 13.7 13.7 13.7 15.2 15.2 15.2 26.7 26.7 26.7 14.9 14.9 14.9 LOS by Move: B B B C C C D D B B B ApproachDel: 13.7 15.2 26.7 14.9 Delay Adj: 1.00 1.00 1.00 ApprAdjDel: 13.7 15.2 26.7 14.9 LOS by Appr: B C D B

FinalVolume: 159 24 8 24 61 217 178 196 102 5 248 21 -----|

AllWayAvgo: 0.5 0.5 0.5 0.9 0.9 0.9 2.9 2.9 2.9 0.8 0.8 0.8 ******************* Note: Queue reported is the number of cars per lane. ******************

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Theresection #33 Lombard St/Divisadero St ***********************************
Cycle (sec): 90
Street Name:
Street Name: Divisadero St Lombard St Approach: North Bound South Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Rights: Include Include Include Min. Green: 27 27 27 27 27 27 27 54 54 54 54 54 54 54 54 54 54 54 54 54
Street Name: Divisadero St Lombard St Approach: North Bound South Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Rights: Include Include Include Min. Green: 27 27 27 27 27 27 27 54 54 54 54 54 54 54 54 54 54 54 54 54
Street Name:
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Movement:
Control:
Control: Rights:
Rights: Include
Y+R:
Y+R:
Lanes: 1 0 0 1 0 1 0 0 1 0 0 1 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 0 1 1 1 1 1 0
Volume Module: Base Vol: 179 153 27 67 140 34 0 1327 172 1 1975 120 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Volume Module: Base Vol: 179 153 27 67 140 34 0 1327 172 1 1975 120 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 179 153 27 67 140 34 0 1327 172 1 1975 120 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 179 153 27 67 140 34 0 1327 172 1 1975 120 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98
PHF Adj: 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98
PHF Volume: 183 156
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 183 156
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 183 156 28 68 143 35 0 1354 176 1 2015 122
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.58 0.98 0.98 0.57 0.97 0.97 0.91 0.63 0.89 0.85 0.59 0.85 Lanes: 1.00 0.85 0.15 1.00 0.80 0.20 0.00 2.75 0.25 0.01 2.87 0.12 Final Sat.: 1104 1579 279 1087 1484 360 0.3272 424 2 3243 197
Lanes: 1.00 0.85 0.15 1.00 0.80 0.20 0.00 2.75 0.25 0.01 2.87 0.12 Final Sat.: 1104 1579 279 1087 1484 360 0 3272 424 2 3243 197
Final Sat.: 1104 1579 279 1087 1484 360 0 3272 424 2 3243 197
Capacity Analysis Module: Vol/Sat: 0.17 0.10 0.10 0.06 0.10 0.10 0.00 0.41 0.41 0.62 0.62 0.62 Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.00 0.60 0.6
Vol/Sat: 0.17 0.10 0.10 0.06 0.10 0.10 0.00 0.41 0.41 0.62 0.62 0.62 Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.00 0.60 0.6
Vol/Sat: 0.17 0.10 0.10 0.06 0.10 0.10 0.00 0.41 0.41 0.62 0.62 0.62 Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.00 0.60 0.6
Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.00 0.60 0.6
Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.00 0.60 0.6
Volume/Cap: 0.55 0.33 0.33 0.21 0.32 0.32 0.00 0.69 0.69 1.04 1.04 1.04
4.
AdjDel/Veh: 28.4 24.8 24.8 23.9 24.7 24.7 0.0 13.2 13.2 47.7 47.7 47.7
LOS by Move: C C C C C A B B D D D
HCM2kAvgQ: 5 4 4 2 4 4 0 11 15 34 24 34

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

*********** Intersection #34 Lombard St/Fillmore St

Stroot Namo: Fillmore St

************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.795
Loss Time (sec): 9 Average Delay (sec/veh): 33.8
Optimal Cycle: 90 Level Of Service: C

Iomband Ct

Street Name:		1	TITIMOT	e st		LOMBALG SC							
Approach:	Nor	th Bou	and	Sou	th Bo	ound	Eas	t Bou	nd	Wes	st Boı	ınd	
Movement:	L -	Т -	- R	L -	T	- R	L -	Т -	R	L -	Т -	- R	
Control:	P	ermitt	ted	P	ermit	ted	Pe	rmitt	ed	P€	ermitt	ted	
Rights:		Includ	de		Inclu	ıde	I	nclud	e]	Includ	de	
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1 0	0 3	1 0	0 1	0	1 0	0 1	1 1	0	0 1	1 1	L 0	
Volume Module	:												
Base Vol:	47	126	36	14	199	54	4 1	067	65	3 1	1900	65	

Initial Bse: 47 126 36 14 199 54 4 1067 65 3 1900 65 PHF Volume: 49 133 38 15 209 57 4 1123 68 3 2000 68 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 49 133 38 15 209 57 4 1123 68 3 2000 68 FinalVolume: 49 133 38 15 209 57 4 1123 68 3 2000 68 _____|

Saturation Flow Module: Adjustment: 0.56 0.97 0.97 0.86 0.86 0.86 0.84 0.57 0.84 0.85 0.88 Lanes: 1.00 0.78 0.22 0.10 1.50 0.40 0.01 2.87 0.12 0.01 2.93 0.06 Final Sat.: 1070 1429 408 172 2448 664 12 3121 190 5 3210 110

_____| Capacity Analysis Module: Vol/Sat: 0.05 0.09 0.09 0.09 0.09 0.09 0.36 0.36 0.36 0.62 0.62 0.62 Crit Moves: **** Volume/Cap: 0.15 0.31 0.31 0.29 0.29 0.29 0.60 0.60 0.60 1.04 1.04 1.04 Delay/Veh: 23.3 24.6 24.6 24.3 24.3 24.3 11.8 11.8 11.8 48.9 48.9 48.9

AdjDel/Veh: 23.3 24.6 24.6 24.3 24.3 24.3 11.8 11.8 11.8 48.9 48.9 48.9 LOS by Move: C C C C C B B B D D D HCM2kAvgO: 1 4 4 3 3 3 11 7 11 40 28 40

****************** Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************* Intersection #35 Bay St/Laguna St

**************** Loss Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 18.4 *************************

Street Name: Laguna St Bay St Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Permitted Permitted Include Include Include Ovl Rights: Min. Green: 18 18 18 34 34 34 28 28 28 28 28 28 0 0 1! 0 0 1 0 1! 0 0 0 0 2 0 1 0 1 0 0 2 -----| Volume Module: Base Vol: 173 0 34 529 151 13 0 210 104 19 348 1208

Initial Bse: 173 0 34 529 151 13 0 210 104 19 348 1208 PHF Volume: 180 0 35 551 157 14 0 219 108 20 363 1258 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 180 0 35 551 157 14 0 219 108 20 363 1258 FinalVolume: 180 0 35 551 157 14 0 219 108 20 363 1258 _____|

Saturation Flow Module: Adjustment: 0.94 1.00 0.94 0.96 0.96 0.96 1.00 0.95 0.85 0.98 0.98 0.75 Lanes: 0.84 0.00 0.16 1.62 0.35 0.03 0.00 2.00 1.00 0.05 0.95 2.00 Final Sat.: 1491 0 293 2950 643 55 0 3610 1615 96 1767 2842 _____|

Capacity Analysis Module: Vol/Sat: 0.12 0.00 0.12 0.19 0.24 0.24 0.00 0.06 0.07 0.21 0.21 0.44 Crit Moves: **** Green/Cycle: 0.20 0.00 0.20 0.38 0.38 0.38 0.00 0.31 0.31 0.31 0.69 Volume/Cap: 0.60 0.00 0.60 0.49 0.65 0.65 0.00 0.19 0.22 0.66 0.66 0.64 Delay/Veh: 35.7 0.0 35.7 21.7 24.4 24.4 0.0 22.8 23.1 29.7 29.7 8.6

AdjDel/Veh: 35.7 0.0 35.7 21.7 24.4 24.4 0.0 22.8 23.1 29.7 29.7 8.6 LOS by Move: D A D C C C A C C A HCM2kAvgO: 6 0 6 7 11 11 0 2 2 9 9 11 ******

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #36 Bay St/Van Ness Ave												
Cycle (sec): Loss Time (sec) Optimal Cycle		9	0			Critic	al Vo	l./Cap	o.(X):		0.	596
Loss Time (s	ec):	1	.0			Average	e Dela	av (se	ec/veh)	:	1	5.8
Optimal Cvcl	e:	9	0			Level	Of Se	rvice	:			В
*****	****	*****	****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Van Ne	ss Ave	=				Bav	St		
Street Name: Approach:	No	rth Bo	und	Soi	ıth Bo	ound	Ea	ast Bo	ound	We	est B	ound
Movement:	L	- T	- R	L -	- Т	- R	L -	- T	- R	L -	- T	- R
Control: Rights:		Inclu	ıde		Inclu	ıde		Incl	ıde		Incl	ude
Min. Green:		2.3	23	2.3	2.3	2.3	57	57	57	57	57	57
Y+R:												
Lanes:												
Volume Modul	e:								·			
			122	5	329	191	9	581	114	39	1242	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:			122		329	191		581			1242	
User Adj:			1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
PHF Adj:			0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:			124	5	336	195	9	593	116		1267	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	21
Reduced Vol:	74	177	124	5	336	195	9	593	116	40	1267	21
PCE Adj:						1.00		1.00			1.00	
MLF Adj:				1.00		1.00		1.00			1.00	
FinalVolume:									116			
Saturation F									·			
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.38	0.85	0.85	0.81	0.81	0.81	0.44	0.44	0.43	0.87	0.87	0.87
Lanes:	1.00	2.00	1.00	0.03	1.97	1.00	0.03	1.97	1.00	0.06	1.91	0.03
Final Sat.:	718	3244	1622	46	3016	1531	26	1662	808	99	3152	53
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.10	0.05	0.08	0.11	0.11	0.13	0.36					
Crit Moves:						****					****	
Green/Cycle:	0.26	0.26	0.26	0.26	0.26	0.26	0.63	0.63	0.63	0.63	0.63	0.63
Volume/Cap:	0.41	0.21	0.30	0.44	0.44	0.50	0.56	0.56	0.23	0.63	0.63	0.63
Delay/Veh:	29.3	26.5	27.2	28.3	28.3	28.9	10.1	10.1	7.3	10.8	10.8	10.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat:	718 lysis 0.10 0.26 0.41 29.3	3244 Modul 0.05 0.26 0.21 26.5	1622 e: 0.08 0.26 0.30 27.2	46 0.11 0.26 0.44 28.3	3016 0.11 0.26 0.44 28.3	1531 0.13 **** 0.26 0.50 28.9	26 0.36 0.63 0.56 10.1	0.36 0.63 0.56 10.1	808 0.14 0.63 0.23 7.3	99 0.40 0.63 0.63 10.8	0.40 **** 0.63 0.63 10.8	53 0.40 0.63 0.63 10.8

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Note: Queue reported is the number of cars per lane.

AdjDel/Veh: 29.3 26.5 27.2 28.3 28.3 28.9 10.1 10.1 7.3 10.8 10.8 10.8

LOS by Move: C C C C C B B B B B

HCM2kAvgO: 2 2 3 5 5 6 5 5 1 12 12 12

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) *************** Intersection #37 Bav St/Hvde St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.382 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: ************************* Street Name: Hyde St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Include Include Include Include Rights: Min. Green: 16 16 16 16 16 16 67 67 67 0 67 67 0 0 0 1 0 0 0 1! 0 0 0 1 0 1 0 0 0 2 1 0 Volume Module: Base Vol: 0 36 10 2 69 19 2 681 32 0 1365 21 Initial Bse: 0 36 10 2 69 19 2 681 32 0 1365 PHF Volume: 0 40 11 2 77 21 2 757 36 0 1517 23 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 40 11 2 77 21 2 757 36 0 1517 23 FinalVolume: 0 40 11 2 77 21 2 757 36 0 1517 23 _____|__| Saturation Flow Module: Adjustment: 1.00 0.97 0.97 0.97 0.97 0.90 0.90 0.90 1.00 0.91 0.91 Lanes: 0.00 0.78 0.22 0.02 0.77 0.21 0.01 1.90 0.09 0.00 2.95 0.05 Final Sat.: 0 1444 401 41 1410 388 10 3247 153 0 5098 78 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.03 0.03 0.05 0.05 0.23 0.23 0.23 0.00 0.30 0.30 *** Crit Moves: Green/Cycle: 0.00 0.18 0.18 0.18 0.18 0.18 0.74 0.74 0.74 0.00 0.74 0.74 Volume/Cap: 0.00 0.16 0.16 0.31 0.31 0.31 0.31 0.31 0.31 0.00 0.40 0.40 Delay/Veh: 0.0 31.5 31.5 32.7 32.7 32.7 3.9 3.9 3.9 0.0 4.3 4.3 AdjDel/Veh: 0.0 31.5 31.5 32.7 32.7 32.7 3.9 3.9 3.9 0.0 4.3 4.3 LOS by Move: A C C C C A A A A A HCM2kAvgO: 0 1 1 3 3 3 4 4 4 0 6 6 **************************

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Existing Weekday PM

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)														

<pre>Intersection #38 Alexander Ave/Bunker Rd ************************************</pre>														
Average Delay	/ (sed	c/veh;): *****	3.7	*****	Worst	Case I	Level	Of Sei	rvice:	B[12	2.3]		
Street Name:			Bunke	er Rd				i	Alexano	der Ave	€			
Approach:	No	rth Bo	ound – R	Soi	ıth Bo	ound	Εa	ast Bo	ound	We	est Bo	ound		
Movement:														
Control:		contro	olled	Und	contro	olled	St	top S:	ign	 St	op Si	ign .		
Rights:			ıde											
Lanes:			0 0											
Volume Module														
Volume Module: Base Vol: 54 237 0 0 299 17 37 0 176 0 0 0														
Growth Adj:	Base Vol: 54 237 0 0 299 17 37 0 176 0 0 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Initial Bse:	54	237	0	0	299	17	37	0	176	0	0	0		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95		
PHF Volume:	57	249	0	0	315	18	39	0	185	0	0	0		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
FinalVolume:	57	249	0	0	315	18	39	0	185	0	0	0		
Critical Gap	Modu:	le:												
Critical Gp:	4.1	XXXX	XXXXX	XXXXX	xxxx	xxxxx	6.4	XXXX	6.2	XXXXX	XXXX	XXXXX		
FollowUpTim:	2.2	XXXX	XXXXX	XXXXX	xxxx	XXXXX	3.5	XXXX	3.3	XXXXX	XXXX	XXXXX		
Capacity Modu														
Cnflict Vol:		xxxx	xxxxx	xxxx	xxxx	xxxxx	687	xxxx	324	xxxx	xxxx	xxxxx		
Potent Cap.:												XXXXX		
Move Cap.:												XXXXX		
Volume/Cap:								xxxx				XXXX		
Level Of Serv	ice 1	4odul	∍:											
2Way95thQ:	0.1	XXXX	XXXXX	XXXX	xxxx	XXXXX	0.3	xxxx	1.0	XXXX	XXXX	XXXXX		
Control Del:								XXXX		XXXXX	XXXX	XXXXX		
LOS by Move:	A	*	*	*	*	*	В	*	В	*	*	*		
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT		
Shared Cap.:	XXXX	xxxx	XXXXX	XXXX	XXXX	XXXXX	XXXX	xxxx	XXXXX	XXXX	XXXX	XXXXX		
SharedQueue:														
Shrd ConDel:												XXXXX		
ApproachDel: ApproachLOS:	X	xxxxx		XX	XXXX			12.3		X	XXXXX			
											*			
*****	****	****	*****	****	****	****	****	****	****	****	****	*****		

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races
Transportation Impact Analysis
Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)												

Intersection	****	****	*****	****	****	****	****					
Average Dela												
Street Name: Approach: Movement:	No:	rth Bo - T	ound – R	Soi L -	uth Bo	ound – R	E e	ast Bo	- R	We L -	est Bo - T	- R
Control: Rights: Lanes:	Und	contro Inclu	olled ide 1 0	Und	contro Incli 1!	olled ude 0 0	0 (top S: Incli) 1!	ign ude 00	St 0 (iop Si Inclu) 1!	ign ude 0 0
Volume Module												
Base Vol:			10	8	308	5	0	0	0	4	0	26
Growth Adj:												
Initial Bse:	0	270	10	8	308	5	0	0	0	4	0	26
User Adj:												
PHF Adj:												
PHF Volume:	0	278	10	8	318	5	0	0	0	4	0	27
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	. 0	278	10	8	318	5		0	0	4	0	27
Critical Gap Critical Gp:			VVVVV	1 1	VVVV	WWW.WW	7 1	6 5	6 2	6 1	6 5	6 2
FollowUpTim:												
Capacity Mod										' '		
		XXXX	xxxxx	289	xxxx	xxxxx	634	625	320	620	623	284
Cnflict Vol: Potent Cap.:	xxxx	XXXX	xxxxx	1285	xxxx	xxxxx	395	404	725	455	405	760
Move Cap.:												
Volume/Cap:												
Level Of Ser												
2Way95thQ:	XXXX	XXXX	XXXXX	0.0	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX
Control Del:	XXXXX	XXXX	XXXXX	7.8	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX
LOS by Move: Movement:												
Shared Cap.:												
Shared Cap.: SharedQueue:												
Shrd ConDel:												
Shared LOS:												
ApproachDel: ApproachLOS:												
******	****	****	****	****	****	****	****	****	*****	****	****	*****
Note: Queue	report	ted is	s the 1	number	of ca	ars pe	r lane					

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #40 Bush St/Van Ness Ave

Cycle (sec): Critical Vol./Cap.(X): 1.415

Loss Time (se	ec):		8	Average Delay (sec/veh): 20.7 Level Of Service: C									
********	****	****	>U *****	****	****	******	****	* * * * * *	• * * * * * * * *	****	****	*****	
Street Name:			Van Ne	SS AVE	_				Bush	St			
Approach:	No	rth B	ound	Soi	ıth B	ound	Ea	ast Bo	ound	We	est Bo	ound	
Movement:	L .	- T	- R	L -	- T	- R	L -	- T	- R	West Bound L - T - R			
Control:	P	rotec	ted	Pro	ot+Pe:	rmit]	Permit	tted	Permitted			
Rights: Min. Green: Y+R:		Incl	ude		Incl	ude		Incl	ıde		Incl	ıde	
Min. Green:	0	34	34	10	48	0	34	34	34	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0 (0 2	1 0	1 (3	0 0	0	1 1	1 0	0 (0 0	0 0	
Volume Module Base Vol:			117	205	1050	0	67	0.00	115	0	0	0	
Growth Adj:						1.00		1.00			1.00		
Initial Bse:						0							
User Adj:						1.00	1.00				1.00		
PHF Adj:								0.94					
PHF Volume:	0	14/4	124	218	1333	0	/1	1031	122	0	0	0	
Reduct Vol: Reduced Vol:	0	1 4 7 4	104	210	1222	0	71	1021	100	0	0	0	
PCE Adj:	1 00	1 00	1 00	1 00	1 00	1.00	1 00	1 00	1 00	1 00	1.00	1.00	
MLF Adj:						1.00							
FinalVolume:													
Saturation F				1		'	1		'	1		'	
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	1.00	0.90	0.90	0.95	0.91	1.00	0.89	0.89	0.89	1.00	1.00	1.00	
Lanes:	0.00	2.77	0.23	1.00	3.00	0.00	0.17	2.53	0.30	0.00	0.00	0.00	
Final Sat.:						0							
Capacity Ana													
Vol/Sat:										0.00	0.00	0.00	
Crit Moves:													
Green/Cycle:						0.00					0.00		
Volume/Cap:						0.00			0.64				
Delay/Veh:						0.0			23.7				
User DelAdj:						1.00		1.00					
AdjDel/Veh:	0.0	25.1	25.1			0.0			23.7				
LOS by Move:	A	C	C	В	В	A	C	C	C	A	A	A	
HCM2kAvgQ:													
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****	

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************* Intersection #41 Pine St/Van Ness Ave

THEET SECETOH MAT I	THE DC/Van	Ness ave	
******	*****	***********	******
Cycle (sec):	90	Critical Vol./Cap.(X):	1.415
Loss Time (sec):	8	Average Delay (sec/veh):	21.0
Optimal Cycle:	90	Level Of Service:	C
******	*****	**********	*******

Optimal Cycle	ec): e:	!	90			Level	e Dela Of Sei	vice	ec/ven) :	:	۷.	C C
*********** Street Name: Approach: Movement:	No:	rth Bo	Van Ne ound	ss Ave	e uth Bo	ound	Ea	ast Bo	Pine ound	St We	est Bo	ound
Control: Rights: Min. Green: Y+R:	Pro	ot+Pe:	rmit	Pi	rotect	ted	I	Permit	ted	I	Permit	ted
Lanes:	1	0 3	0 0	0 (2	1 0	0 (0 (0 0	0 :	1 2	1 0
Volume Module	e:											
Base Vol:												
Growth Adj:												
Initial Bse:	156	1298	0	0	1312	207						
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:												
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	161	1338	0	0	1353	213	0	0	0	126	1533	165
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	161	1338	0	0	1353	213	0	0	0	126	1533	165
Saturation F	low M	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.89	0.89	1.00	1.00	1.00	0.89	0.89	0.89
Lanes:	1.00	3.00	0.00	0.00	2.59	0.41	0.00	0.00	0.00	0.28	3.36	0.36
Final Sat.:	1805	5187	0	0	4391	693	0	0	0	466	5681	611
Capacity Ana												
Vol/Sat:							0.00	0.00				
Crit Moves:	****				****							
Green/Cycle:	0.56	0.53	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.38	0.38	0.38
Volume/Cap:							0.00	0.00	0.00	0.71	0.71	0.71
Delay/Veh:									0.0		24.8	24.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:												
LOS by Move:	В	В	A	A	С	С	A	A	A	С	С	C
HCM2kAvgQ:	3	8	0	0	14	14	0	0	0	13	13	13
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

	Lombard St/Van Ness	Ave	*****
Cycle (sec):	90	Critical Vol./Cap.(X):	0.724
Loss Time (sec):	7	Average Delay (sec/veh):	42.5
Optimal Cycle:	117	Level Of Service:	D
******	*****	********	******
Street Name:	Van Ness Ave	Lombard St	t

Street Name:			Van Ne	ss Ave	€		Lombard St						
Approach:	Noi	rth Bo	ound	Soi	ath Bo	ound	East Bound West Bound						
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	T	- R	
Control:	Pi	cotect	ed	Pi	rotect	ed]	Permit	tted	P	ermit	ted	
Rights:		Inclu	ıde		Inclu	ıde		Ovl		Permitted Include 27 27 27 4.0 4.0 4.0			
Min. Green:	56	56	56	0	27	27	27	27	56	27	27	27	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	3 (0 (1 0	0 (2	0 1	0	1 0	0 2	0 0	1!	0 0	
Volume Modul	e:												
Base Vol:	1020	227	34	0	442	98	114	112	853	1	91	9	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	1020	227	34	0	442	98	114	112	853	1	91	9	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:				0.93				0.93		0.93	0.93	0.93	
PHF Volume:				0					917	1		10	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:								120	917	1	98	10	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00				
MLF Adj:													
FinalVolume:													
Saturation F													
Sat/Lane:													
Adjustment:													
Lanes:													
Final Sat.:													
Capacity Ana													
Vol/Sat:										0.06	0.06	0.06	
Crit Moves:													
Green/Cycle:										0.23			
Volume/Cap:				0.00			1.48			0.25			
Delay/Veh:				0.0			288.7			37.1			
User DelAdj:				1.00			1.00						
AdjDel/Veh:	20.2	5.9	5.9	0.0	40.8	37.4	288.7	289	17.2	37.1	37.1	37.1	
LOS by Move: HCM2kAvgQ:	С	A	A	A	D	D	F	F	В	D	D	D	
HCM2kAvgQ:	9	3	3	0	8	3	18	18	14	3	3	3	
*******	****	****	*****	****	****	*****	****	****	*****	****	****	*****	

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Note: Queue reported is the number of cars per lane.

Existing Weekday PM Fri Jun 3, 2011 14:14:22 Page 45-1

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

*****						(Base					****	*****
Intersection	#43 I	Embaro	cadero	/ Howa	ard St	Ė.						
Cvcle (sec):		10				Critic						
Loss Time (sec).			10			Averag						
,	,		9.5			Level				•	41	D . 4
Optimal Cycle				****						****	****	_
Street Name:			Embarc						Howar			
Approach:	Noi	rth Bo	ound	Sot	ıth Bo	ound	Εá	ast Bo	ound	We	est B	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	Pı	rotect	ed	Pı	rotect	ted	Sp.	lit Ph	nase	Sp.	lit Pl	hase
Rights:		Inclu	ıde		Incl	ted ude	_	Incl	ıde	-	Incl	ude
Min. Green:			0			40			30		0	
Y+R:						4.0						
						0 1						
Volume Module	'		1	1		'	1		ı	1		
Base Vol:		1548	0	3	1145	329	252	0	169	0	0	0
Growth Adj:					1.00	1.00		1.00	1.00		1.00	
Initial Bse:					1145	329		0	169	0	0	
			1.00			1.00		1.00		-	1.00	
			0.93			0.93		0.93	0.93		0.93	
PHF Volume:		1665			1231	354	271		182	0.93		
		1003			1231	0	2 / 1		102	0		
Reduct Vol:				3			271					-
Reduced Vol:										0		
PCE Adj:			1.00						1.00		1.00	
MLF Adj:		1.00				1.00		1.00			1.00	
FinalVolume:						354		0	182	-	0	-
 Saturation Fi	'											
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:											1.00	
Lanes:											0.00	
Final Sat.:									837			
Capacity Ana:	'											
Vol/Sat:			0.00	0 00	0 37	0 44	0.13	0 00	0.22	0 00	0.00	0.00
Crit Moves:		****			0.57	0.11	****	0.00	0.22	0.00	0.00	0.00
Green/Cvcle:						0.44	0.30	0 00	0.30	0 00	0.00	0.00
Volume/Cap:								0.00			0.00	
volume/Cap: Delav/Veh:								0.00		0.00		
4 '												
User DelAdj:								1.00	1.00		1.00	
AdjDel/Veh:						70.9		0.0	34.9		0.0	0.0
LOS by Move:				D		E	C		С	A		
HCM2kAvgQ:	3		0	0	17	12	5	0	10	0	-	0
****	****	*****	*****	****	****	*****	****	*****	*****	****	****	****

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Existing Weel												46-1		
34th America's Cup Races Transportation Impact Analysis														
	Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)													
******											****	*****		
Intersection														

Cycle (sec):	,	9	0			Critic	cal Vo	l./Cap	p.(X):		0.			
Loss Time (se Optimal Cycle	ec):	1	0 0 0			Level	De DeT	ay (se	ec/veh)	:	4:	5.2 D		
*******	-• ****	*****	, o	****	****					****				
Street Name:			Embaro	adero					Folso	m St				
Approach:	No	rth Bo	ound	Soi	ath B	ound	E	ast B	ound	W	est B	ound		
Movement:									- R					
Rights: Include Include Include Include														
Min. Green:	12	49	49	32	32	31	31	31	0	0	0			
Y+R:				4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0														
Volume Module														
Base Vol:		1412	0	0	1292	25	260	0	256	0	0	0		
Growth Adj:					1.00				1.00		1.00			
Initial Bse:			0		1292		260				0	0		
User Adj:						1.00		1.00			1.00	1.00		
PHF Adj:					1389	0.93	0.93	0.93			0.93	0.93		
PHF Volume: Reduct Vol:		1218	0		1389		280		275	0		0		
Reduced Vol:				0				0		0		0		
PCE Adj:					1.00		1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:									1.00		1.00	1.00		
FinalVolume:				. 0			280			. 0		0		
Saturation F														
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.88	0.70	1.00	1.00	0.97	0.87	0.83	1.00	0.59	1.00	1.00	1.00		
Lanes:														
Final Sat.:						70			1114			0		
Capacity Ana														
Vol/Sat:				0.00	0.39	0.39	0.09	0.00	0.25	0.00	0.00	0.00		
Crit Moves:		***		***			***							
Green/Cycle:	0.14	0.54						0.00			0.00			
Volume/Cap:								0.00			0.00	0.00		
Delay/Veh:								0.0			0.0	0.0		
User DelAdj: AdjDel/Veh:								1.00		1.00		1.00		
LOS by Move: HCM2kAvgQ:	4	27	0	0	21	19	C 3	0	7	A 0	0			
*****	****	****	*****	****	****	*****			*****	****	****	*****		
Note: Queue 1									*****	****	****	*****		

Existing Conditions

Weekend Midday Peak Hour

Existing Weekend MID Fri Jun 3, 2011 14:15:25 Page 3-1 34th America's Cup Races Transportation Impact Analysis Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative) ****************** Intersection #1 Beach St/Columbus Ave ************************* Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B[11.3] ************************ Street Name: Columbus Ave Beach St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Rights: Include Include Include Include Rights: Include Include Include Include Include Lanes: 0 0 1! 0 0 0 0 0 0 0 0 0 1 1 0 0 0 Volume Module: Base Vol: 39 0 23 0 0 0 0 269 95 14 82 0 Initial Bse: 39 0 23 0 0 0 0 269 95 14 82 0 PHF Volume: 42 0 25 0 0 0 0 292 103 15 89 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 FinalVolume: 42 0 25 0 0 0 0 292 103 15 89 _____| Critical Gap Module: FollowUpTim: 3.5 4.0 3.3 xxxxx xxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxx xxxxx Capacity Module: -----|----|-----| Level Of Service Module: LOS by Move: * * * * * * * * * A * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: * B * * * * * * A * * ApproachDel: 11.3 xxxxxx xxxxxx ApproachLOS: B * * XXXXXX *****************************

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Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative)

****************** Intersection #2 North Point St/Columbus Ave *************************

Loss Time (sec): 9 Average Delay (sec/veh): 11.0 Optimal Cycle: 60 Level Of Service: B **************************

Street Name: Columbus Ave North Point St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted

Include Include Include Include Min. Green: 18 18 18 18 18 18 33 33 33 33 33 -----|

Base Vol: 42 98 33 31 75 50 28 171 50 41 188 44 Initial Bse: 42 98 33 31 75 50 28 171 50 41 188 44 PHF Volume: 48 111 38 35 85 57 32 194 57 47 214 50 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 48 111 38 35 85 57 32 194 57 47 214 50 FinalVolume: 48 111 38 35 85 57 32 194 57 47 214 50

_____| Saturation Flow Module: Adjustment: 0.64 0.96 0.96 0.80 0.80 0.80 0.92 0.92 0.92 0.82 0.82 Lanes: 1.00 0.75 0.25 0.40 0.96 0.64 0.11 0.69 0.20 0.30 1.38 0.32

Final Sat.: 1214 1367 460 604 1462 975 197 1204 352 466 2138 500 _____| Capacity Analysis Module:

Crit Moves: **** ****

Volume/Cap: 0.13 0.27 0.27 0.19 0.19 0.19 0.29 0.29 0.29 0.18 0.18 0.18 Delay/Veh: 16.0 17.2 17.2 16.1 16.1 16.1 8.0 8.0 8.0 7.0 7.0 7.0 AdjDel/Veh: 16.0 17.2 17.2 16.1 16.1 16.1 8.0 8.0 8.0 7.0 7.0 7.0 LOS by Move: B B B B B B A A A A A A HCM2kAvgO: 1 2 2 1 1 1 3 3 3 2 2 2

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #3 North Point St/Stockton St

************************* Cycle (sec): 60 Critical Vol./Cap.(X): 0.310
Loss Time (sec): 8 Average Delay (sec/veh): 10.0
Optimal Cycle: 60 Level Of Service: B *************************

Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 16 16 16 16 16 16 36 36 36 36 36 36

Street Name: Stockton St North Point St
Approach: North Bound South Bound East Bound West Bound

Volume Module: Base Vol: 16 54 52 15 25 17 22 209 63 17 81 13 Initial Bse: 16 54 52 15 25 17 22 209 63 17 81 1.3 PHF Volume: 18 62 60 17 29 20 25 240 72 20 93

0 0 Reduct Vol: Ω 0 0 0 0 0 0 0 0 Ω Reduced Vol: 18 62 60 17 29 20 25 240 72 20 93 15 FinalVolume: 18 62 60 17 29 20 25 240 72 20 93 15 _____|

Saturation Flow Module: Adjustment: 0.91 0.91 0.91 0.88 0.88 0.88 0.95 0.95 0.95 0.84 0.84 0.84

Lanes: 0.13 0.44 0.43 0.26 0.44 0.30 0.07 0.72 0.21 0.31 1.46 0.23 Final Sat.: 226 764 735 442 737 501 135 1281 386 490 2333 374 _____| Capacity Analysis Module: Vol/Sat: 0.08 0.08 0.08 0.04 0.04 0.04 0.19 0.19 0.19 0.04 0.04 0.04

Crit Moves: **** **** Green/Cycle: 0.27 0.27 0.27 0.27 0.27 0.27 0.60 0.60 0.60 0.60 0.60 0.60 Volume/Cap: 0.30 0.30 0.30 0.15 0.15 0.15 0.31 0.31 0.31 0.07 0.07 Delay/Veh: 19.3 19.3 19.3 17.5 17.5 17.5 6.7 6.7 6.7 5.1 5.1 AdjDel/Veh: 19.3 19.3 19.3 17.5 17.5 17.5 6.7 6.7 6.7 5.1 5.1 LOS by Move: B B B B B B A A A A A HCM2kAvgO: 2 2 2 1 1 1 3 3 3 1 1 1

************************** Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 Ba	*	: Ave **************	*****
Cycle (sec):	60	Critical Vol./Cap.(X):	0.287
Loss Time (sec):	9	Average Delay (sec/veh):	16.8
Optimal Cycle:	60	Level Of Service:	В

Loss Time (se	ec): e:		9 50			Averag Level	e Dela Of Sei	ay (se	ec/veh)	:	16	B
Street Name: Approach:	Noi	rth Bo	ound	Soi	ıth Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- Т	- R	L -	- T	- R	L -	- T	- R
Control:	Pı	rotect	ted	·	Permit	ted	·	Permit	ted	E	ermit	ted
Rights:		Igno	re		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	5	28	28	0	19	19	20	20	20	0	23	23
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Rights: Min. Green: Y+R: Lanes:	2 (0 0	1 0	0 2	L 0	1 0	0 3	1 1	0 1	0 1	. 0	1 0
Volume Module												
Base Vol:												
Growth Adj:					1.00			1.00			1.00	
Initial Bse:			69	1					130			
User Adj:	1.00	1.00	0.00								1.00	
PHF Adj:	0.98	0.98							0.98			0.98
PHF Volume:												
Reduct Vol:												
Reduced Vol:												
PCE Adj:												
MLF Adj:												
FinalVolume:												37
	•											
Saturation F												
Sat/Lane:									1900			
Adjustment:												
Lanes:	2.00	1.00	0.00	0.01	1.89	0.10	0.04	1.96	1.00	0.13	1.73	0.14
Final Sat.:												
Capacity Ana												
Vol/Sat:				0.05	0.05	0.05				0.16	0.16	0.16
Crit Moves:								****				
Green/Cycle:								0.34			0.34	
Volume/Cap:								0.53				
Delay/Veh:									15.5		17.4	
User DelAdj:									1.00			
AdjDel/Veh:												
LOS by Move:	C	A	A	В	В	В	В	В	В			
HCM2kAvgQ:												4
*****	****	****	*****	****	*****	*****	****	****	*****	*****	*****	*****

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) ************************** Intersection #5 Bay St/Stockton St ***************** Cycle (sec): 60 Critical Vol./Cap.(X): 0.341 Loss Time (sec): 7 Average Delay (sec/veh): 9.4 Optimal Cycle: 60 Level Of Service: A ************************* Street Name: Stockton St Bay St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|

Control: Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 20 20 20 20 20 20 33 33 33 33 33 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 Volume Module: Base Vol: 55 42 59 24 44 38 37 561 33 29 447 47

Initial Bse: 55 42 59 24 44 38 37 561 33 29 447 47 PHF Volume: 57 43 61 25 45 39 38 578 34 30 461 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 57 43 61 25 45 39 38 578 34 30 461 FinalVolume: 57 43 61 25 45 39 38 578 34 30 461 48 _____|

Saturation Flow Module: Adjustment: 0.83 0.83 0.83 0.88 0.88 0.88 0.86 0.86 0.86 0.85 0.85 Lanes: 0.35 0.27 0.38 0.23 0.41 0.36 0.12 1.78 0.10 0.11 1.71 0.18 Final Sat.: 557 425 597 380 696 601 191 2894 170 180 2768 291 _____|

Capacity Analysis Module: Vol/Sat: 0.10 0.10 0.10 0.07 0.07 0.20 0.20 0.20 0.17 0.17 0.17 Crit Moves: **** **** Volume/Cap: 0.31 0.31 0.31 0.20 0.20 0.20 0.36 0.36 0.36 0.30 0.30 0.30 Delay/Veh: 16.3 16.3 16.3 15.0 15.0 15.0 8.2 8.2 7.7 7.7 7.7

AdjDel/Veh: 16.3 16.3 16.3 15.0 15.0 15.0 8.2 8.2 7.7 7.7 7.7 LOS by Move: B B B B B B A A A A A HCM2kAvgO: 2 2 2 1 1 1 4 4 4 3 3 3 *************************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) *************

Intersection #6 Bay St/Kearny St *****************

Loss Time (sec): 9 Average Delay (sec/veh): 8.6
Optimal Cycle: 90 Level Of Service: A **************************

Street Name: Kearny St Bay St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 20 20 20 20 20 20 61 61 61 61 61 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 -----| Base Vol: 58 7 14 7 9 30 20 568 62 20 436 9

Initial Bse: 58 7 14 7 9 30 20 568 62 20 436 9 PHF Volume: 65 8 16 8 10 34 22 638 70 22 490 10 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 65 8 16 8 10 34 22 638 70 22 490 10 FinalVolume: 65 8 16 8 10 34 22 638 70 22 490 10 _____|

Saturation Flow Module: Adjustment: 0.75 0.75 0.75 0.88 0.88 0.88 0.87 0.87 0.87 0.86 0.86 Lanes: 0.73 0.09 0.18 0.15 0.20 0.65 0.06 1.75 0.19 0.09 1.87 0.04 Final Sat.: 1042 126 251 254 327 1091 102 2899 316 141 3078 64 _____|

Capacity Analysis Module: Vol/Sat: 0.06 0.06 0.06 0.03 0.03 0.03 0.22 0.22 0.22 0.16 0.16 0.16 Crit Moves: **** **** Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.68 0.68 0.68 0.68 0.68 0.68 Volume/Cap: 0.28 0.28 0.28 0.14 0.14 0.14 0.32 0.32 0.32 0.23 0.23 0.23 Delay/Veh: 31.3 31.3 31.3 28.9 28.9 28.9 6.4 6.4 6.4 5.8 5.8 5.8 AdjDel/Veh: 31.3 31.3 31.3 28.9 28.9 28.9 6.4 6.4 5.8 5.8 5.8 LOS by Move: C C C C C A A A A A HCM2kAvgO: 2 2 2 1 1 1 5 5 5 3 3 3

************************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #7 Broadway St/Sansome St ************************* Cycle (sec): 80 Critical Vol./Cap.(X): 0.312 Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 70 Level Of Service: 11.9

************************** Street Name: Sansome St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Split Phase Split Phase Permitted Permitted Rights: Include Include Include Include Min. Green: 17 17 17 0 0 0 44 44 0 0 44 44 0 1 0 1 0 0 0 0 0 0 0 1 1 0 0 0 0 1 1 0 -----| Volume Module: Base Vol: 145 152 18 0 0 0 72 417 0 0 421 38 Initial Bse: 145 152 18 0 0 0 72 417 0 0 421 PHF Volume: 154 162 19 0 0 0 77 444 0 0 448 40 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 Ω Reduced Vol: 154 162 19 0 0 0 77 444 0 0 448 FinalVolume: 154 162 19 0 0 0 77 444 0 0 448 40 _____|__| Saturation Flow Module: Adjustment: 0.88 0.88 0.88 1.00 1.00 1.00 0.78 0.78 1.00 1.00 0.94 0.94 Lanes: 0.92 0.97 0.11 0.00 0.00 0.00 0.29 1.71 0.00 0.00 1.83 0.17 Final Sat.: 1533 1607 190 0 0 434 2515 0 0 3271 295 _____| Capacity Analysis Module: Crit Moves: **** **** Delay/Veh: 20.6 20.6 20.6 0.0 0.0 0.0 9.3 9.3 0.0 0.0 8.8 8.8

Note: Queue reported is the number of cars per lane.

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AdjDel/Veh: 20.6 20.6 20.6 0.0 0.0 0.0 9.3 9.3 0.0 0.0 8.8 8.8

LOS by Move: C C C A A A A A A A A A

HCM2kAvgO: 3 3 3 0 0 0 4 4 0 0 3 3

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************** Intersection #8 Broadway St/Battery St ************************

Loss Time (sec): 9 Average Delay (sec/veh): 17.2 Optimal Cycle: 70 Level Of Service: B

************************** Street Name: Battery St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Split Phase Split Phase Permitted Permitted Rights: Include Include Include Include Min. Green: 0 0 0 44 44 44 17 17 17 17 17 17 0 0 0 0 0 0 1 0 1 0 0 0 1 1 0 0 1 1 0 0 -----| Base Vol: 0 0 0 15 261 83 0 276 161 34 376 0 Initial Bse: 0 0 0 15 261 83 0 276 161 34 376 0 PHF Volume: 0 0 0 16 281 89 0 297 173 37 404 0 Reduct Vol: 0 0 0 0 0 Ω 0 0 0 0 0 Ω Reduced Vol: 0 0 0 16 281 89 0 297 173 37 404 0 FinalVolume: 0 0 0 16 281 89 0 297 173 37 404 0 _____| Saturation Flow Module: Lanes: 0.00 0.00 0.00 0.08 1.46 0.46 0.00 1.26 0.74 0.17 1.83 0.00 Final Sat.: 0 0 0 145 2517 801 0 2155 1257 266 2937 0 _____| Capacity Analysis Module: **** Crit Moves: Green/Cycle: 0.00 0.00 0.00 0.55 0.55 0.55 0.00 0.34 0.34 0.34 0.00 Volume/Cap: 0.00 0.00 0.00 0.20 0.20 0.20 0.00 0.41 0.41 0.41 0.00 Delay/Veh: 0.0 0.0 0.0 9.2 9.2 9.2 0.0 20.6 20.6 20.6 0.0 AdjDel/Veh: 0.0 0.0 0.0 9.2 9.2 9.2 0.0 20.6 20.6 20.6 20.6 0.0 LOS by Move: A A A A A A A C C C A HCM2kAvgO: 0 0 0 3 3 3 0 5 5 4 4 0

************************* Note: Queue reported is the number of cars per lane.

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Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************

Intersection #9 Embarcadero/ Beach St/ Grant St *************************

Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 101 Level Of Service: 94.2 Level Of Service: *************************

Street Name: Embarcadero Beach St (EB)/Grant St (WB)
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R Control: Split Phase Split Phase Split Phase Split Phase Rights: Include Include Include Include Min. Green: 17 17 17 0 26 0 0 0 26 19 19 19 0 1 0 1 0 0 0 1 0 0 0 0 0 1 0 0 1! 0 0 Volume Module: Base Vol: 349 484 48 0 155 0 0 0 315 9 59 9 Initial Bse: 349 484 48 0 155 0 0 0 315 9 59 9 PHF Volume: 367 509 51 0 163 0 0 0 332 9 62 9 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Ω

Reduced Vol: 367 509 51 0 163 0 0 332 FinalVolume: 367 509 51 0 163 0 0 0 332 9 62 9 _____|

Saturation Flow Module:

Adjustment: 0.92 1.75 0.92 1.00 1.89 1.00 1.00 1.00 0.87 0.98 0.98 Lanes: 1.07 0.78 0.15 0.00 1.00 0.00 0.00 0.00 1.00 0.12 0.76 0.12 Final Sat.: 1878 2604 258 0 3593 0 0 0 1644 217 1424 217 _____|__|

Capacity Analysis Module:

Crit Moves: **** **** Green/Cycle: 0.17 0.17 0.17 0.00 0.26 0.00 0.00 0.00 0.26 0.19 0.19 Volume/Cap: 1.16 1.16 1.16 0.00 0.18 0.00 0.00 0.00 0.78 0.23 0.23 Delay/Veh: 128.7 129 128.7 0.0 29.3 0.0 0.0 0.0 44.1 35.1 35.1 35.1 AdjDel/Veh: 128.7 129 128.7 0.0 29.3 0.0 0.0 0.0 44.1 35.1 35.1 35.1 LOS by Move: F F F A C A A A D D D

HCM2kAvgO: 21 36 21 0 4 0 0 0 12 2 2

************************** Note: Queue reported is the number of cars per lane.

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Intersection #11 Embarcadero / Bay St

Rights:

Volume Module:

Reduct Vol: 0 0

Saturation Flow Module:

Capacity Analysis Module:

Approach: North Bound South Bound

Include

0

Crit Moves: **** ****

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Transportation Impact Analysis

2000 HCM Operations Method (Base Volume Alternative)

Movement: L - T - R L - T - R L - T - R

Include

Min. Green: 42 53 0 0 25 25 7 0 42 0 0

Base Vol: 459 902 0 0 442 36 36 0 552 0 0

Initial Bse: 459 902 0 0 442 36 36 0 552 0 0

PHF Volume: 473 930 0 0 456 37 37 0 569 0 0

FinalVolume: 473 930 0 0 456 37 37 0 569 0 0

_____|

Adjustment: 0.92 0.95 1.00 1.00 0.94 0.92 0.95 1.00 0.43 1.00 1.00 1.00

Lanes: 2.00 2.00 0.00 0.00 1.85 0.15 1.00 0.00 2.00 0.00 0.00 0.00

Final Sat.: 3502 3610 0 0 3297 269 1805 0 1628 0 0

_____|__|

Vol/Sat: 0.14 0.26 0.00 0.00 0.14 0.14 0.02 0.00 0.35 0.00 0.00 0.00

Green/Cycle: 0.47 0.84 0.00 0.00 0.38 0.38 0.08 0.00 0.54 0.00 0.00 0.00

Volume/Cap: 0.29 0.31 0.00 0.00 0.37 0.37 0.26 0.00 0.64 0.00 0.00 0.00 Delay/Veh: 14.9 1.5 0.0 0.0 20.4 20.4 40.1 0.0 16.0 0.0 0.0 0.0

AdjDel/Veh: 14.9 1.5 0.0 0.0 20.4 20.4 40.1 0.0 16.0 0.0 0.0 0.0

LOS by Move: B A A A C C D A B A A A

HCM2kAvgO: 4 3 0 0 5 5 1 0 6 0 0

Reduced Vol: 473 930 0 0 456 37 37 0 569 0 0

0 0

2 0 2 0 0 0 0 1 1 0 1 0 0 0 2 0 0 0 0

0

Control: Protected Protected Split Phase Split Phase

Level Of Service Computation Report

Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 81 Level Of Service:

Street Name: Embarcadero Bay St

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #10 Embarcadero/ North Point St / Kearny St ******************* Loss Time (sec): 16 Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: 94.4 Level Of Service: ************************** Street Name: Embarcadero North Point St (EB)/ Kearny St (W Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Permitted Split Phase Split Phase Include Include Include Include Min. Green: 15 36 0 0 17 17 20 20 20 20 20 20 1 0 2 0 0 0 1 0 1 0 0 0 1! 0 1 0 1 0 1 -----| Volume Module: Base Vol: 112 826 0 1 313 166 24 148 50 4 34 14 Initial Bse: 112 826 0 1 313 166 24 148 50 4 34 14 PHF Volume: 122 898 0 1 340 180 26 161 54 4 37 15 0 0 0 0 Reduct Vol: 0 0 Ω 0 0 0 0 Ω Reduced Vol: 122 898 0 1 340 180 26 161 54 4 37 15 FinalVolume: 122 898 0 1 340 180 26 161 54 4 37 15 _____| Saturation Flow Module: Adjustment: 0.94 0.48 1.00 0.86 0.44 0.86 0.96 0.96 0.96 1.00 1.00 0.85 Lanes: 1.00 2.00 0.00 0.01 1.57 0.42 0.12 0.75 1.13 0.11 0.89 1.00 Final Sat.: 1787 1829 0 4 1314 697 222 1372 2058 199 1691 1615 _____| Capacity Analysis Module: Vol/Sat: 0.07 0.49 0.00 0.26 0.26 0.26 0.12 0.12 0.03 0.02 0.02 0.01 Crit Moves: **** ****

Green/Cycle: 0.17 0.42 0.00 0.24 0.24 0.24 0.21 0.21 0.21 0.21 0.21 0.21

Volume/Cap: 0.39 1.18 0.00 1.07 1.07 1.07 0.56 0.56 0.13 0.10 0.10 0.05

Delay/Veh: 36.0 121 0.0 95.9 95.9 95.9 35.8 35.8 30.9 30.9 30.9 30.4

AdjDel/Veh: 36.0 121 0.0 95.9 95.9 95.9 35.8 35.8 30.9 30.9 30.9 30.4

LOS by Move: D F A F F F D D C C C

HCM2kAvgO: 3 24 0 19 10 19 6 6 1 1 1 0

Note: Queue reported is the number of cars per lane.

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Note: Queue reported is the number of cars per lane.

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11.6

Include

0 0

East Bound West Bound

Ovl

0 0 0

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #12 Embarcadero / Chestnut St / Sansome St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.547 Loss Time (sec): 13 Average Delay (sec/veh): 16.2 Optimal Cycle: 79 Level Of Service: B

************************** Street Name: Embarcadero Chestnut St (EB) / Sansome (WB) Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 10 40 0 10 40 0 16 16 7 7 7 1 0 2 0 0 1 0 2 1 0 0 1 0 1 0 0 0 0 0 -----| Base Vol: 28 1141 0 38 939 17 83 222 16 0 0 Initial Bse: 28 1141 0 38 939 17 83 222 16 0 0 PHF Volume: 30 1240 0 41 1021 18 90 241 17 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 30 1240 0 41 1021 18 90 241 17 0 0 FinalVolume: 30 1240 0 41 1021 18 90 241 17 0 0 _____| Saturation Flow Module: Lanes: 1.00 2.00 0.00 1.00 2.95 0.05 0.52 1.38 0.10 0.00 0.00 0.00 _____| Capacity Analysis Module: Crit Moves: **** **** **** Green/Cycle: 0.14 0.57 0.00 0.11 0.54 0.54 0.18 0.18 0.18 0.00 0.00 0.00 Volume/Cap: 0.12 0.61 0.00 0.21 0.37 0.37 0.57 0.57 0.57 0.00 0.00 0.00 Delay/Veh: 34.4 13.4 0.0 36.9 11.9 11.9 35.1 35.1 35.1 0.0 0.0 0.0 AdjDel/Veh: 34.4 13.4 0.0 36.9 11.9 11.9 35.1 35.1 35.1 0.0 0.0 0.0

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Note: Queue reported is the number of cars per lane.

LOS by Move: C B A D B B D D D A A A

HCM2kAvgO: 1 11 0 1 6 6 5 5 5 0 0 0

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #13 Embarcadero/ Lombard St / Battery St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.455 Loss Time (sec): 11 Average Delay (sec/veh):
Optimal Cycle: 82 Level Of Service: 21.5 Level Of Service:

************************** Street Name: Embarcadero Lombard St (EB) / Battery St (WB) Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 9 35 35 9 35 35 21 21 21 6 6 6 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 27 1130 29 17 756 189 29 4 130 9 4 15 Initial Bse: 27 1130 29 17 756 189 29 4 130 9 4 15 PHF Volume: 29 1228 32 18 822 205 32 4 141 10 4 16 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 29 1228 32 18 822 205 32 4 141 10 4 16 FinalVolume: 29 1228 32 18 822 205 32 4 141 10 4 16 _____| Saturation Flow Module: Adjustment: 0.95 0.95 0.94 0.95 0.95 0.51 0.96 0.96 0.66 0.91 0.91 0.82 Lanes: 1.00 1.95 0.05 1.00 2.00 1.00 0.88 0.12 1.00 0.30 0.13 0.57 Final Sat.: 1805 3505 90 1805 3610 966 1600 221 1245 524 233 873 _____|__| Capacity Analysis Module: Vol/Sat: 0.02 0.35 0.35 0.01 0.23 0.21 0.02 0.02 0.11 0.02 0.02 0.02 Crit Moves: **** **** ****

Note: Queue reported is the number of cars per lane.

Green/Cycle: 0.11 0.46 0.46 0.10 0.45 0.45 0.25 0.25 0.25 0.07 0.07 0.07

Volume/Cap: 0.14 0.76 0.76 0.10 0.51 0.48 0.08 0.08 0.45 0.28 0.28

Delay/Veh: 36.2 22.2 22.2 37.1 18.1 18.3 25.9 25.9 29.6 41.4 41.4 41.4

AdjDel/Veh: 36.2 22.2 22.2 37.1 18.1 18.3 25.9 25.9 29.6 41.4 41.4 41.4

LOS by Move: D C C D B B C C C D D

HCM2kAvgO: 1 15 15 0 8 4 1 1 4 1 1

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Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) ***************** Intersection #14 Embarcadero / Green St / Davis St ********************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.439
Loss Time (sec): 14 Average Delay (sec/veh): 17.9
Optimal Cycle: 89 Level Of Service: B ************************* Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Split Phase Rights: Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 1 0 2 0 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 0 -----| Volume Module: Base Vol: 30 1190 0 9 749 15 17 0 7 0 0 PHF Volume: 32 1266 0 10 797 16 18 0 7 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 32 1266 0 10 797 16 18 0 7 0 0 0 FinalVolume: 32 1266 0 10 797 16 18 0 7 0 0 _____| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.95 0.93 1.00 0.93 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 1.00 1.96 0.04 0.71 0.00 0.29 0.00 1.00 0.00 _____| Capacity Analysis Module: Vol/Sat: 0.02 0.35 0.00 0.01 0.23 0.23 0.01 0.00 0.01 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.09 0.50 0.00 0.08 0.48 0.48 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.19 0.70 0.00 0.07 0.47 0.47 0.05 0.00 0.05 0.00 0.00 0.00 Delay/Veh: 38.1 18.6 0.0 38.7 15.7 15.7 24.6 0.0 24.6 0.0 0.0 0.0 AdjDel/Veh: 38.1 18.6 0.0 38.7 15.7 15.7 24.6 0.0 24.6 0.0 0.0 0.0 LOS by Move: D B A D B B C A C A A A HCM2kAvgO: 1 14 0 0 8 8 1 0 1 0 0

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

******						(Base						
Intersection												
*******	π±υ.:	****	*****	****	10Way ****	bc / b	****	,	*****	****	****	*****
Cycle (sec):			90						o.(X):		0.	
Loss Time (se	ec).		L 7						ec/veh)		2	
Optimal Cycle			90			Level				•	_	C
******				****	****					****	****	*****
Street Name:		Emba	arcader	o-Dru	nm St				Broadw	av St		
Approach:	No	rth Bo	ound	Soi	ath Bo	ound	Εa				est B	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	Pi	rotect	ed	Pi	rotect	ed	Spi	lit Ph	nase	Spl	Lit Pl	hase
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ude
Min. Green:	16				28	28			29		0	0
Y+R:			4.0			4.0			4.0			
Lanes:			0 0			1 0			0 1			0 0
Volume Module												
Base Vol:					726	30	52			0	0	
Growth Adj:					1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			0		726	30	52	0	245	0	0	0
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj: PHF Volume:		1193	1.00		1.00 726	1.00	52	1.00	1.00 245	1.00	1.00	1.00
	339		0	0	720	0	0	0	243	0	0	0
Reduced Vol:		1193	0	6	-	30	52	0		0	0	0
PCE Adi:			1.00	-	1.00	1.00		1.00		-	1.00	-
MLF Adj:			1.00			1.00		1.00			1.00	1.00
FinalVolume:				6		30	52				0	0
Saturation F	low Mo	odule:	:									
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	1.00	0.95	0.94	0.94	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	1.00	1.92	0.08	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:					3446	142		0			0	0
Capacity Anal												
Vol/Sat:		0.33	0.00	0.00	0.21			0.00	0.15	0.00	0.00	0.00
Crit Moves:						****	****					
Green/Cycle:			0.00					0.00			0.00	0.00
Volume/Cap:						0.68		0.00			0.00	0.00
Delay/Veh:			0.0	38.5		28.7	19.0	0.0		0.0		0.0
User DelAdj:					1.00	1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			0.0		28.7	28.7	19.0		22.2	0.0		0.0
LOS by Move:				D		C	В			A 0	A 0	A 0
HCM2kAvgQ:			0		10	10	1		5	-	-	-
		~ ~ × × × 7		^ * * * * *						^ ^ ^ ^ ^ 7	· ~ × × × ·	

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ******************

Cycle (sec):		9	90		Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service:							0.416		
Loss Time (se	ec):	1	7			Averag	e Dela	ay (se	c/veh)	:	2	9.6		
Optimal Cycle			90			Level	Of Se	rvice:				С		
Street Name:			Embaro		**************************************									
Approach:	Noi	rth Bo	ound	Soi	ath Bo	ound	Εá	ast Bo	und	We	est B	ound		
Approach: Movement:				L -	– T	R	L -	– T	R	L -	- T	- R		
Control:	Pı	rotect	 :ed	P1	rotect	 :ed	l	 lit Ph	ase	lI Sp:	lit Pl	hase		
Rights:		Incl	ıde		Inclu	ıde	-		ıde					
Min. Green:	12	30	0	10		0		0	33	0	0	0		
Y+R:			4.0						4.0		4.0	4.0		
			0 0			1 0			0 1			0 0		
Volume Module	'													
		1440	0	11	925	108	97	0	125	0	0	0		
Growth Adj:			1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00		
Initial Bse:	235	1440	0	11	925	108	97	0	125	0	0	0		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
_	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00		
PHF Volume:		1440	0		925	108	97	0	125	0	0	0		
Reduct Vol:		0	0	0		0	0	-	0	0		0		
Reduced Vol:		1440	0	11		108	97	0	125	0		0		
PCE Adj: MLF Adj:		1.00		1.00	1.00	1.00		1.00	1.00		1.00	1.00		
FinalVolume:				11		100	97		125	0.00	1.00	1.00		
Saturation F														
Sat/Lane:					1900	1900		1900	1900		1900			
Adjustment:					0.90	0.90			0.85		1.00	1.00		
Lanes: Final Sat.:			0.00			0.31 534			1.00 1615		0.00	0.00		
Capacity Ana	lysis	Modu!	Le:						'	'				
Vol/Sat:			0.00		0.20	0.20		0.00	0.08	0.00	0.00	0.00		
Crit Moves:		****		***			***							
Green/Cycle:				0.11		0.31		0.00	0.37		0.00	0.00		
Volume/Cap:				0.05				0.00	0.21		0.00	0.00		
Delay/Veh:			0.0		27.7	27.7	19.2	0.0	19.7	0.0		0.0		
User DelAdj: AdjDel/Veh:			1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00		
LOS by Move:			0.0 A		27.7 C	27.7 C		0.0 A	19.7 B	0.0 A				
	3			0			2		2	0		0		

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

*****			Operati *****								****	*****		
Intersection							****	*****	*****	****	****	*****		
Cycle (sec):	,		10			Critical Vol./Cap.(X): 0.553 Average Delay (sec/veh): 13.1 Level Of Service: B								
Loss Time (se	ec):		10			Averag	e Dela	ay (se	ec/veh)	:	1.	3.1		
Optimal Cycle	∋:		89			Level	Of Ser	rvice:				В		
*****					****						****	*****		
Street Name:			Embarc						MIssi	on St				
Approach: Movement:	Noi	rth B	ound	Soi	ıth Bo	ound	Εā	ast Bo	ound	We	est Bo	ound		
Movement:	L -	– T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R		
Control:	I	Permi	tted]	Permit	ted	Spl	lit Ph	nase	Sp.	lit Pl	nase		
Rights: Min. Green:		Incl	ude		Incl	ıde		Inclu	ıde		Incl	ıde		
Min. Green:	0	52	0	52	52	52	27	0	27	0	0	0		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:	0 (0 3	0 0	0 (2	1 0	0 () 1!	0 0	0 (0	0 0		
Volume Module	∋:						'		1	1				
Base Vol:	0	1443	0	0	896	188	266	0	53	0	0	0		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:	0	1443	0	0	896	188	266	0	53	0	0	0		
User Adi:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adi:									0.93		0.93			
PHF Volume:					963	202	286				0.55			
Reduct Vol:	0	1332	0	0		0	200			0	0			
Reduced Vol:									57		-	-		
PCE Adi:											1.00			
MLF Adj:											1.00			
FinalVolume:										0				
Saturation F	'						1							
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:														
Lanes:														
Final Sat.:														
Capacity Ana	'						1							
Vol/Sat:				0.00	0.23	0.23	0.19	0.00	0.19	0.00	0.00	0.00		
Crit Moves:					0		****							
Green/Cvcle:				0 00	0 58	0.58	0 31	0 00	0.31	0 00	0.00	0.00		
Volume/Cap:							0.62							
Delav/Veh:							28.6							
User DelAdj:							1.00							
AdiDel/Veh:														
LOS by Move: HCM2kAvgQ:	A	В	A	A	В	В	C	A	C	A	A	A		
****	****	* * * * *	*****	****	*****	*****	*****	*****	*****	****	****	*****		

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************************ Intersection #18 Embarcadero / Harrison St ********************** Loss Time (sec): 10 Average Delay (sec/veh): 12.1 Optimal Cycle: 100 Level Of Service: B

************************* Street Name: Embarcadero Harrison St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 0 63 0 0 63 0 27 27 27 0 0 0 0 0 2 0 0 0 0 1 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 0 876 0 0 767 219 183 0 74 0 0

Initial Bse: 0 876 0 0 767 219 183 0 74 0 0 PHF Volume: 0 942 0 0 825 235 197 0 80 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 942 0 0 825 235 197 0 80 0 0 FinalVolume: 0 942 0 0 825 235 197 0 80 0 0 _____|

Saturation Flow Module: Adjustment: 1.00 0.95 1.00 1.00 0.92 0.92 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 0.00 2.00 0.00 0.00 1.56 0.44 1.00 0.00 1.00 0.00 0.00 0.00 Final Sat.: 0 3610 0 0 2716 775 1805 0 1615 0 0 _____| Capacity Analysis Module:

Vol/Sat: 0.00 0.26 0.00 0.00 0.30 0.30 0.11 0.00 0.05 0.00 0.00 0.00 **** Crit Moves: Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.00 0.41 0.00 0.00 0.48 0.48 0.40 0.00 0.18 0.00 0.00 0.00 Delay/Veh: 0.0 9.4 0.0 0.0 10.0 10.0 30.5 0.0 28.2 0.0 0.0 0.0 AdjDel/Veh: 0.0 9.4 0.0 0.0 10.0 10.0 30.5 0.0 28.2 0.0 0.0 0.0 LOS by Move: A A A A A A C A C A A A HCM2kAvgO: 0 7 0 0 9 9 5 0 2 0 0 *************************

Note: Queue reported is the number of cars per lane. *************************

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

******									ernativ			
Intersection	#19 H	Embaro	cadero	/ Brya	ant St	:						
<pre>cycle (sec): Loss Time (sec) Optimal Cycle ************************************</pre>	ec): e:	10	00 10 95			Critic Averag Level	al Voi e Dela Of Sei	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.3	361 2.9 C
Street Name: Approach: Movement:	No:	rth Bo	Embaro ound - R	cadero Sou L	uth Bo	ound – R	Ea L -	ast Bo	Bryan ound - R	t St We L -	est Bo	ound - R
Control: Rights: Min. Green: Y+R: Lanes:	21 4.0	rotect Inclu 41 4.0	ed ide 41 4.0	Pr 16 4.0	Inclu 36 4.0	ed ide 36 4.0	28 4.0	Permit Inclu 28 4.0	ited ide 28 4.0	28 4.0	Permit Inclu 28 4.0	tted ude 28 4.0
Volume Module Base Vol: Growth Adj: Initial Bse: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	54 1.00 54 1.00 0.92 59 0 59 1.00 1.00	812 1.00 812 1.00 0.92 883 0 883 1.00 1.00	14 1.00 14 1.00 0.92 15 0 15 1.00 1.00	31 1.00 31 1.00 0.92 34 0 34 1.00 1.00	744 1.00 744 1.00 0.92 809 0 809 1.00 1.00	64 1.00 64 1.00 0.92 70 0 70 1.00 1.00	58 1.00 58 1.00 0.92 63 0 63 1.00 1.00	5 1.00 5 1.00 0.92 5 0 5 1.00	85 1.00 85 1.00 0.92 92 0 92 1.00 1.00	4 1.00 4 1.00 0.92 4 0 4 1.00 1.00	11 1.00 11 1.00 0.92 12 0 12 1.00 1.00	5 1.00 5 1.00 0.92 5 0 5 1.00 1.00
Saturation Fi Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 1900 0.95 1.00 1805	1900 0.95 1.97 3538	1900 0.95 0.03 61	1900 0.95 1.00 1805	1900 0.95 2.00 3610	1900 0.85 1.00 1615	1900 0.76 0.92 1322	1900 0.76 0.08 114	1900 0.85 1.00 1615	1900 0.94 0.20 356	1900 0.94 0.55 978	1900 0.94 0.25 445
Capacity Anal Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Delay/Veh: User DelAdj: AdjDel/Veh:	0.03 0.23 0.14 30.9 1.00 30.9	0.25 0.46 0.54 19.8 1.00	0.25 **** 0.46 0.54 19.8 1.00 19.8	0.02 **** 0.16 0.12 36.1 1.00 36.1	0.22 0.39 0.57 24.4 1.00 24.4	0.04 0.39 0.11 19.4 1.00 19.4	0.05 0.28 0.17 27.4 1.00 27.4	0.05 0.28 0.17 27.4 1.00 27.4	0.06 **** 0.28 0.20 27.7 1.00 27.7	0.01 0.28 0.04 26.3 1.00 26.3	0.01 0.28 0.04 26.3 1.00 26.3	0.01 0.28 0.04 26.3 1.00 26.3
LOS by Move: HCM2kAvgQ:	1	10	10	1	10	1	2	2	2	0	0	0

Note: Queue reported is the number of cars per lane.

Intersection #20 Embarcadero / Brannan St

Include

Reduct Vol: 0 0

Saturation Flow Module:

Capacity Analysis Module:

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Cycle (sec): 90 Critical Vol./Cap.(X): 0.321
Loss Time (sec): 11 Average Delay (sec/veh): 19.8
Optimal Cycle: 90 Level Of Service: B

-----|

Include

0

0

Include

0 0

Control: Protected Protected Split Phase Split Phase Include

Min. Green: 10 37 0 14 37 37 28 0 28 28 28 28

-----|

Base Vol: 33 821 0 2 721 108 60 0 43 0 0

Initial Bse: 33 821 0 2 721 108 60 0 43 0 0

PHF Volume: 35 883 0 2 775 116 65 0 46 0 0

FinalVolume: 35 883 0 2 775 116 65 0 46 0 0

_____|

Adjustment: 0.95 0.95 1.00 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00

_____|

Vol/Sat: 0.02 0.24 0.00 0.00 0.21 0.07 0.04 0.00 0.03 0.00 0.00 0.00

Green/Cycle: 0.12 0.41 0.00 0.16 0.45 0.45 0.31 0.00 0.31 0.00 0.00 0.00

Volume/Cap: 0.16 0.59 0.00 0.01 0.48 0.16 0.11 0.00 0.09 0.00 0.00 0.00

Delay/Veh: 35.9 21.3 0.0 32.1 17.8 15.0 22.2 0.0 22.1 0.0 0.0 0.0

AdjDel/Veh: 35.9 21.3 0.0 32.1 17.8 15.0 22.2 0.0 22.1 0.0 0.0 0.0

LOS by Move: D C A C B B C A C A A A

HCM2kAvgO: 1 10 0 0 8 2 1 0 1 0 0

0

0

0 0

Reduced Vol: 35 883 0 2 775 116 65 0 46 0 0

Ω

Crit Moves: **** ****

Note: Queue reported is the number of cars per lane.

1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0

Street Name: Brannan St Embarcadero Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R 34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ************* Intersection #21 Folsom St/Fremont St ************************* Cycle (sec): 75 Critical Vol./Cap.(X): 0.394 Loss Time (sec): 16 Average Delay (sec/veh):
Optimal Cycle: 77 Level Of Service: 24.8 ************************* Street Name: Fremont St (I-80 WB Off Ramp) Folsom St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 19 19 19 19 19 19 21 21 0 21 21 0 1 0 1 0 1 1 0 1! 0 0 0 1 1 1 0 0 0 0 1 0 -----| Volume Module: Base Vol: 0 108 28 254 38 0 75 297 9 0 15 75 Initial Bse: 0 108 28 254 38 0 75 297 9 0 15 PHF Volume: 0 111 29 262 39 0 77 306 9 0 15 0 Reduct Vol: 0 0 0 0 0 Ο 0 0 Ω Reduced Vol: 0 111 29 262 39 0 77 306 9 0 15 FinalVolume: 0 111 29 262 39 0 77 306 9 0 15 77 _____| Saturation Flow Module: Adjustment: 0.95 0.92 0.92 0.46 0.65 1.00 0.90 0.90 0.90 1.00 0.89 0.89 Lanes: 0.00 1.59 0.41 1.82 0.18 0.00 0.59 2.34 0.07 0.00 0.17 0.83 Final Sat.: 0 2778 720 1605 217 0 1007 3987 121 0 281 1406 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.00 0.04 0.04 0.16 0.18 0.00 0.08 0.08 0.08 0.00 0.05 0.05 Crit Moves: Green/Cycle: 0.00 0.25 0.25 0.25 0.00 0.27 0.27 0.27 0.00 0.27 0.27 Volume/Cap: 0.00 0.16 0.16 0.66 0.73 0.00 0.28 0.28 0.28 0.00 0.20 0.20

Note: Queue reported is the number of cars per lane.

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Delay/Veh: 0.0 22.8 22.8 29.7 33.2 0.0 22.2 22.2 22.2 0.0 21.8 21.8

AdjDel/Veh: 0.0 22.8 22.8 29.7 33.2 0.0 22.2 22.2 22.2 0.0 21.8 21.8

LOS by Move: A C C C C A C C A C C

HCM2kAvgO: 0 1 1 3 5 0 3 3 0 2 2

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> 34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) **************

Intersection #22 King St/3rd St ******************* Loss Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 95 Level Of Service: 24.4

************************* Street Name: 3rd St King St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Split Phase Split Phase Protected Protected Ovl Include Include Include Min. Green: 26 26 26 0 0 0 20 46 46 13 39 39

0 1 2 1 1 0 0 0 0 0 3 0 1 1 0 2 0 1 1 0

-----| Base Vol: 50 331 122 0 0 0 534 786 29 123 727 56 Initial Bse: 50 331 122 0 0 0 534 786 29 123 727 56 PHF Volume: 52 345 127 0 0 0 556 819 30 128 757 58 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Ω Reduced Vol: 52 345 127 0 0 0 556 819 30 128 757 58

FinalVolume: 52 345 127 0 0 0 556 819 30 128 757 58 _____| Saturation Flow Module: Adjustment: 0.86 0.86 0.86 1.00 1.00 1.00 0.92 0.95 0.95 0.92 0.94 0.94 Lanes: 0.50 3.29 1.21 0.00 0.00 0.00 3.00 1.93 0.07 2.00 1.86 0.14 Final Sat.: 816 5402 1991 0 0 5253 3464 128 3502 3315 255 _____|

Capacity Analysis Module: Vol/Sat: 0.06 0.06 0.06 0.00 0.00 0.00 0.11 0.24 0.24 0.04 0.23 0.23 Crit Moves: **** **** Green/Cycle: 0.26 0.26 0.40 0.00 0.00 0.00 0.20 0.50 0.50 0.14 0.44 0.44 Volume/Cap: 0.25 0.25 0.16 0.00 0.00 0.00 0.52 0.47 0.47 0.26 0.52 0.52 Delay/Veh: 29.3 29.3 19.2 0.0 0.0 0.0 36.0 16.6 16.6 38.6 20.8 20.8 AdjDel/Veh: 29.3 29.3 19.2 0.0 0.0 0.0 36.0 16.6 16.6 38.6 20.8 20.8

LOS by Move: C C B A A A D B B D C C HCM2kAvgO: 3 3 2 0 0 0 6 9 9 2 9 9 *************************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

2000 HCM Operations Method (Base Volume Alternative)

************* Intersection #23 King St/4th St

****************** Cycle (sec): 100 Critical Vol./Cap.(X): 0.428 Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 125 Level Of Service: 38.2 ************************

Street Name: King St 4th St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R

Control: Protected Protected Protected Protected Include Include Include Include Min. Green: 28 28 28 28 28 28 10 42 42 14 45 45 0 1 0 0 1 1 0 1 1 1 1 0 2 1 0 1 0 1 1 0

Volume Module: Base Vol: 24 35 23 64 193 161 81 1263 0 41 680 56 Initial Bse: 24 35 23 64 193 161 81 1263 0 41 680

PHF Volume: 25 36 24 67 201 168 84 1316 0 43 708 58 0 0 0 0 0 Reduct Vol: Ω 0 0 0 0 0 Ω Reduced Vol: 25 36 24 67 201 168 84 1316 0 43 708 FinalVolume: 25 36 24 67 201 168 84 1316 0 43 708 58 _____|

Saturation Flow Module: Adjustment: 0.98 0.98 0.85 0.95 0.89 0.89 0.95 0.91 0.91 0.95 0.94 0.94

Lanes: 0.41 0.59 1.00 1.00 1.64 1.36 1.00 3.00 0.00 1.00 1.85 0.15 Final Sat.: 757 1105 1615 1805 2751 2295 1805 5187 0 1805 3299 272 _____| Capacity Analysis Module:

Vol/Sat: 0.03 0.03 0.01 0.04 0.07 0.07 0.05 0.25 0.00 0.02 0.21 0.21 Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.08 0.34 0.00 0.11 0.37 0.37 Volume/Cap: 0.15 0.15 0.07 0.16 0.33 0.33 0.57 0.75 0.00 0.21 0.59 0.59 Delay/Veh: 39.1 39.1 38.3 39.3 40.8 40.8 60.7 38.8 0.0 51.0 32.6 32.6 AdjDel/Veh: 39.1 39.1 38.3 39.3 40.8 40.8 60.7 38.8 0.0 51.0 32.6 32.6

LOS by Move: D D D D D D E D A D C C HCM2kAvgO: 2 2 1 2 4 4 4 18 0 2 13 13 ******************* Note: Queue reported is the number of cars per lane.

34th America's Cup Races

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************** Intersection #24 16th St/3rd St

Loss Time (sec): 10 Average Delay (sec/veh): 20.2 Optimal Cycle: 100 Level Of Service: C *************************

Street Name: 3rd St 16th St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R

Control:	Pro	otecte	d	Pe	ermit	ted	Pe	ermitt	ed	P	ermit	ted
Rights:		Includ	.e]	Inclu	de		Includ	e		Inclu	ıde
Min. Green:	20	56	56	31	31	31	34	34	34	34	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 0	1 1	0	1 0	1	1 0	1 0	1 1	0	0 1	0	1 0

Volume Module: Base Vol: 103 236 0 4 140 32 38 0 105 0 0 PHF Volume: 114 262 0 4 156 36 42 0 117 0 0

0 0 0 0 Reduct Vol: 0 0 Ω 0 0 0 0 Reduced Vol: 114 262 0 4 156 36 42 0 117 0 0 FinalVolume: 114 262 0 4 156 36 42 0 117 0 0

_____| Saturation Flow Module: Adjustment: 0.92 0.95 0.95 0.58 0.92 0.92 0.77 0.95 0.81 0.95 0.95

Lanes: 2.00 2.00 0.00 1.00 1.63 0.37 1.00 1.00 1.00 0.00 0.00 2.00 _____|

Capacity Analysis Module: Vol/Sat: 0.03 0.07 0.00 0.00 0.05 0.05 0.03 0.00 0.08 0.00 0.00 0.00 Crit Moves: **** ****

Green/Cycle: 0.25 0.56 0.00 0.31 0.31 0.31 0.34 0.00 0.34 0.00 0.00 0.00 Volume/Cap: 0.13 0.13 0.00 0.01 0.18 0.18 0.08 0.00 0.22 0.00 0.00 0.00 Delay/Veh: 29.1 10.5 0.0 23.9 25.3 25.3 22.5 0.0 23.8 0.0 0.0 0.0 AdjDel/Veh: 29.1 10.5 0.0 23.9 25.3 25.3 22.5 0.0 23.8 0.0 0.0 0.0

LOS by Move: C B A C C C C A C A A A HCM2kAvgO: 1 2 0 0 2 2 1 0 3 0 0 *****************************

Note: Queue reported is the number of cars per lane.

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Note: Queue reported is the number of cars per lane.

AdjDel/Veh: 13.8 21.2 21.2 15.9 26.3 26.3 19.5 19.2 19.8 18.7 18.7 18.7

LOS by Move: B C C B C C B B B B B

HCM2kAvgO: 2 3 3 0 3 3 2 2 3 1 1 1

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ************* Intersection #25 Cesar Chavez St/3rd St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 1.023
Loss Time (sec): 12 Average Delay (sec/veh): 20.4
Optimal Cycle: 97 Level Of Service: C ************************ Street Name: 3rd St Cesar Chavez St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permit+Prot Permit+Prot Permitted Permitted Include Include Include Include Rights: Min. Green: 15 35 35 10 30 30 5 40 40 30 30 30 -----| Volume Module: Base Vol: 133 219 8 2 146 56 83 88 130 10 86 8 Initial Bse: 133 219 8 2 146 56 83 88 130 10 86 8 PHF Volume: 146 241 9 2 160 62 91 97 143 11 95 9 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 Reduced Vol: 146 241 9 2 160 62 91 97 143 11 95 FinalVolume: 146 241 9 2 160 62 91 97 143 11 95 9 _____| Saturation Flow Module: Adjustment: 0.71 0.95 0.95 0.57 0.91 0.91 0.68 0.87 0.87 0.87 0.87 Lanes: 1.00 1.93 0.07 1.00 1.45 0.55 1.00 1.00 1.00 0.19 1.66 0.15 _____| Capacity Analysis Module: Vol/Sat: 0.11 0.07 0.07 0.00 0.06 0.06 0.07 0.06 0.09 0.03 0.03 0.03 Crit Moves: **** **** Volume/Cap: 0.20 0.19 0.19 0.00 0.21 0.21 0.18 0.15 0.22 0.09 0.09 0.09 Delay/Veh: 13.8 21.2 21.2 15.9 26.3 26.3 19.5 19.2 19.8 18.7 18.7 18.7

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) *******************

Intersection #26 Cesar Chavez St/Illinois St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.086
Loss Time (sec): 9 Average Delay (sec/veh): 14.5
Optimal Cycle: 100 Level Of Service: B ************************* Street Name: Illinois St Cesar Chavez St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 20 20 20 20 20 20 71 71 71 71 71 71 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 29 27 3 9 17 11 27 27 45 3 65 7 Initial Bse: 29 27 3 9 17 11 27 27 45 3 65 7 PHF Volume: 37 35 4 12 22 14 35 35 58 4 83 9 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 37 35 4 12 22 14 35 35 58 4 83 9 FinalVolume: 37 35 4 12 22 14 35 35 58 4 83 9 _____| Saturation Flow Module: Adjustment: 0.74 0.99 0.99 0.74 0.94 0.94 0.78 0.78 0.78 0.98 0.98 Lanes: 1.00 0.90 0.10 1.00 0.61 0.39 0.54 0.55 0.91 0.04 0.87 0.09 Final Sat.: 1404 1684 187 1400 1086 702 804 804 1340 75 1616 174 _____| Capacity Analysis Module: Vol/Sat: 0.03 0.02 0.02 0.01 0.02 0.02 0.04 0.04 0.05 0.05 0.05 Crit Moves: **** Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.71 0.71 0.71 0.71 0.71 Volume/Cap: 0.13 0.10 0.10 0.04 0.10 0.10 0.06 0.06 0.06 0.07 0.07 0.07

************************* Note: Queue reported is the number of cars per lane.

Delay/Veh: 33.1 32.8 32.8 32.3 32.8 32.8 4.4 4.4 4.4 4.5 4.5 4.5 AdjDel/Veh: 33.1 32.8 32.8 32.8 32.8 32.8 4.4 4.4 4.5 4.5 4.5 LOS by Move: C C C C C A A A A A HCM2kAvgO: 1 1 1 0 1 1 1 1 1 1 1 1

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

******									ernatıv			++++++
Intersection												
**********										****		*****
Cycle (sec): Loss Time (se	,		1			CLICIC	al VO.	1./Ca	p.(X): ec/veh)		0.	224
	ec):		0			Averag	le ner	ay (se	ec/ven)	:	1.	5.2
Optimal Cycle												
Street Name:									del Mar			
Approach:												
Movement:										L -		
Control:	Si	top S:	ign	St	top S	ign	St	top S	ign ude	St	top Si	ign
Rights: Min. Green:		Incl	ude		Incli	ude		Incli	ıde		Incl	ıde
Lanes:												
Volume Module												
Base Vol:						2		239			166	
Growth Adj:								1.00			1.00	
Initial Bse:	20	22	280	25	16	2	1	239	27	256	166	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	20	22	286	26	16	2	1	244	28	261	169	13
Reduct Vol:	0	0		0		0	0	0	0	0	0	0
Reduced Vol:	20	22	286	26	16	2	1	244	28	261	169	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	22	286	26	16	2	1	244	28	261	169	13
Saturation F	low M	odule	:									
Adjustment:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:									0.20		0.94	
Final Sat.:												
Capacity Anal												
Vol/Sat:	-4			0.09	0.09	0.00	0.25	0.24	0.24	0.48	0.31	0.38
Crit Moves:		0.00	0.00	****	0.05	0.00	****	0.21	0.21	****	0.01	0.00
Delay/Veh:		15.3	15.3	10.6	10.6	8.9	10.9	10.8	10.6	14.9	11.2	11.2
Delay Adj:								1.00			1.00	
AdiDel/Veh:								10.8			11.2	
LOS by Move:						A		В			В	
ApproachDel:					10.5		ь	10.8			13.4	ь
D-1 7-1		1 00			1.00			1.00			1.00	
ApprAdjDel:		1 . 0 0			10.5			10.8			13.4	
LOS by Appr:					10.5 B			10.0 B			13.4 B	
AllWayAvgQ:				0 1			0.3			0 0	0.4	
AliwayAvgQ:												
Note: Queue	repor	Lea 1	s the r	ıumper	OI C	ars per	rane	•				

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

******************** Intersection #28 Lake St/14th Ave ******************

100 Critical Vol./Cap.(X): Cvcle (sec): Loss Time (sec): 0 Average Delay (sec/veh): 9.4 Optimal Cycle: 0 Level Of Service: Α

********		****	· * * * * * * *	*****	****	******				****	****	A *****	
Street Name:			14th	n Ave			Lake St East Bound West Bound						
Approach:	No	rth Bo	ound	Soi	ath B	ound	Εá	ast Bo	ound	We	est Bo	ound	
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R	
Control:	St	top S:	ign	St	top S	ign	St	top S	ign	St	op S	ign	
Rights:		Incl	ıde		Incl	ıde		Incl	ude 0		Incl	ıde 0	
Min. Green:	0	. 0	0	0	0	0	0	0	0	0	. 0	0	
Lanes:													
Volume Modul	•												
Base Vol:			1.0	2	0	0	1.6	175	6	60	151	14	
Growth Adj:								1.00			1.00		
Initial Bse:						0.00	1.00					1.00	
								1.00			1.00		
User Adj: PHF Adj:	0.00	0.00	0.00	0.00	0.00	0.86		0.86			0.86		
PHF Volume:						0.00	19					16	
Reduct Vol:	0	10	12			0	0			0			
Reduced Vol:	2	10	12			0	19	203	7				
PCE Adi:									1.00				
MLF Adj:						1.00		1.00			1.00		
FinalVolume:										79	176	16	
Saturation F	low M	odule	:										
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:													
Final Sat.:													
Capacity Ana													
Vol/Sat:	0.04	0.04	0.04	0.01	XXXX	XXXX	0.28	0.28	0.28			0.02	
Crit Moves:	****			****				****		****			
Delay/Veh: Delay Adj:	7.9	7.9	7.9	8.3	0.0	0.0	9.0	9.0	9.0			6.8	
Delay Adj: AdjDel/Veh:	1.00	1.00	1.00	1.00	1.00						1.00		
						0.0	9.0		9.0		10.1	6.8	
LOS by Move:							A	9.0		В	9.9	A	
ApproachDel:					1 00								
Delay Adj:		7.00			1.00			1.00			1.00		
ApprAdjDel: LOS by Appr:		7.9			8.3 A			9.0 A			9.9 A		
Allwayayao.							0.4			0 6			

AllWayAvgQ: 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.4 0.4 0.5 0.5 0.0 ********************** Note: Oueue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Intersection	#29 1	Lake :	St/15th	a Ave								

Cycle (sec): Loss Time (so Optimal Cycle ************************************		1	0.0			Critic	al Vol	l./Cap	o.(X):		0.2	223
Loss Time (se	ec):		0			Averag	e Dela	ay (se	ec/veh)	:	8	3.3
Optimal Cycle	e:		0			Level	Of Se	rvice	:			A
*****	****	****	*****	*****	****	*****	****	****			****	*****
Street Name: Approach:			15th	a Ave					Lake	St		
Approach:	Noi	rth_B	ound_	Sot	ıth Bo	ound_	Ea	ast Bo	ound_	We	est_Bo	ound_
Movement:												
Control			 : ~n									
Control: Rights: Min. Green:	51	Lop S.	rgn ido	51	.op S.	ido	51	op S.	rgn ido	51	Lop S.	rdu ido
Min Croon:	0	111011	n n	0	111010	nue n	0	111011	n n	0	TITCI	n n
Lanes:	0 0	1 11	n n	0 0	1 1 1	n n	0 0	1 11	0	0 0	1 11	0
	1		1	1	, i.		1		1	1		1
Volume Module			'	1		1	1		1	1		1
Base Vol:			15	19	20	11	1	160	2	10	134	6
Growth Adj:												
Initial Bse:	3	3	15	19	20	11	1	160	2	10	134	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
PHF Volume:	3	3	17	22	23	13	1	182	2	11	152	7
PHF Volume: Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	3	17	22	23	13	1	182	2	11	152	7
PCE Adj:												
MLF Adj:												
FinalVolume:												
Saturation F												
Adjustment:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:												
Final Sat.:	110	110	551	277	292	160	5	816	10	55	739	33
Capacity Ana												
Vol/Sat:	0.03	0.03	0.03	0.08	0.08	0.08	0.22	0.22	0.22	0.21	0.21	0.21 ****
Crit Moves: Delay/Veh:	****	7.4	7 4	0 0	****	0 0	****	0 4	0 4	0 0	0 0	
Delay Adj: AdjDel/Veh:												
LOS by Move:												
ApproachDel:	A	7 A	A	A	8 N	Α	A	8 A	А	A	8 3 A	ri
Delav Adi:		1.00			1.00			1.00			1.00	
ApprAdiDel:		7.4			8.0			8.4			8.3	
ApproachDel: Delay Adj: ApprAdjDel: LOS by Appr:		A			A			A			A	
AllWayAvgQ:	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.2	0.2	0.2
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****

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Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

******************** Intersection #30 Jackson St/Arguello Blvd

Loss Time (sec): 0 Average Delay (sec/veh): 12.1 Optimal Cycle: 0 Level Of Service: B **************************

Street Name: Arguello Blvd Jackson St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 0 347 27 30 363 0 0 0 39 0 49 Initial Bse: 0 347 27 30 363 0 0 0 39 0 49 PHF Volume: 0 369 29 32 386 0 0 0 0 41 0 52 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 369 29 32 386 0 0 0 41 0 52 FinalVolume: 0 369 29 32 386 0 0 0 41 0 52 _____|__|__| Saturation Flow Module:

Lanes: 0.00 0.93 0.07 0.08 0.92 0.00 0.00 0.00 0.00 0.44 0.00 0.56 Final Sat.: 0 720 56 59 712 0 0 0 0 269 0 338 _____| Capacity Analysis Module: Vol/Sat: xxxx 0.51 0.51 0.54 0.54 xxxx xxxx xxxx xxxx 0.15 xxxx 0.15 **** Crit Moves: Delay/Veh: 0.0 12.1 12.1 12.7 12.7 0.0 0.0 0.0 9.2 0.0 9.2 AdjDel/Veh: 0.0 12.1 12.1 12.7 12.7 0.0 0.0 0.0 0.0 9.2 0.0 9.2 LOS by Move: * B B B B * * * * A * ApproachDel: 12.1 12.7 xxxxxx 9.2 Delay Adj: 1.00 1.00 xxxxx 1.00 xxxxx 1.00 ApprAdjDel: 12.1 12.7
LOS by Appr: B B XXXXXX 9.2

*

Δ

******************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #31 Pacific Ave/Presidio Blvd *************************

Cycle (sec): 100 Critical Vol./Cap.(X): 0.492
Loss Time (sec): 0 Average Delay (sec/veh): 11.2
Optimal Cycle: 0 Level Of Service: B

Street Name: Presidio Blvd Pacific Ave
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 3 353 11 14 356 18 10 1 1 15 11 31 Initial Bse: 3 353 11 14 356 18 10 1 1 15 11 31 PHF Volume: 3 357 11 14 360 18 10 1 1 15 11 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 3 357 11 14 360 18 10 1 1 15 11 31 FinalVolume: 3 357 11 14 360 18 10 1 1 15 11 31 _____|__| Saturation Flow Module: Lanes: 0.01 0.96 0.03 0.03 0.92 0.05 0.84 0.08 0.08 0.26 0.19 0.55 Final Sat.: 6 761 24 29 731 37 463 46 46 161 118 333 _____| Capacity Analysis Module: Vol/Sat: 0.47 0.47 0.47 0.49 0.49 0.02 0.02 0.02 0.09 0.09 0.09 Crit Moves: **** **** **** Delay/Veh: 11.2 11.2 11.2 11.6 11.6 11.6 8.8 8.8 8.8 8.7 8.7 8.7 AdjDel/Veh: 11.2 11.2 11.2 11.6 11.6 11.6 8.8 8.8 8.8 8.7 8.7 8.7 LOS by Move: B B B B B A A A A

Note: Queue reported is the number of cars per lane.

ApproachDel: 11.2 11.6 8.8 Delay Adj: 1.00 1.00 1.00

ApprAdjDel: 11.2 11.6 8.8

LOS by Appr: B B A

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AllWayAvgQ: 0.8 0.8 0.8 0.9 0.9 0.0 0.0 0.0 0.1 0.1 0.1

8 7

1.00

8.7

Α

1.00

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #32 Lombard St/Lvon St ****************** Loss Time (sec): 0 Average Delay (sec/veh): 15.8 Optimal Cycle: 0 Level Of Service: C

Street Name: Lyon St Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----|

Volume Module: Base Vol: 88 29 21 27 34 159 186 205 91 8 229 18 Initial Bse: 88 29 21 27 34 159 186 205 91 8 229 18 PHF Volume: 89 29 21 27 34 161 188 207 92 8 231 18 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 89 29 21 27 34 161 188 207 92 8 231 18 FinalVolume: 89 29 21 27 34 161 188 207 92 8 231 18 _____|

Lanes: 0.64 0.21 0.15 0.12 0.15 0.73 0.39 0.42 0.19 0.03 0.90 0.07 Final Sat.: 320 105 76 70 88 412 254 280 124 19 535 42 _____| Capacity Analysis Module: Vol/Sat: 0.28 0.28 0.28 0.39 0.39 0.39 0.74 0.74 0.74 0.43 0.43 0.43 Crit Moves: **** **** Delay/Veh: 11.3 11.3 11.3 11.7 11.7 11.7 20.8 20.8 20.8 12.4 12.4 12.4 AdjDel/Veh: 11.3 11.3 11.3 11.7 11.7 11.7 20.8 20.8 20.8 12.4 12.4 12.4 LOS by Move: B B B B B B C C B B B 12.4 ApproachDel: 11.3 11.7 Delay Adi: 1.00 1.00 11.7 20.8 1.00 1.00 Delay Adj: 1.00 ApprAdjDel: 11.3 11.7 20.8
LOS by Appr: B B C 12.4 B

Saturation Flow Module:

************************* Note: Queue reported is the number of cars per lane. **************************

AllWayAvgo: 0.3 0.3 0.3 0.5 0.5 0.5 2.3 2.3 0.6 0.6 0.6

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

*****						(Base					++++	
Intersection												
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Cycle (sec):		9	0			Critic Averag Level	al Vol	l./Cap	o.(X):		0.0	639
Loss Time (se	ec):		9			Averag	e Dela	av (se	ec/veh)	:	1.	4.4
Optimal Cycle	e:	9	0			Level	Of Sei	rvice	:			В
*****		****	****	****	****	*****	****	****	*****	****	****	*****
Street Name:		D	ivisad	lero St					Lomba	rd St		
Approach:	No	rth Bo	und	Soi	ıth Bo	ound	Εa	ast Bo	ound	We	est B	ound
Movement:	T.	- Т	– R	T	- Т	- R	Τ	- Т	- R	T.	- Т	- R
Control:												
Rights:						ıde						
Min. Green:						27			54			5.4
Y+R:						4.0						
						1 0						
Volume Module												
Base Vol:		106	30	0.0	130	42	20	1313	197	22	1608	89
Growth Adj:								1.00			1.00	
Initial Bse:			39	80		42		1313			1608	89
											1.00	
						1.00		1.00				
		0.98			0.98			0.98			0.98	
PHF Volume:			40	82		43	20	1340	201		1641	
Reduct Vol:		0	0		0	0	20	0	0	-	-	
Reduced Vol:				82		43	20	1340	201	22		
PCE Adj:									1.00		1.00	
MLF Adj:		1.00				1.00		1.00			1.00	
FinalVolume:							20					
Saturation F				1000	1000	1900	1000	1000	1000	1000	1000	1000
Sat/Lane:											1900	
Adjustment: Lanes:												
												0.15
Final Sat.:												
Capacity Ana				0 00	0 10	0 10	0 04	0 04	0 04	0 20	0 00	0 00
Vol/Sat:			0.12	0.09	0.10	0.10	0.34	0.34	0.34		****	
Crit Moves:			0 00	0 0 0	0 0 0	0 00			0.66			
Green/Cycle:									0.60		0.60	
Volume/Cap:						0.34	0.57				0.63	
Delay/Veh:							11.3				12.1	
User DelAdj:							1.00		1.00		1.00	
AdjDel/Veh:							11.3		11.3		12.1	12.1
LOS by Move:					С			В			В	
HCM2kAvgQ:		5		2						11		11
*****									*****	****	****	*****
Note: Queue	report	ted is	the n	number	of ca	ars per	lane	•				

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Level Of Service Computation Report

	never or bervice comparation report
2000 HCM	Operations Method (Base Volume Alternative)

Intersection #34	Lombard St/Fi	llmore St	
******	******	***********	*****
Cycle (sec):	90	Critical Vol./Cap.(X):	0.491
Loss Time (sec):	9	Average Delay (sec/veh):	12.9
Optimal Cycle:	90	Level Of Service:	В

Street Name: Fillmore St	Optimal Cycle	(sec): 9 ycle: 90				Average Delay (sec/ven): Level Of Service:							В
Control: Permitted Permitted Include Include Include Min. Green: 27 27 27 27 27 27 27 54 54 54 54 54 54 4 74 8 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Street Name:			Fillmo	re St					Lomba	rd St		
Control: Permitted Permitted Include Include Include Min. Green: 27 27 27 27 27 27 27 54 54 54 54 54 54 4 74 8 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Approach:	No:	rth Bo	ound	Soi	uth Bo	ound	Εá	ast B	ound	We	est Bo	ound
Control:	Movement:	L -	– T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Rights:	Control:		Permit	tted	1	Permit	tted]	Permi	tted	I	Permit	ted
Lanes: 1 0 0 1 0 0 1 0 1 0 1 0 0 1 1 0 1 0 0 1 1 1 1 0 0 1 1 0 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 0 1 1 1 1 1 0	Rights:		Incl	ude		Incl	ıde		Incl	ude		Incl	ıde
Lanes: 1 0 0 1 0 0 1 0 1 0 1 0 0 1 1 0 1 0 0 1 1 1 1 0 0 1 1 0 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 0 1 1 1 1 1 0	Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Lanes: 1 0 0 1 0 0 1 0 1 0 1 0 0 1 1 0 1 0 0 1 1 1 1 0 0 1 1 0 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 1 1 1 1 1 0 0 0 0 1 1 1 1 1 0	Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module: Base Vol: 68 155 25 32 173 69 15 1261 62 12 1459 65 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lanes:	1	0 0	1 0	0 :	1 0	1 0	0 :	1 1	1 0	0 :	1 1	1 0
Base Vol: 68 155 25 32 173 69 15 1261 62 12 1459 65 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				0.5	2.0	170		1.5	1001		1.0	1 4 5 0	6.5
Initial Bse: 68 155 25 32 173 69 15 1261 62 12 1459 65 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
PHF Adj: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95													
PHF Volume: 72 163 26 34 182 73 16 1327 65 13 1536 68 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	User Adj:	1.00	1.00	1.00									
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PHF Adj:	0.95	0.95	0.95									
Reduced Vol: 72 163 26 34 182 73 16 1327 65 13 1536 68 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
FinalVolume: 72 163 26 34 182 73 16 1327 65 13 1536 68	PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													
Adjustment: 0.56 0.98 0.98 0.83 0.83 0.83 0.82 0.82 0.82 0.83 0.83 0.83 Lanes: 1.00 0.86 0.14 0.23 1.27 0.50 0.03 2.83 0.14 0.02 2.85 0.13 Final Sat.: 1056 1602 258 366 1980 790 52 4413 217 37 4515 201 0.00 0.00 0.00 0.00 0.00 0.00 0.00													
Lanes: 1.00 0.86 0.14 0.23 1.27 0.50 0.03 2.83 0.14 0.02 2.85 0.13 Final Sat: 1056 1602 258 366 1980 790 52 4413 217 37 4515 201													
Final Sat.: 1056 1602 258 366 1980 790 52 4413 217 37 4515 201													
Capacity Analysis Module: Vol/Sat: 0.07 0.10 0.10 0.09 0.09 0.09 0.30 0.30 0.30 0.34 0.34 0.34 Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.60 0.6													
Capacity Analysis Module: Vol/Sat: 0.07 0.10 0.10 0.09 0.09 0.09 0.30 0.30 0.30 0.34 0.34 0.34 Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.60 0.60													
Vol/Sat: 0.07 0.10 0.10 0.09 0.09 0.09 0.30 0.30 0.30 0.34 0.34 0.34 Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.60 0.60													
Crit Moves: **** Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.60 0.60					0 00	0 00	0 00	0 20	0 20	0 20	0 24	0 24	0.24
Green/Cycle: 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.3					0.09	0.09	0.09	0.30	0.30				
Volume/Cap: 0.23 0.34 0.34 0.31 0.31 0.31 0.50 0.50 0.50 0.57 0.57 0.57 Delay/Veh: 24.0 24.9 24.9 24.5 24.5 24.5 10.4 10.4 10.4 11.2 11.2 11.2 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0 30	0 30	0 30	0 60	0 60				
Delay/Veh: 24.0 24.9 24.9 24.5 24.5 24.5 10.4 10.4 10.4 11.2 11.2 11.2 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
AdjDel/Veh: 24.0 24.9 24.9 24.5 24.5 24.5 10.4 10.4 10.4 11.2 11.2 11.2 LOS by Move: C C C C C C B B B B B B B B B B B B B													
LOS by Move: C C C C C B B B B B B B B B B B B B B													
$HCM2k\bar{A}vgQ$: 2 4 4 3 3 3 8 8 8 10 10 10													
	HCM3kMaraO.	2	/	/	3	3	3	0	0	. 0	10	10	10

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #35 Bav St/Laguna St

*****	*****	*********	*****
Cycle (sec):	60	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	8	Average Delay (sec/veh):	14.8
			_

cycle (sec).			00			CIICIC	aı vo.	r./ca	P. (A).		0.)))
Loss Time (se	ec):		8			Averag	re Dela	:	: 14.8 B			
Loss Time (se Optimal Cycle	e:		60			Level	Of Sea	cvice	:			В
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Lagur	na St					Bav	st		
Approach:	No	rth B	ound	So	ith B	ound	Ea	ast B	ound	We	est Bo	nund
Movement:	Τ.	- Т	– R	Τ	- Т	– R	Τ	- Т	– R	Τ	- Т	– R
	 		I	 		I	1		I	1		I
Control:												
Rights:												cca
Min Green:	15	11101	15	26	26	26	Λ	11	11	11	11	1 1
Min. Green: Y+R:	4 0	4 0	1.0	4.0	4 0	1 0	4 0	1 0	1 0	4 0	4 0	4 0
Lanes:	4.0	1.0	0 0	1	1.0	0 4.0	4.0	1 2	0 1	4.0	1 0	0 2
Lanes:		J 1:	0 0	ΙΙ.	J 1:	0 0	, ,) 2	0 1		L U	0 2
Volume Module Base Vol:		0	2.0	C 0 1	107	1.0	0	015	100	1.0	0.20	750
									1.00		1.00	
Growth Adj:												
Initial Bse:							0			13		
User Adj:											1.00	
PHF Adj:									0.96		0.96	
PHF Volume:	164	0	31	647	143	20	0	224	110	14	249	783 0
Reduct Vol: Reduced Vol:	0	0	0	0	0		0	0	0	0	0	0
							0	224	110	14	249	783
PCE Adj:												
MLF Adj:												
FinalVolume:												
Saturation F	low M	odule	:									
Sat/Lane:												
Adjustment:	0.94	1.00	0.94	0.96	0.96	0.96	1.00	0.95	0.85	0.98	0.98	0.75
Lanes:	0.84	0.00	0.16	1.67	0.29	0.04	0.00	2.00	1.00	0.05	0.95	2.00
Final Sat.:	1498	0	286	3032	535	74	0	3610	1615	96	1764	2842
Capacity Ana	lysis	Modu	le:									
Vol/Sat:	0.11	0.00	0.11	0.21	0.27	0.27	0.00	0.06	0.07	0.14	0.14	0.28
Crit Moves:											****	
Green/Cycle:						0.43	0.00	0.18	0.18	0.18	0.18	0.62
Volume/Cap:									0.37			
Delay/Veh:									22.3			
User DelAdj:												
AdjDel/Veh:												6.3
LOS by Move: HCM2kAvgQ:	3	0	3	6	2	Ω Α	0	2	2	5	5	4

Note: Queue reported is the number of cars per lane. *****************

Crit Moves:

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Operations Method (Base Volume Alternative) **************

Intersection #36 Bay St/Van Ness Ave ***************** Cycle (sec): 60 Critical Vol./Cap.(X): 0.826 Loss Time (sec): 10 Average Delay (sec/veh): 32.6
Optimal Cycle: 64 Level Of Service: C

Street Name: Van Ness Ave Bay St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 19 19 19 19 19 31 31 31 31 31 1 0 2 1 0 0 1 1 1 0 0 1 1 0 1 0 1 0 1 -----| Volume Module: Base Vol: 63 220 138 9 233 175 59 738 139 100 539 12

Initial Bse: 63 220 138 9 233 175 59 738 139 100 539 12 PHF Volume: 68 239 150 10 253 190 64 802 151 109 586 13 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 68 239 150 10 253 190 64 802 151 109 586 13 FinalVolume: 68 239 150 10 253 190 64 802 151 109 586 13 _____|

Saturation Flow Module: Adjustment: 0.48 0.86 0.86 0.79 0.79 0.79 0.41 0.41 0.43 0.67 0.67 Lanes: 1.00 2.00 1.00 0.07 1.93 1.00 0.15 1.85 1.00 0.31 1.65 0.04 Final Sat.: 906 3257 1629 112 2898 1505 114 1427 808 390 2101 47 _____|

Capacity Analysis Module: Vol/Sat: 0.08 0.07 0.09 0.09 0.09 0.13 0.56 0.56 0.19 0.28 0.28 0.28 **** Crit Moves: Green/Cycle: 0.32 0.32 0.32 0.32 0.32 0.32 0.52 0.52 0.52 0.52 0.52 0.52 Volume/Cap: 0.24 0.23 0.29 0.28 0.28 0.40 1.09 1.09 0.36 0.54 0.54 0.54 Delay/Veh: 15.6 15.2 15.6 15.4 15.4 16.3 72.9 72.9 9.2 10.2 10.2 10.2

AdjDel/Veh: 15.6 15.2 15.6 15.4 15.4 16.3 72.9 72.9 9.2 10.2 10.2 10.2 LOS by Move: B B B B B E E A B B B HCM2kAvgO: 1 2 2 2 3 15 15 2 5 5 *************************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) *************

Intersection #37 Bay St/Hyde St **************** Cycle (sec): 60 Critical Vol./Cap.(X): 0.356 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 60 Level Of Service: 7.0 *************************

Street Name: Hyde St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Include Include Include Include Rights: Min. Green: 16 16 16 16 16 16 37 37 37 0 37 37 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 0 0 2 1 0 -----| Volume Module: Base Vol: 7 44 19 3 92 36 1 762 26 0 612 14 Initial Bse: 7 44 19 3 92 36 1 762 26 0 612 14 PHF Volume: 7 46 20 3 96 38 1 794 27 0 638 15 0 0 0 0 Reduct Vol: 0 0 0 0 Ω 0 0 Ω Reduced Vol: 7 46 20 3 96 38 1 794 27 0 638 15 FinalVolume: 7 46 20 3 96 38 1 794 27 0 638 15 _____| Saturation Flow Module: Adjustment: 0.94 0.94 0.94 0.96 0.96 0.96 0.90 0.90 0.90 1.00 0.91 0.91 Lanes: 0.10 0.63 0.27 0.02 0.71 0.27 0.01 1.93 0.06 0.00 2.93 0.07 Final Sat.: 178 1120 484 42 1280 501 4 3313 113 0 5056 116 _____|__| Capacity Analysis Module:

AdjDel/Veh: 17.0 17.0 17.0 17.8 17.8 17.8 5.9 5.9 5.9 0.0 5.1 5.1 LOS by Move: B B B B B B A A A A A HCM2kAvgO: 1 1 1 2 2 2 4 4 4 0 2 2 *************************

Vol/Sat: 0.04 0.04 0.04 0.07 0.07 0.07 0.24 0.24 0.24 0.00 0.13 0.13

Green/Cycle: 0.27 0.27 0.27 0.27 0.27 0.27 0.62 0.62 0.62 0.00 0.62 0.62

Volume/Cap: 0.15 0.15 0.15 0.28 0.28 0.28 0.39 0.39 0.39 0.00 0.20 0.20 Delay/Veh: 17.0 17.0 17.0 17.8 17.8 17.8 5.9 5.9 5.9 0.0 5.1 5.1

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Unsignalized Method (Base Volume Alternative)

************************* Intersection #38 Alexander Ave/Bunker Rd *************************

Average Delay (sec/veh): 7.9 Worst Case Level Of Service: C[16.9] ******************* Street Name: Bunker Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound L - T - R L-T-R L-T-R L-T-R Movement:

-----| Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Include Include Include Include Rights: 1 0 1 0 0 0 0 0 1 0 1 0 0 0 1 0 0 0 0 Lanes:

Base Vol: 182 265 0 0 221 35 106 0 346 0 0 Initial Bse: 182 265 0 0 221 35 106 0 346 0 0 PHF Volume: 194 282 0 0 235 37 113 0 368 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0

_____|__| Critical Gap Module:

Critical Gp: 4.1 xxxx xxxxx xxxxx xxxx xxxx 6.4 xxxx 6.2 xxxxx xxxx xxxxx FollowUpTim: 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 xxxx 3.3 xxxxx xxxxx xxxxx

FinalVolume: 194 282 0 0 235 37 113 0 368 0 0

Capacity Module:

Cnflict Vol: 272 xxxx xxxxx xxxx xxxx xxxx 923 xxxx 254 xxxx xxxx xxxxx Potent Cap.: 1303 xxxx xxxxx xxxx xxxx xxxx 302 xxxx 790 xxxx xxxx xxxx Move Cap.: 1303 xxxx xxxxx xxxx xxxx xxxx 268 xxxx 790 xxxx xxxx xxxxx Volume/Cap: 0.15 xxxx xxxx xxxx xxxx xxxx 0.42 xxxx 0.47 xxxx xxxx xxxx -----|

Level Of Service Module:

2Way95thQ: 0.5 xxxx xxxxx xxxx xxxx xxxx 2.0 xxxx 2.5 xxxx xxxx xxxxx Control Del: 8.2 xxxx xxxxx xxxxx xxxxx xxxxx 27.9 xxxx 13.5 xxxxx xxxx xxxx LOS by Move: A * * * * * D * B * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

ApproachDel: xxxxxx xxxx 16.9 xxxxxx ApproachLOS: * * C * *******************

Note: Queue reported is the number of cars per lane.

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Existing Weekend MID Mon Jun 27, 2011 09:44:51

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #39 Alexander Ave/Ft.Baker (East) Rd

************************* Average Delay (sec/veh): 1.8 Worst Case Level Of Service: B[13.5] *******************

Street Name: Ft.Baker (East) Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound

L - T - R L - T - R L - T - R Movement: Control: Uncontrolled Uncontrolled Stop Sign Stop Sign Rights: Include Include Include Include Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0

Base Vol: 2 313 54 14 216 7 0 0 0 38 0 46 Initial Bse: 2 313 54 14 216 7 0 0 0 38 0 46

PHF Volume: 2 360 62 16 248 8 0 0 0 44 0 53 -----|----|-----|

Critical Gap Module:

Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 6.4 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 ______|__|

Capacity Module:

Cnflict Vol: 256 xxxx xxxxx 422 xxxx xxxxx 706 711 252 680 684 391 Potent Cap.: 1320 xxxx xxxxx 1148 xxxx xxxxx 353 361 791 420 374 662 Move Cap.: 1320 xxxx xxxxx 1148 xxxx xxxxx 321 355 791 415 368 662

-----| Level Of Service Module:

LOS by Move: A * * A * * * * * * * * * *

Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared Cap.: xxxx xxxx xxxx xxxx xxxx xxxx xxxx 0 xxxx xxxx 521 xxxxx

ApproachDel: xxxxx xxxxx xxxxx xxxxx ApproachLOS: * * * * 13.5 B

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

************** Intersection #40 Bush St/Van Ness Ave

************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.415

Loss Time (sec): 8 Average Delay (sec/veh): 18.3 Optimal Cycle: 90 Level Of Service: B

************************** Street Name: Van Ness Ave Bush St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Prot+Permit Permitted Permitted Include Include Include Min. Green: 0 34 34 10 48 0 34 34 0 0 0 0 0 2 1 0 1 0 3 0 0 0 1 1 1 0 0 0 0 0 -----| Base Vol: 0 1115 117 198 1250 0 65 773 88 0 0 Initial Bse: 0 1115 117 198 1250 0 65 773 88 0 0 0 PHF Volume: 0 1149 121 204 1289 0 67 797 91 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1149 121 204 1289 0 67 797 91 0 0 FinalVolume: 0 1149 121 204 1289 0 67 797 91 0 0 _____| Saturation Flow Module: Adjustment: 1.00 0.90 0.90 0.95 0.91 1.00 0.89 0.89 0.89 1.00 1.00 1.00 Lanes: 0.00 2.72 0.28 1.00 3.00 0.00 0.21 2.50 0.29 0.00 0.00 0.00 Final Sat.: 0 4629 486 1805 5187 0 355 4227 481 0 0 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.25 0.25 0.11 0.25 0.00 0.19 0.19 0.19 0.00 0.00 Crit Moves: **** **** **** Green/Cycle: 0.00 0.41 0.41 0.56 0.53 0.00 0.38 0.38 0.38 0.00 0.00 0.00 Volume/Cap: 0.00 0.61 0.61 0.67 0.47 0.00 0.50 0.50 0.50 0.00 0.00 Delay/Veh: 0.0 21.3 21.3 15.4 13.2 0.0 21.7 21.7 21.7 0.0 0.0 0.0 AdjDel/Veh: 0.0 21.3 21.3 15.4 13.2 0.0 21.7 21.7 21.7 0.0 0.0 0.0

************************* Note: Queue reported is the number of cars per lane.

LOS by Move: A C C B B A C C A A A

HCM2kAvgO: 0 11 11 4 8 0 8 8 8 0 0 0

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Intersection #41 Pine St/Van Ness Ave

************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.415
Loss Time (sec): 8 Average Delay (sec/veh): 19.0
Optimal Cycle: 90 Level Of Service: B *************************

Street Name: Van Ness Ave Pine St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L}

Control: Prot+Permit Protected Permitted Permitted Rights: Include Include Include Include Min. Green: 10 48 48 0 34 34 0 0 0 34 34 34 1 0 3 0 0 0 0 2 1 0 0 0 0 0 0 1 2 1 0 -----|

Volume Module:

Base Vol: 96 1107 0 0 1319 146 0 0 0 86 689 105 Initial Bse: 96 1107 0 0 1319 146 0 0 0 86 689 105 PHF Volume: 101 1165 0 0 1388 154 0 0 0 91 725 111 0 0 Ω

0 0 0 0 0 0 0 Reduct Vol: 0 0 Reduced Vol: 101 1165 0 0 1388 154 0 0 0 91 725 111 FinalVolume: 101 1165 0 0 1388 154 0 0 0 91 725 111

_____| Saturation Flow Module:

Lanes: 1.00 3.00 0.00 0.00 2.70 0.30 0.00 0.00 0.00 0.39 3.13 0.48 Final Sat.: 1805 5187 0 0 4600 509 0 0 654 5238 798

_____|

Capacity Analysis Module:

Vol/Sat: 0.06 0.22 0.00 0.00 0.30 0.30 0.00 0.00 0.01 0.14 0.14 Crit Moves: **** Green/Cycle: 0.56 0.53 0.00 0.00 0.41 0.41 0.00 0.00 0.00 0.38 0.38 0.38 Delay/Veh: 9.8 12.7 0.0 0.0 23.6 23.6 0.0 0.0 0.0 20.3 20.3 20.3 AdjDel/Veh: 9.8 12.7 0.0 0.0 23.6 23.6 0.0 0.0 0.0 20.3 20.3 20.3

LOS by Move: A B A A C C A A A C C C

HCM2kAvgO: 1 7 0 0 13 13 0 0 0 5 5 5 ************************* Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

******************* Intersection #42 Lombard St/Van Ness Ave *************************

 Cycle (sec):
 90
 Critical Vol./Cap.(X):
 0.767

 Loss Time (sec):
 7
 Average Delay (sec/veh):
 44.7

 Optimal Cycle:
 101
 Level Of Service:
 D

************************** Street Name: Van Ness Ave Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Permitted Permitted Include Ovl Include Include Min. Green: 26 26 26 0 28 28 40 40 55 40 40 40 3 0 0 1 0 0 0 2 0 1 0 1 0 0 2 0 0 0 1 0 -----| Volume Module: Base Vol: 779 250 41 0 443 110 160 140 829 0 88 5 Initial Bse: 779 250 41 0 443 110 160 140 829 0 88 5 PHF Volume: 803 258 42 0 457 113 165 144 855 0 91 5 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 Reduced Vol: 803 258 42 0 457 113 165 144 855 0 91 5 FinalVolume: 803 258 42 0 457 113 165 144 855 0 91 5 _____| Saturation Flow Module: Adjustment: 0.92 0.98 0.98 1.00 0.95 0.85 0.38 0.38 0.34 1.00 0.99 0.99 Lanes: 3.00 0.86 0.14 0.00 2.00 1.00 0.53 0.47 2.00 0.00 0.95 0.05 Final Sat.: 5253 1598 262 0 3610 1615 380 333 1279 0 1785 101 _____| Capacity Analysis Module: Vol/Sat: 0.15 0.16 0.16 0.00 0.13 0.07 0.43 0.43 0.67 0.00 0.05 0.05 Crit Moves: **** **** **** Green/Cycle: 0.26 0.53 0.53 0.00 0.28 0.28 0.40 0.40 0.65 0.00 0.40 0.40 Volume/Cap: 0.59 0.30 0.30 0.00 0.46 0.25 1.10 1.10 1.02 0.00 0.13 0.13 Delay/Veh: 33.6 13.2 13.2 0.0 30.5 28.7 112.2 112 54.4 0.0 19.5 19.5 AdjDel/Veh: 33.6 13.2 13.2 0.0 30.5 28.7 112.2 112 54.4 0.0 19.5 19.5 LOS by Move: C B B A C C F F D A B B HCM2kAvgO: 7 5 5 0 6 3 14 14 19 0 2 2

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative)

Street Name: Embarcadero Howard St

Intersection #43 Embarcadero / Howard St

************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.396
Loss Time (sec): 10 Average Delay (sec/veh): 20.3
Optimal Cycle: 95 Level Of Service: C *************************

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 15 45 0 10 40 40 30 30 30 0 0 1 0 3 0 0 1 0 2 0 1 1 0 1! 0 0 0 0 0 0 Volume Module: Base Vol: 112 1291 0 6 764 177 147 0 86 0 0 0 Initial Bse: 112 1291 0 6 764 177 147 0 86 0 0 PHF Volume: 120 1388 0 6 822 190 158 0 92 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 Ο _____|

Saturation Flow Module: Adjustment: 0.95 0.91 1.00 0.95 0.95 0.85 0.92 1.00 0.92 1.00 1.00 1.00 Lanes: 1.00 3.00 0.00 1.00 2.00 1.00 1.46 0.00 0.54 0.00 0.00 0.00 _____|__|

Capacity Analysis Module: Vol/Sat: 0.07 0.27 0.00 0.00 0.23 0.12 0.06 0.00 0.10 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.15 0.49 0.00 0.11 0.45 0.45 0.30 0.00 0.30 0.00 0.00 0.00

Volume/Cap: 0.44 0.55 0.00 0.03 0.51 0.26 0.21 0.00 0.33 0.00 0.00 0.00 Delay/Veh: 39.9 17.9 0.0 39.9 19.8 17.3 26.2 0.0 27.4 0.0 0.0 0.0 AdjDel/Veh: 39.9 17.9 0.0 39.9 19.8 17.3 26.2 0.0 27.4 0.0 0.0 0.0 LOS by Move: D B A D B B C A C A A A HCM2kAvgO: 3 10 0 0 9 3 3 0 4 0 0

Note: Queue reported is the number of cars per lane.

Existing Weekend MID Fri Jun 3, 2011 14:15:27 Page 46-1 34th America's Cup Races Transportation Impact Analysis Level Of Service Computation Report 2000 HCM Operations Method (Base Volume Alternative) ***************** Intersection #44 Embarcadero / Folsom St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.474
Loss Time (sec): 10 Average Delay (sec/veh): 19.9
Optimal Cycle: 90 Level Of Service: B ******************* Street Name: Embarcadero Folsom St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 12 49 0 0 32 32 31 0 31 0 0 1 0 2 0 0 0 0 1 1 0 2 0 0 0 1 0 0 0 0 ------| Volume Module: Base Vol: 137 1075 0 0 842 20 330 0 127 0 0 PHF Volume: 147 1156 0 0 905 22 355 0 137 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 147 1156 0 0 905 22 355 0 137 0 0 Saturation Flow Module: Adjustment: 0.95 0.95 1.00 1.00 0.95 0.95 0.92 1.00 0.85 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 0.00 1.95 0.05 2.00 0.00 1.00 0.00 0.00 Final Sat.: 1805 3610 0 0 3516 84 3502 0 1615 0 0 _____|__| Capacity Analysis Module: Vol/Sat: 0.08 0.32 0.00 0.00 0.26 0.26 0.10 0.00 0.08 0.00 0.00 0.00 Crit Moves: **** **** Volume/Cap: 0.55 0.59 0.00 0.00 0.65 0.65 0.29 0.00 0.25 0.00 0.00 0.00 Delay/Veh: 38.0 14.2 0.0 0.0 23.2 23.2 21.7 0.0 21.4 0.0 0.0 0.0 AdjDel/Veh: 38.0 14.2 0.0 0.0 23.2 23.2 21.7 0.0 21.4 0.0 0.0 0.0 LOS by Move: D B A A C C C A C A A A HCM2kAvgO: 4 11 0 0 11 11 4 0 3 0 0 ***** Note: Queue reported is the number of cars per lane. *****************

Existing plus AC34 - 2012

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Existing plus AC34 2012 Project Conditions

Weekday PM Peak Hour

Transportation impact Analysis

Intersection #1 Beach St/Columbus Ave ************************* Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.0] ******************* Street Name: Columbus Ave Beach St Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-R Movement: Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Include Include Include Rights: Include 0 0 1! 0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 Lanes: Volume Module: Base Vol: 17 0 8 0 0 0 157 92 9 76 Initial Bse: 17 0 8 0 0 0 157 92 9 76 0 Added Vol: 0 0 0 0 0 0 0 Ω 0 0 Ω 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 Initial Fut: 17 0 8 0 0 0 0 157 92 PHF Volume: 18 0 9 0 0 0 167 98 Reduct Vol: 0 0 0 0 0 0 0 0 10 81 0 0 0 0 0 0 0 FinalVolume: 18 0 9 0 0 0 0 167 98 10 81 Ω -----| Critical Gap Module: _____| Capacity Module: Potent Cap.: 681 603 922 xxxx xxxx xxxxx xxxx xxxx xxxx 1311 xxxx xxxxx Level Of Service Module: LOS by Move: * * * * * * * * * A * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT SharedQueue:xxxxx 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxx xxxxx Shared LOS: * B * * * * * * * A * * ApproachLOS: B * xxxxx xxxxx ApproachLOS: B * * XXXXXX ************************* Note: Queue reported is the number of cars per lane.

North Point St

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

2000 HCM Operations Method (Future Volume Alternative)												
Intersection #2 North Point St/Columbus Ave												
***********	****	****	* * * * * * * 0 0	****	****	C~:+:		* * * * * *	******	*****	*****	****** 010
Cycle (sec): Loss Time (se Optimal Cycle			90			Critic	ar vo.	1./Ca).(X):		0.2	210
Loss lime (se	ec):		9			Averag	de ner	ay (S	ec/ven)	:	1.	3.8
*********	e: *****		9U ++++++	+++++		rever	OI 561	rvice	:			B ++++++
Street Name:			Columb						North F			
Approach:						nund	Ea		ound			ound
Movement:									- R			
			tted									
Rights:		Incl	ude		Incl	ıde		Incl	ıde		Incl	ude
Min. Green:						28					53	53
Y+R:	4.0		4.0									
			1 0									
Volume Module												
	62			22	76	58	21			28	292	29
Growth Adj:					1.00	1.00		1.00			1.00	1.00
Initial Bse:				22	76	58	21			28	292	29
Added Vol:		0		0	0	0	0	0		0	0	0
PasserByVol: Initial Fut:	0	0		0	0	0	0		0	0	0	0
			22	22	76	58	21	131	44	28	292	29
User Adj:					1.00	1.00		1.00	1.00		1.00	1.00
_		0.87			0.87	0.87		0.87			0.87	0.87
PHF Volume:		44	25	25	87	67	24	151	51	32	336	33
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		44		25	87		24			32	336	33
_		1.00			1.00			1.00			1.00	1.00
MLF Adj:					1.00			1.00			1.00	1.00
FinalVolume:				25				151	51		336	33
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:								1900			1900	
Adjustment:								0.91			0.86	
Lanes:											1.67	
Final Sat.:												
Capacity Ana												
Vol/Sat:				0 06	0 06	0 06	0 13	0.13	0.13	0 12	0.12	0.12
Crit Moves:		0.04	0.04	0.00	0.00	0.00	0.13	****	0.13	0.12	0.12	0.12
Green/Cycle:		0 31	0.31	0.31	0.31	0.31	0 59	0.59	0.59	0 59	0.59	0.59
Volume/Cap:						0.18		0.22			0.21	0.21
Delay/Veh:					23.1		9.2			8.9	8.9	8.9
User DelAdj:						1.00		1.00			1.00	1.00
AdiDel/Veh:					23.1		9.2			8.9	8.9	8.9
LOS by Move:						23.1 C	9.2 A			0.9 A		
HCM2kAvgQ:				2		2	3			3	3	3
*******							-	-	-	-	-	-

Note: Queue reported is the number of cars per lane.

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Street Name: Stockton St

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 North Point St/Stockton St

****************** Loss Time (sec): 8 Average Delay (sec/veh): 12.1 Optimal Cycle: 90 Level Of Service: B *************************

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Include Rights: Include Include Min. Green: 25 25 25 25 25 25 57 57 57 57 57 57 Volume Module: Base Vol: 23 30 32 14 37 22 17 267 57 7 152 5 Initial Bse: 23 30 32 14 37 22 17 267 57 7 152 Added Vol: 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 Ω 0 0 0 22 17 267 Initial Fut: 23 30 32 14 37 57 PHF Volume: 26 34 36 16 42 25 19 300 64 8 171 6 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 26 34 36 16 42 25 19 300 64 8 171

-----|----| Saturation Flow Module: Adjustment: 0.87 0.87 0.87 0.91 0.91 0.91 0.96 0.96 0.96 0.89 0.89 Lanes: 0.27 0.35 0.38 0.19 0.51 0.30 0.05 0.78 0.17 0.09 1.85 0.06 Final Sat.: 449 586 625 332 876 521 91 1430 305 144 3136 103 _____|

FinalVolume: 26 34 36 16 42 25 19 300 64 8 171 6

Capacity Analysis Module:

Vol/Sat: 0.06 0.06 0.06 0.05 0.05 0.05 0.21 0.21 0.21 0.05 0.05 0.05 Crit Moves: **** Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.63 0.63 0.63 0.63 0.63 0.63 Volume/Cap: 0.21 0.21 0.21 0.17 0.17 0.17 0.33 0.33 0.33 0.09 0.09 0.09 Delay/Veh: 25.9 25.9 25.9 25.4 25.4 25.4 8.4 8.4 8.4 6.5 6.5 6.5 AdjDel/Veh: 25.9 25.9 25.9 25.4 25.4 25.4 8.4 8.4 6.5 6.5 6.5 LOS by Move: C C C C C A A A A A

HCM2kAvgO: 2 2 2 2 2 5 5 5 1 1 1

Note: Queue reported is the number of cars per lane.

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6

Bay St

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******						(ruture						******
	11 4 D	0.1										
intersection	****	*****	*****	****	- * * * * * * *	*****	****	*****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	-	9			Averag	e Dela	av (se	ec/veh)	:	2	1.4
Optimal Cycle	e:	c	0			Level	Of Set	rvice:	:	•		C
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Columb	us Ave	€				Bay	St		
Approach:	No	rth Bo	und	Soi	ath Bo	ound	Ea	ast Bo	ound	We	est B	ound
Movement:												
Control: Rights: Min. Green:	P	rotect	.ed	Pi	rotect	ted]	Permit	ted	I	Permi	tted
Rights:		Ignor	e		Incl	ıde		Inclu	ıde		Incl	ude
Min. Green:	8	31	31	0	19	19	47	47	47	50	50	50
Y+R:												
Lanes:	. 2	0 0	1 0	. 0 () 1	1 0	. 0 :	1 1	0 1	. 0 :	L 0	1 0
M-d-1												
Volume Modula Base Vol:		96	66	0	1 / 5	4	1	616	187	7	1214	34
Growth Adj:									1.00			1.00
Initial Bse:				0								
Added Vol:		0	0	0	0	0	0	010	187 0 0	,	0	0
						0	0	0	0	0		
PasserByVol: Initial Fut:	341	86	66	0	145	4	1	616	187	7	1214	34
User Adi:											1.00	
PHF Adj:						0.94		0.94			0.94	
PHF Volume:	363	91	0	0	154	4				7	1291	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:						4						
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F												
Sat/Lane:											1900	
Adjustment:												
Lanes:									1.00		1.94	
Final Sat.:												
Capacity Ana												
Vol/Sat:				0 00	0 04	0 04	0 19	0 19	0 12	N 39	0.39	0.39
Crit Moves:				****	0.04	0.04	0.19	0.19	0.12	0.33	****	0.33
Green/Cycle:					0.23	0.23	0.56	0.56	0.56	0.56	0.56	0.56
Volume/Cap:									0.22		0.70	
Delay/Veh:								11.1			15.8	
User DelAdj:								1.00			1.00	
AdjDel/Veh:								11.1			15.8	
LOS by Move: HCM2kAvgQ:												
*******									*****	****	****	*****
Note: Queue	repor	ted is	the n	umber	of ca	ars per	lane	•				

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Stockton St

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bay St/Stockton St

Street Name:

Cycle (sec):	90	Critical Vol./Cap.(X):	0.535
Loss Time (sec):	7	Average Delay (sec/veh):	10.2
Optimal Cycle:	90	Level Of Service:	В
******	******	*********	*****

Approach:	No:	rth B	ound	Soi	uth B	ound	E	ast B	ound	W	est B	ound
Movement:			- R			- R			- R		– T	
Control:		Permi	tted	 I	Permi	tted		Permi	tted		Permi	tted
Rights:		Incl			Incl	ude			ude		Incl	ude
Min. Green:	20			20			63		63			63
Y+R:		4.0		4.0			4.0					
Lanes:		0 1!		0				1 0		-	1 0	
Volume Module												
Base Vol:	e: 66	25	58	40	33	31	2.2	516	3.0	22	1134	40
Growth Adj:				1.00				1.00			1.00	
Initial Bse:				40	33		2.2				1134	40
Added Vol:	0	2.0		40	0		0			0		0
PasserByVol:	-	0		0	0	0	0		-	0	-	0
Initial Fut:		25	-	40	33	-	2.2	-	-	-	1134	-
User Adj:					1.00			1.00			1.00	1.00
PHF Adj:					0.92			0.92			0.92	0.92
PHF Volume:	72			43			24				1233	43
Reduct Vol:		0		0	0	0	0			0		0
Reduced Vol:		2.7	-	43	36	-	24	-		-	1233	-
PCE Adj:					1.00		1.00				1.00	
	1.00							1.00			1.00	
FinalVolume:		27		43				561			1233	43
Saturation F	low M	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.79	0.79	0.79	0.82	0.82	0.82	0.83	0.83	0.83	0.89	0.89	0.89
-												

Lanes: 0.44 0.17 0.39 0.38 0.32 0.30 0.08 1.82 0.10 0.04 1.89 0.07

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Intersection #6 Bay St/Kearny St												
Cvcle (sec):			90			Critic	al Vo	l./Cai	o.(X):		0.	580
Loss Time (se	-c) ·		9			Averag	e Dela	av (s	ec/veh)		1	2.1
Cycle (sec): Loss Time (se Optimal Cycle	٠.		90			Level	Of Sei	rvice	•	•		R
Optimal Cycle	· * * * * *	****	,, ******	****	****	*****	****	****	• *****	*****	****	*****
Street Name:									Bay			
Approach:					ıth Bo	nind					et B	ound
Movement:	Τ	- Т	- R	т	- Т	- R	Т	_ т	– R	T	- Т	– R
	 		I	1		I	1			1		I
Control:												
Diabta		Tnal	100		Tnalı	ide			ude		Incl	
Min. Green:	20	20	20	20	20	20	61	61	61	61	61	61
Y+R:						1 0	4 0	4 0	4 N	4 0	4 0	4.0
Lanes:												
				1	J I.					1		
Volume Module	'		'	1		1	1		1	1		1
Base Vol:			56	2	3	1 4	1.0	548	62	29	1031	2
Growth Adi:								1.00			1.00	
Initial Bse:		3		2	3			548			1031	
Added Vol:							0			0	1001	0
PasserByVol:		0	0	0	0			0	0	0	0	0
Initial Fut:		3		2		14	10				1031	
User Adj:				_		1.00		1.00			1.00	
PHF Adj:				0.90		0.90		0.90			0.90	
PHF Volume:						16	11				1146	2
Reduct Vol:							0			0		
Reduced Vol:												2
PCE Adi:								1.00			1.00	
MLF Adj:						1.00		1.00			1.00	
FinalVolume:						16						
				1		I	1					
Saturation Fl	low M	odule	:									
Sat/Lane:											1900	
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Anal												
Vol/Sat:				0.01	0.01	0.01	0.21	0.21	0.21			
Crit Moves:											****	
Green/Cycle:									0.68			
Volume/Cap:									0.31		0.52	

Note: Queue reported is the number of cars per lane.

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Delay/Veh: 48.1 48.1 48.1 27.9 27.9 27.9 6.3 6.3 6.3 8.1 8.1 AdjDel/Veh: 48.1 48.1 48.1 27.9 27.9 27.9 6.3 6.3 6.3 8.1 8.1 8.1 LOS by Move: D D D C C C A A A A A HCM2kAvq0: 8 8 8 0 0 0 4 4 4 9 9 9

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

The Tribute The Tribute	**************************************						*****	****	****	*****	****	****	*****
Street Name: Sansome St	*****	****	****	*****	****	****							
Street Name: Sansome St	Cycle (sec):		8	80			Critic	al Vo	1./Caj	p.(X):		0.	538
Street Name: Sansome St	Loss Time (se	ec):		9			Averag	e Del	ay (s	ec/veh)	:	1	4.5
Street Name: Sansome St	Optimal Cycle	e:	8	80			Level	Of Se	rvice	:			В
Approach: North Bound	***********	****	****	***** Canso	**** me St	*****	*****	****	****	****** Broadw	***** 'av St	****	*****
Control: Split Phase Rights: Include Include Tinclude Tin	Approach:	No	rth Bo	nund	Soi	ith Bo	nund	E	ast B	nund	We	est Bo	nund
Control: Split Phase Rights: Include Include Tinclude Tinclude Include Min. Green: 27 27 27 0 0 0 0 44 44 0 0 4.0 4.0 4.0 4.0 Lanes: 0 1 0 1 0 0 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0 0 0 0 0 0 1 1 0	Movement:	L -	- T	- R	L -	- T	- R	L	- T	- R	L ·	- T	- R
Rights: Include Min. Green: 27 27 27 0 0 0 0 44 44 0 0 44 44 VHR: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0													
Lanes:	Control:	Sp.	lit Pl	nase	Sp.	lit Ph	nase		Permi	tted]	Permi	ted
Lanes:	Rights:	0.7	Incli	ude	0	Inclu	ıde		Incl	ude	0	Incli	ıde
Lanes:	Min. Green:	21	4 0	4.0	1 0	4 0	4 0	44	44	4 0	4 0	44	44
Volume Module: Base Vol: 274 298 39 0 0 0 83 558 0 0 852 107 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	I anos:	4.0	4.0	1 0	4.0	4.0	4.0	4.0	1 1	4.0	4.0	4.0	4.0
Volume Module: Base Vol: 274 298 39 0 0 0 83 558 0 0 852 107 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		. U	. U		1			1			1	∪ ⊥ 	I
Base Vol: 274 298 39 0 0 0 0 83 558 0 0 852 107 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				-1	_		-1			-1	_		-1
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				39	0	0	0	83	558	0	0	852	107
Initial Bse: 274 298 39 0 0 0 83 558 0 0 852 107 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Initial Bse:	274	298	39	0	0	0	83	558	0	0	852	107
Initial Fut: 274 298 39 0 0 0 83 558 0 0 852 107 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut: 274 298 39 0 0 0 83 558 0 0 852 107 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
PHF Adj:	Initial Fut:	274	298	39	0	0	0	83	558	0	0	852	107
PHF Volume: 288 314 41 0 0 0 87 587 0 0 897 113 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PHF Volume:	288	314	41	0	0	0	87	587	0	0	897	113
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduced Vol:	288	314	41	0	0	0	87	587	0	0	897	113
FinalVolume: 288 314 41 0 0 0 87 587 0 0 897 113	PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	FinalVolume:	288	314	41	. 0	0	0	8.7	587	0	0	897	113
Adjustment: 0.88 0.88 0.88 1.00 1.00 0.66 0.66 1.00 1.00 0.93 0.93 Lanes: 0.90 0.97 0.13 0.00 0.00 0.00 0.26 1.74 0.00 0.00 1.78 0.22 Final Sat.: 1495 1626 213 0 0 0 324 2181 0 0 3153 396													
Lanes: 0.90 0.97 0.13 0.00 0.00 0.00 0.26 1.74 0.00 0.00 1.78 0.22 Final Sat.: 1495 1626 213 0 0 0 324 2181 0 0 3153 396													
Final Sat.: 1495 1626 213 0 0 0 324 2181 0 0 3153 396	Adjustment:	0.88	0.88	0.88	1.00	1.00	1.00	0.66	0.66	1.00	1.00	0.93	0.93
Capacity Analysis Module: Vol/Sat: 0.19 0.19 0.19 0.00 0.00 0.00 0.27 0.27 0.00 0.00 0.28 0.28 Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Volume/Cap: 0.57 0.57 0.57 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.52 0.52 Delay/Veh: 22.5 22.5 22.5 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lanes:	0.90	0.97	0.13	0.00	0.00	0.00	0.26	1.74	0.00	0.00	1.78	0.22
Capacity Analysis Module: Vol/Sat: 0.19 0.19 0.19 0.00 0.00 0.00 0.27 0.27 0.00 0.00 0.28 0.28 Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Volume/Cap: 0.57 0.57 0.57 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.52 0.52 Delay/Veh: 22.5 22.5 22.5 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Final Sat.:	1495	1626	213	0	0	0	324	2181	0	0	3153	396
Vol/Sat: 0.19 0.19 0.19 0.00 0.00 0.27 0.27 0.00 0.00 0.28 0.28 Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Volume/Cap: 0.57 0.57 0.57 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.52 0.52 Delay/Veh: 22.5 22.5 0.0 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Volume/Cap: 0.57 0.57 0.57 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.52 0.52 Delay/Veh: 22.5 22.5 22.5 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.28	0.28
Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Volume/Cap: 0.57 0.57 0.57 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.52 0.52 Delay/Veh: 22.5 22.5 22.5 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					3.00	3.00	0.00	0.2/	5.27	0.00	0.00		
Volume/Cap: 0.57 0.57 0.57 0.00 0.00 0.00 0.49 0.49 0.00 0.00 0.52 0.52 Delay/Veh: 22.5 22.5 22.5 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.55	0.55
Delay/Veh: 22.5 22.5 22.5 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
AdjDel/Veh: 22.5 22.5 22.5 0.0 0.0 0.0 11.4 11.4 0.0 0.0 11.6 11.6													
LOS by Move: C C C A A A B B A A B B HCM2kAvgQ: 7 7 7 0 0 0 6 6 0 0 8 8	AdjDel/Veh:	22.5	22.5	22.5	0.0	0.0	0.0	11.4	11.4	0.0	0.0	11.6	11.6
HCM2kAvqQ: 7 7 7 0 0 0 6 6 0 0 8 8	LOS by Move:	С	С	С	A	A	A	В	В	A	A	В	В
	HCM2kAvgQ:	7	7	7	0	0	0	6	6	0	0	8	8

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******************* Intersection #8 Broadway St/Battery St ************************ Cycle (sec): 80 Critical Vol./Cap.(X): 0.576 Loss Time (sec): 9 Average Delay (sec/veh): 19.4 Optimal Cycle: 70 Level Of Service: B Street Name: Battery St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Split Phase Split Phase Permitted Permitted Rights: Include Include Include Include Min. Green: 0 0 0 44 44 44 17 17 17 17 17 17 0 0 0 0 0 0 1 0 1 0 0 0 1 1 0 0 1 1 0 0 -----| Volume Module: Base Vol: 0 0 0 54 633 184 0 337 257 37 776 0 Initial Bse: 0 0 0 54 633 184 0 337 257 37 776 0 0 337 -.. 0 0 0 0 U PHF Volume: 0 0 0 55 646 188 0 344 262 38 792 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 55 646 188 0 344 262 38 792 0 FinalVolume: 0 0 0 55 646 188 0 344 262 38 792 0 -----| Saturation Flow Module: Adjustment: 1.00 1.00 1.00 0.91 0.91 0.91 1.00 0.89 0.89 0.86 0.86 1.00 Lanes: 0.00 0.00 0.00 0.12 1.46 0.42 0.00 1.13 0.87 0.09 1.91 0.00 Final Sat.: 0 0 0 215 2517 732 0 1915 1460 148 3108 0 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.26 0.26 0.26 0.00 0.18 0.18 0.25 0.25 0.00 Crit Moves: **** Green/Cycle: 0.00 0.00 0.00 0.55 0.55 0.55 0.00 0.34 0.34 0.34 0.34 0.00 Volume/Cap: 0.00 0.00 0.00 0.47 0.47 0.47 0.00 0.53 0.53 0.75 0.75 0.00 Delay/Veh: 0.0 0.0 0.0 11.1 11.1 11.1 0.0 21.9 21.9 26.6 26.6 0.0 AdjDel/Veh: 0.0 0.0 0.0 11.1 11.1 11.1 0.0 21.9 21.9 26.6 26.6 0.0 LOS by Move: A A A B B B A C C C A HCM2kAvgO: 0 0 0 7 7 7 0 6 6 10 10 0 *******

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Embarcadero/ Beach St/ Grant St

*****	*****	*****	*****	****	*****	*****	****	****	*****	****	****	*****
Cycle (sec): Loss Time (se Optimal Cycle			75			Critic	al Vol	l./Cap	o.(X):		0.6	504
Loss Time (se	ec):	1	L3			Averag	e Dela	ay (se	ec/veh)	:	56	5.2
Optimal Cycle	e:	10)1			Level	Of Sei	rvice	:			E

Street Name:			Embaro	adero			Bea	ach St	(EB)/	Grant	St (1	VB)
Approach:												
Movement:												
Control:	Sp.	lit Ph	nase	Sp.	lit Ph	nase	Sp.	lit Pl	nase	Sp.	lit Pl	nase
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	17	17	17	26	26	0	0	0	26	19	19	19
Rights: Min. Green: Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 1	1 0	1 0	0 :	L 0	0 0	0 (0 0	0 1	0 (1!	0 0
Volume Module	e:											
Base Vol:	161	335	28	4	141	0	0	0	340	17	73	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	335	28	4	141	0	0	0	340	17	73	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Bse: Added Vol: PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	335	28	4	141	0	0	0	340	17	73	8
User Adi:												
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	175	364	30	4	153	0	0	0	370	18	79	9
Reduct Vol:												
Reduced Vol:	175	364	30	4	153	0	0	0	370	18	79	9
PCE Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation Fi												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:									0.87			
Lanes: Final Sat.:	1084	2255	188	52	1846	0	0	0	1644	323	1387	152
										1		
Capacity Anal						'			'			
Vol/Sat:				0.08	0.08	0.00	0.00	0.00	0.22	0.06	0.06	0.06
Crit Moves:										****		

Note: Queue reported is the number of cars per lane.

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Green/Cycle: 0.17 0.17 0.17 0.26 0.26 0.00 0.00 0.00 0.26 0.19 0.19

Volume/Cap: 0.96 0.96 0.96 0.32 0.32 0.00 0.00 0.00 0.87 0.30 0.30 0.30

Delay/Veh: 68.7 68.7 68.7 30.8 30.8 0.0 0.0 53.8 35.8 35.8 35.8

AdjDel/Veh: 68.7 68.7 68.7 30.8 30.8 0.0 0.0 53.8 35.8 35.8 35.8

LOS by Move: E E E C C A A A D D D

HCM2kAvgO: 14 14 14 4 4 0 0 0 14 3 3 3

34th America's Cup Races

Transportation Impact Analysis

2000 HCM Operations Method (Future Volume Alternative) ************************* Intersection #10 Embarcadero/ North Point St / Kearny St

Level Of Service Computation Report

******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.376
Loss Time (sec): 14 Average Delay (sec/veh): 30.1
Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Embarcadero North Point St (EB)/ Kearny St (W Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Permitted Split Phase Split Phase Include Include Include Include Min. Green: 15 36 0 0 17 17 20 20 20 20 20 20 1 0 2 0 0 0 1 0 1 0 0 0 1! 0 1 0 1 0 1 -----| Volume Module: Base Vol: 166 480 0 1 444 54 19 243 45 4 25 10 Initial Bse: 166 480 0 1 444 54 19 243 45 4 25 10 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 Ω 0 45 4 25 1 444 Initial Fut: 166 480 54 19 243 PHF Volume: 175 505 0 1 467 57 20 256 47 4 26 11 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 175 505 0 1 467 57 20 256 47 4 26 11 FinalVolume: 175 505 0 1 467 57 20 256 47 4 26 11 -----|----|-----| Saturation Flow Module: Lanes: 1.00 2.00 0.00 0.01 1.78 0.21 0.07 0.85 1.08 0.14 0.86 1.00 Final Sat.: 1805 3610 0 7 3018 367 124 1582 1999 260 1626 1615 _____|__| Capacity Analysis Module: Vol/Sat: 0.10 0.14 0.00 0.15 0.15 0.15 0.16 0.16 0.02 0.02 0.02 0.01 Crit Moves: **** **** Volume/Cap: 0.78 0.35 0.00 0.56 0.56 0.56 0.73 0.73 0.11 0.07 0.07 0.03 Delay/Veh: 54.8 19.0 0.0 28.6 28.6 28.6 38.4 38.4 27.9 27.7 27.7 27.4

Note: Queue reported is the number of cars per lane.

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AdjDel/Veh: 54.8 19.0 0.0 28.6 28.6 28.6 38.4 38.4 27.9 27.7 27.7 27.4

LOS by Move: D B A C C C D D C C C

HCM2kAvgO: 5 5 0 6 6 6 8 8 1 1 1 0

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Embarcadero / Bay St

****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.599 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 81 Level Of Service: 15.4 **************************

Street Name: Embarcadero Bay St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Ovl Include Min. Green: 42 53 0 0 25 25 7 0 42 0 0 2 0 2 0 0 0 0 1 1 0 1 0 0 0 2 0 0 0 0 -----| Volume Module: Base Vol: 966 630 0 0 666 67 16 0 589 0 0 Initial Bse: 966 630 0 0 666 67 16 0 589 0 0 Added Vol: 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Initial Fut: 966 630 0 0 666 0 0 0 0 0 0 0 0 0 67 16 0 589

PHF Volume: 1050 685 0 0 724 73 17 0 640 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 1050 685 0 0 724 73 17 0 640 FinalVolume: 1050 685 0 0 724 73 17 0 640 0 0

Saturation Flow Module: Adjustment: 0.92 0.87 1.00 1.00 0.86 0.86 0.95 1.00 0.69 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 0.00 1.82 0.18 1.00 0.00 2.00 0.00 0.00 0.00 Final Sat.: 3502 3321 0 0 2975 299 1805 0 2615 0 0 _____|__|__|

Capacity Analysis Module:

Vol/Sat: 0.30 0.21 0.00 0.00 0.24 0.24 0.01 0.00 0.24 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.47 0.84 0.00 0.00 0.38 0.38 0.08 0.00 0.54 0.00 0.00 0.00

Volume/Cap: 0.64 0.24 0.00 0.00 0.64 0.64 0.12 0.00 0.45 0.00 0.00 0.00 Delay/Veh: 19.2 1.4 0.0 0.0 24.2 24.2 39.0 0.0 12.6 0.0 0.0 0.0 AdjDel/Veh: 19.2 1.4 0.0 0.0 24.2 24.2 39.0 0.0 12.6 0.0 0.0 0.0 LOS by Move: B A A A C C D A B A A A HCM2kAvgO: 11 2 0 0 9 9 0 0 6 0 0 ******************

Note: Queue reported is the number of cars per lane.

Include

Include

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) *************************

Intersection #12 Embarcadero / Chestnut St / Sansome St												
Cycle (sec): Loss Time (sec) Optimal Cycle	90 13 79 ******	*****	****	Critic Averag Level	e Dela Of Sei	ay (se	ec/veh)		0.6	9.4 B		
Street Name: Approach: Movement:	Noi L -	rth B	Embaro ound - R	adero Sou L -	uth Bo	ound – R	Chest Ea L	inut S ast Bo - T	St (EB) ound - R	/ San We L -	nsome est Bo - T	(WB) ound - R
	10 4.0 1 (Incl 40 4.0 2	ted ude 0 4.0 0 0	10 4.0 1 (Inclu 40 4.0 2	ted ade 0 4.0 1 0	16 4.0 0	lit Ph Inclu 16 4.0 l 0	nase ude 16 4.0 1 0	7 4.0 0	lit Ph Inclu 7 4.0	nase ide 7 4.0 0 0
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj:	36 1.00 36 0 0 36 1.00 0.90 40 0 40 1.00 1.00	1239 1.00 1239 0 0 1239 1.00 0.90 1377 0 1377 1.00 1.00	0 1.00 0 0 0 0 1.00 0.90 0 0 0	18 1.00 18 0 0 18 1.00 0.90 20 0 20 1.00 1.00	1230 1.00 1230 0 0 1230 1.00 0.90 1367 0 1367 1.00 1.00	7 1.00 7 0 0 7 1.00 0.90 8 0 8 1.00	79 1.00 79 0 0 79 1.00 0.90 88 0 88 1.00 1.00 88	335 1.00 335 0 0 335 1.00 0.90 372 0 372 1.00 1.00	57 1.00 57 0 0 57 1.00 0.90 63 0 3 1.00 1.00 63	0 1.00 0 0 0 1.00 0.90 0 0 0	0 1.00 0 0 0 0 1.00 0.90 0 0 0 1.00	0 1.00 0 0 0 0 1.00 0.90 0 0 0
Saturation F	1900 1900 0.95 1.00 1805	1900 0.95 2.00 3610	: 1900 1.00 0.00	1900 0.95 1.00 1805	1900 0.91 2.98 5152	1900 0.91 0.02 29	1900 0.91 0.34 580	1900 0.91 1.42 2458	1900 0.91 0.24 418	1900 1.00 0.00	1900 1.00 0.00 0	1900 1.00 0.00
Capacity Anal Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ: ************************************	0.13 0.17 35.3 1.00 35.3 D	Modu 0.38 **** 0.53 0.72 17.2 1.00 17.2 B 14	0.00 0.00 0.00 0.00 0.0 1.00 0.0 A	0.01 **** 0.11 0.10 36.2 1.00 36.2	0.27 0.52 0.51 14.6 1.00 14.6 B	0.27 0.52 0.51 14.6 1.00 14.6 B	0.15 0.21 0.72 36.4 1.00 36.4 D	0.15 **** 0.21 0.72 36.4 1.00 36.4 D	0.15 0.21 0.72 36.4 1.00 36.4 D	0.00 0.00 0.00 0.0 1.00 0.0 A	0.00 0.00 0.00 0.0 1.00 0.0 A	0.00 0.00 0.00 0.0 1.00 0.0 A

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Note: Queue reported is the number of cars per lane.

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Include

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #13 Embarcadero/ Lombard St / Battery St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.522 33.8

Loss Time (sec): 11 Average Delay (sec/veh):
Optimal Cycle: 82 Level Of Service: Level Of Service: C ************************** Street Name: Embarcadero Lombard St (EB) / Battery St (WB) Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include

Min. Green: 9 35 35 9 35 35 21 21 21 6 6 6 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 Volume Module: Base Vol: 103 1215 11 12 870 410 30 7 292 40 30 28 40 30 28 Added Vol: 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Ω 0 0 0 Initial Fut: 103 1215 11 12 870 410 30 7 292 PHF Volume: 112 1321 12 13 946 446 33 8 317 43 33 30 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 112 1321 12 13 946 446 33 8 317 43 33 30

Saturation Flow Module: Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.96 0.96 0.85 0.94 0.94 Lanes: 1.00 1.98 0.02 1.00 2.00 1.00 0.81 0.19 1.00 0.41 0.31 0.28 Final Sat.: 1805 3574 32 1805 3610 1615 1480 345 1615 730 548 511 _____|

FinalVolume: 112 1321 12 13 946 446 33 8 317 43 33 30

Capacity Analysis Module:

Rights:

Vol/Sat: 0.06 0.37 0.37 0.01 0.26 0.28 0.02 0.02 0.20 0.06 0.06 0.06 Crit Moves: **** **** **** Green/Cycle: 0.10 0.39 0.39 0.10 0.39 0.39 0.38 0.38 0.38 0.07 0.07 0.07 Volume/Cap: 0.62 0.95 0.95 0.07 0.67 0.71 0.06 0.06 0.52 0.89 0.89 0.89 Delay/Veh: 45.3 40.6 40.6 36.9 24.1 27.0 17.9 17.9 22.6 92.5 92.5 92.5 AdjDel/Veh: 45.3 40.6 40.6 36.9 24.1 27.0 17.9 17.9 22.6 92.5 92.5 92.5

LOS by Move: D D D D C C B B C F F F HCM2kAvgO: 3 21 21 0 11 10 1 1 7 6 6

******************* Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ******************* Intersection #14 Embarcadero / Green St / Davis St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.517
Loss Time (sec): 14 Average Delay (sec/veh): 19.7
Optimal Cycle: 89 Level Of Service: B Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Rights: Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 1 0 2 0 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 0 -----| Volume Module: Base Vol: 46 1280 0 4 1003 11 27 0 64 0 0 Initial Bse: 46 1280 0 4 1003 11 27 0 64 0 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 Ω 0 0 0 0 Initial Fut: 46 1280 0 4 1003 11 27 64 0 0 PHF Volume: 49 1362 0 4 1067 12 29 0 68 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 49 1362 0 4 1067 12 29 0 68 0 0 0 FinalVolume: 49 1362 0 4 1067 12 29 0 68 0 0 0 -----| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.95 0.89 1.00 0.89 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 1.00 1.98 0.02 0.30 0.00 0.70 0.00 1.00 0.00 _____|

Note: Queue reported is the number of cars per lane.

Crit Moves: **** ****

Capacity Analysis Module:

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Green/Cycle: 0.09 0.50 0.00 0.08 0.48 0.48 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.29 0.75 0.00 0.03 0.62 0.62 0.21 0.00 0.21 0.00 0.00 0.00 Delay/Veh: 38.9 19.9 0.0 38.5 17.8 17.8 25.9 0.0 25.9 0.0 0.0 0.0 AdjDel/Veh: 38.9 19.9 0.0 38.5 17.8 17.8 25.9 0.0 25.9 0.0 0.0 0.0 LOS by Move: D B A D B B C A C A A A HCM2kAvgO: 1 15 0 0 11 11 2 0 2 0 0 0 ******************* Existing + AC Event 2012 WeMon Jun 20, 2011 11:41:23 34th America's Cup Races

> Transportation Impact Analysis Level Of Service Computation Report

*****		HCM O	Level O: peration	ns Met	thod	(Future	Volur	ne Alt	ernati		****	*****
Intersection									*****	****	*****	*****
Cycle (sec):			90			Critic						
Loss Time (se			17			Averag	ar vo.	., car	o (110h)		36	
Optimal Cycle			17 90			Lovel	Of CO	ay (se	c/veii)	•	5(D. 9
******										****	*****	_
Street Name:			arcader						Broadw			
Approach:												nund
Movement:						– R			– R			
Control:			ed									
Rights:			ıde			ıde			ide		Incl	
			0						29			0
Min. Green:					28							
Y+R:			4.0								4.0	
			0 0			1 0			0 1			
Volume Module												
Base Vol:			0	_	972	99	84	0	319	0	0	0
Growth Adj:								1.00			1.00	
Initial Bse:		1225	0		972	99	84	0	319	0	0	0
Added Vol:	0			0		0	0	0	0	0	0	0
PasserByVol:			0	0		0	0	0	0	0	0	0
Initial Fut:				6		99	84	0	319	0	0	0
User Adj:						1.00		1.00	1.00		1.00	1.00
_			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:		1225		6		99	84	0	319	0	0	0
Reduct Vol:		0			0	0	0	0	0	0	0	0
Reduced Vol:				6		99	8 4	0	319	0	-	0
PCE Adj:			1.00			1.00			1.00		1.00	
MLF Adj:			1.00			1.00		1.00	1.00		1.00	
FinalVolume:				6			84		319		0	0
Saturation F												
Sat/Lane:											1900	
Adjustment:											1.00	
Lanes:											0.00	
Final Sat.:									1615			
Capacity Ana												
Vol/Sat:		0.34	0.00	0.00		0.30		0.00	0.20	0.00	0.00	0.00
Crit Moves:					****		****					
Green/Cycle:								0.00			0.00	0.00
Volume/Cap:								0.00			0.00	0.00
Delay/Veh:						50.1		0.0		0.0		0.0
User DelAdj:							1.00		1.00		1.00	1.00
AdjDel/Veh:						50.1	21.2			0.0		0.0
LOS by Move: HCM2kAvgQ:	D	C	A		D	D	C		C	A	A	A
				0		18	2		7	0		0
*****									*****	****	*****	*****
Note: Oueue i	report	ted is	s the n	ımber	of ca	ars per	lane					

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #16 Embarcadero / Washington St ****************** Loss Time (sec): 17 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 33.9 Level Of Service: ************************** Street Name: Embarcadero Washington St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 12 30 0 10 28 0 33 0 33 0 0 2 0 3 0 0 1 0 2 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 302 1577 0 9 1255 82 104 0 254 0 0 Initial Bse: 302 1577 0 9 1255 82 104 0 254 0 0 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 Ω 0 0 0 0 0 0 0 0 0 9 1255 Initial Fut: 302 1577 82 104 0 254 0 PHF Volume: 302 1577 0 9 1255 82 104 0 254 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 302 1577 0 9 1255 82 104 0 254 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 0.91 1.00 0.95 0.90 0.90 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 3.00 0.00 1.00 2.82 0.18 1.00 0.00 1.00 0.00 0.00 0.00 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.09 0.30 0.00 0.00 0.26 0.26 0.06 0.00 0.16 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.13 0.33 0.00 0.11 0.31 0.31 0.37 0.00 0.37 0.00 0.00 0.00 Volume/Cap: 0.65 0.91 0.00 0.04 0.84 0.84 0.16 0.00 0.43 0.00 0.00 0.00 Delay/Veh: 40.1 36.5 0.0 35.8 32.9 32.9 19.3 0.0 21.9 0.0 0.0 0.0 AdjDel/Veh: 40.1 36.5 0.0 35.8 32.9 32.9 19.3 0.0 21.9 0.0 0.0 0.0 LOS by Move: D D A D C C B A C A A A HCM2kAvgO: 4 16 0 0 12 12 2 0 6 *******************

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Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) **************************

Street Name: Embarcadero MIssion St

Intersection #17 Embarcadero / Mission St *************************

Cycle (sec): 90 Critical Vol./Cap.(X): 0.731
Loss Time (sec): 10 Average Delay (sec/veh): 2.0
Optimal Cycle: 62 Level Of Service: A *************************

Approach: North Bound South Bound East Bound West Bound

Transportation Impact Analysis

Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 0 52 0 52 52 52 28 0 28 0 0 0 0 1 2 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 -----| Volume Module: Base Vol: 2 2003 0 0 1459 179 0 0 0 0 0 Initial Bse: 2 2003 0 0 1459 179
Added Vol: 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0
Initial Fut: 2 2003 0 0 1459 179 0 0 0 0 0 0 0 Ω 0 0 0 Ω 0 0 0 0 PHF Volume: 2 2154 0 0 1569 192 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 2 2154 0 0 1569 192 0 0 0 0 0

-----| Saturation Flow Module: Adjustment: 0.86 0.58 1.00 1.00 0.61 0.90 1.00 1.00 1.00 1.00 1.00 1.00 Lanes: 0.01 2.99 0.00 0.00 2.77 0.23 0.00 1.00 0.00 0.00 0.00 0.00 Final Sat.: 3 3313 0 0 3203 393 0 1900 0 0 0 _____|__|__|

FinalVolume: 2 2154 0 0 1569 192 0 0 0 0 0

Capacity Analysis Module:

Crit Moves: **** Delay/Veh: 2.5 2.5 0.0 0.0 1.3 1.3 0.0 0.0 0.0 0.0 0.0 0.0

AdjDel/Veh: 2.5 2.5 0.0 0.0 1.3 1.3 0.0 0.0 0.0 0.0 0.0 0.0 LOS by Move: A A A A A A A A A A HCM2kAvgO: 9 6 0 0 4 5 0 0 0 0 0 ******************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #18 Embarcadero / Harrison St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.876
Loss Time (sec): 10 Average Delay (sec/veh): 45.7
Optimal Cycle: 100 Level Of Service: D ************************** Street Name: Embarcadero Harrison St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Split Phase Split Phase Include Include Include Include Min. Green: 0 63 0 0 63 63 27 27 27 0 0 0 0 0 2 0 0 0 0 1 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 0 1393 0 0 1320 351 183 0 169 0 0 Initial Bse: 0 1393 0 0 1320 351 183 0 169 0 0 0 Added Vol: 0 0
PasserByVol: 0 0
Initial Fut: 0 1393 0 0 0 0 0 Ω 0 0 0 0 Ω 0 0 0 0 1320 351 183 0 169 0 PHF Volume: 0 1498 0 0 1419 377 197 0 182 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1498 0 0 1419 377 197 0 182 -----|----|-----| Saturation Flow Module: Adjustment: 1.00 0.67 1.00 1.00 0.65 0.92 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 0.00 2.00 0.00 0.00 1.68 0.32 1.00 0.00 1.00 0.00 0.00 0.00 Final Sat.: 0 2559 0 0 2089 556 1805 0 1615 0 0 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.00 0.59 0.00 0.00 0.68 0.68 0.11 0.00 0.11 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.00 0.93 0.00 0.00 1.08 1.08 0.40 0.00 0.42 0.00 0.00 0.00 Delay/Veh: 0.0 26.4 0.0 0.0 65.0 65.0 30.5 0.0 30.7 0.0 0.0 AdjDel/Veh: 0.0 26.4 0.0 0.0 65.0 65.0 30.5 0.0 30.7 0.0 0.0 0.0 LOS by Move: A C A A E E C A C A A A HCM2kAvgO: 0 22 0 0 33 47 5 0 5 0 0 *******************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) **************************

Intersection #19 Embarcadero / Bryant St ******************

Cycle (sec): 100 Critical Vol./Cap.(X): 0.663
Loss Time (sec): 10 Average Delay (sec/veh): 36.5
Optimal Cycle: 95 Level Of Service: D *************************

Street Name: Embarcadero Bryant St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Protected Protected Permitted Permitted Include Include Include Include Rights: Min. Green: 21 41 41 16 36 36 28 28 28 28 28 28

1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 137 1277 9 43 1404 41 76 6 168 75 62 39 41 76 6 168 75 62

Initial Bse: 137 1277 9 43 1404
Added Vol: 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0
Initial Fut: 137 1277 9 43 1404 0 0 0 0 0 0 Ω 41 76 6 168 PHF Volume: 141 1316 9 44 1447 42 78 6 173 77 64 40 Reduct Vol: 0 0 0 0 0 0 0 0 Ω

Ω Ω Ω

Reduced Vol: 141 1316 9 44 1447 42 78 6 173 77 64 40 FinalVolume: 141 1316 9 44 1447 42 78 6 173 77 64 40 -----|

Saturation Flow Module:

Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.63 0.63 0.85 0.81 0.81 Lanes: 1.00 1.99 0.01 1.00 2.00 1.00 0.93 0.07 1.00 0.43 0.35 0.22 Final Sat.: 1805 3581 25 1805 3610 1615 1116 88 1615 658 544 342

_____|__| Capacity Analysis Module:

Vol/Sat: 0.08 0.37 0.37 0.02 0.40 0.03 0.07 0.07 0.11 0.12 0.12 0.12 Crit Moves: **** ****

Green/Cycle: 0.21 0.45 0.45 0.17 0.41 0.41 0.28 0.28 0.28 0.28 0.28 0.28 Volume/Cap: 0.37 0.82 0.82 0.14 0.98 0.06 0.25 0.25 0.38 0.42 0.42 0.42 Delay/Veh: 34.5 27.9 27.9 35.2 47.3 17.9 28.3 28.3 29.6 30.0 30.0 30.0 AdjDel/Veh: 34.5 27.9 27.9 35.2 47.3 17.9 28.3 28.3 29.6 30.0 30.0 30.0 LOS by Move: C C C D D B C C C C C

HCM2kAvgO: 3 18 18 1 22 1 2 2 4 5 5 5

****************** Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

****************** Intersection #20 Embarcadero / Brannan St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.510
Loss Time (sec): 11 Average Delay (sec/veh): 30.1
Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Brannan St Embarcadero Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 10 37 0 14 37 37 28 28 28 28 28 28 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 51 1305 0 3 1370 275 120 0 15 0 0 Initial Bse: 51 1305 0 3 1370 275 120 0 15 0 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 Ω 0 Ω 0 0 0 Ω 0 0 0 3 1370 275 120 Initial Fut: 51 1305 0 15 0 PHF Volume: 53 1359 0 3 1427 286 125 0 16 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 53 1359 0 3 1427 286 125 0 16 FinalVolume: 53 1359 0 3 1427 286 125 0 16 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.03 0.38 0.00 0.00 0.40 0.18 0.07 0.00 0.01 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.12 0.41 0.00 0.16 0.45 0.45 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.24 0.92 0.00 0.01 0.89 0.40 0.22 0.00 0.03 0.00 0.00 0.00 Delay/Veh: 36.4 34.2 0.0 32.2 29.2 17.1 23.1 0.0 21.6 0.0 0.0 0.0 AdjDel/Veh: 36.4 34.2 0.0 32.2 29.2 17.1 23.1 0.0 21.6 0.0 0.0 0.0 LOS by Move: D C A C C B C A C A A A HCM2kAvgO: 1 21 0 0 18 5 3 0 0 0 0 ******************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Folsom St/Fremont St

****************** Cycle (sec): 75 Critical Vol./Cap.(X): 0.554
Loss Time (sec): 16 Average Delay (sec/veh): 26.6
Optimal Cycle: 77 Level Of Service: C

************************** Street Name: Fremont St (I-80 WB Off Ramp) Folsom St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 19 19 19 19 19 19 21 21 0 21 21 0 1 0 1 0 1 1 0 1! 0 0 0 1 1 1 0 0 0 0 1 0 -----| Volume Module: Base Vol: 4 185 73 228 39 1 167 407 57 0 95 66 Initial Bse: 4 185 73 228 39 1 167 407 57 0 95 Added Vol: 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω Initial Fut: 4 185 73 228 39 1 167 407 57 PHF Volume: 4 197 78 243 41 1 178 433 61 0 101 7.0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 4 197 78 243 41 1 178 433 61 0 101 FinalVolume: 4 197 78 243 41 1 178 433 61 0 101 70 -----| Saturation Flow Module: Adjustment: 0.87 0.87 0.87 0.37 0.58 0.58 0.89 0.89 0.89 1.00 0.95 0.95 Lanes: 0.03 1.41 0.56 1.81 0.18 0.01 0.79 1.94 0.27 0.00 0.59 0.41 Final Sat.: 50 2325 917 1282 197 5 1337 3259 456 0 1059 736 _____|__| Capacity Analysis Module: Vol/Sat: 0.08 0.08 0.08 0.19 0.21 0.21 0.13 0.13 0.13 0.00 0.10 0.10 Crit Moves: **** **** Green/Cycle: 0.25 0.25 0.25 0.25 0.25 0.25 0.27 0.27 0.27 0.00 0.27 0.27 Volume/Cap: 0.34 0.34 0.34 0.77 0.85 0.85 0.49 0.49 0.49 0.00 0.35 0.35 Delay/Veh: 24.1 24.1 24.1 36.2 46.4 46.4 23.8 23.8 23.8 0.0 22.9 22.9

Note: Queue reported is the number of cars per lane.

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AdjDel/Veh: 24.1 24.1 24.1 36.2 46.4 46.4 23.8 23.8 23.8 0.0 22.9 22.9

LOS by Move: C C C D D D C C C A C C

HCM2kAvgO: 3 3 3 3 5 5 5 5 0 3 3

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*********** Intersection #22 King St/3rd St ******************* Cycle (sec): 100 Critical Vol./Cap.(X): 1.001 Loss Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: 82.5 F ************************** Street Name: 3rd St King St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Split Phase Split Phase Protected Protected Ovl Include Include Include Min. Green: 26 26 26 0 0 0 20 46 46 13 39 39 0 1 2 1 1 0 0 0 0 0 3 0 1 1 0 2 0 1 1 0 -----| Volume Module: Base Vol: 76 688 262 0 0 0 841 960 14 184 1246 40 Initial Bse: 76 688 262 0 0 0 841 960 14 184 1246 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 Ω 0 0 0 0 0 Ω 0 0 0 0 0 0 Ω 0 Ω Initial Fut: 76 688 262 0 0 0 841 960 14 184 1246 PHF Volume: 78 709 270 0 0 0 867 990 14 190 1285 41 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 78 709 270 0 0 0 867 990 14 190 1285 41 FinalVolume: 78 709 270 0 0 867 990 14 190 1285 41 -----| Saturation Flow Module: Adjustment: 0.87 0.87 0.87 1.00 1.00 1.00 0.92 0.95 0.95 0.92 0.57 0.95 Lanes: 0.37 3.35 1.28 0.00 0.00 0.00 3.00 1.97 0.03 2.00 1.96 0.04 Final Sat.: 609 5515 2100 0 0 5253 3551 52 3502 2114 68 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.13 0.13 0.13 0.00 0.00 0.00 0.17 0.28 0.28 0.05 0.61 0.61 Crit Moves: **** **** Green/Cycle: 0.26 0.26 0.40 0.00 0.00 0.00 0.20 0.50 0.50 0.14 0.44 0.44 Volume/Cap: 0.49 0.49 0.32 0.00 0.00 0.00 0.83 0.56 0.56 0.38 1.38 1.38 Delay/Veh: 31.6 31.6 20.6 0.0 0.0 43.8 17.8 17.8 39.5 206 205.9 AdjDel/Veh: 31.6 31.6 20.6 0.0 0.0 43.8 17.8 17.8 39.5 206 205.9 LOS by Move: C C C A A A D B B D F F HCM2kAvgO: 6 6 5 0 0 0 11 11 11 3 45 74 ******************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) ************************** Intersection #23 King St/4th St ***************** Cycle (sec): 100 Critical Vol./Cap.(X): 0.712 Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 125 Level Of Service: 68.1 ************************* Street Name: King St 4th St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Protected Protected Include Include Include Include Rights: Min. Green: 28 28 28 28 28 28 10 42 42 14 45 45 0 1 0 0 1 1 0 1 1 1 1 0 2 1 0 1 0 1 1 0 -----| Volume Module: Base Vol: 8 52 50 56 304 432 116 1708 17 24 1263 34 Initial Bse: 8 52 50 56 304 432 116 1708 17 24 1263 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 Ω Ω 0 0 0 0 0 0 0 Ω Initial Fut: 8 52 50 56 304 432 116 1708 17 24 1263 PHF Volume: 8 55 53 59 320 455 122 1798 18 25 1329 36 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 8 55 53 59 320 455 122 1798 18 25 1329 FinalVolume: 8 55 53 59 320 455 122 1798 18 25 1329 36 Saturation Flow Module: Adjustment: 0.99 0.99 0.85 0.95 0.87 0.87 0.95 0.91 0.91 0.95 0.95 Lanes: 0.13 0.87 1.00 1.00 1.24 1.76 1.00 2.97 0.03 1.00 1.95 0.05 Final Sat.: 252 1635 1615 1805 2040 2899 1805 5131 51 1805 3501 94 _____|__| Capacity Analysis Module: Vol/Sat: 0.03 0.03 0.03 0.03 0.16 0.16 0.07 0.35 0.35 0.01 0.38 0.38 Crit Moves: **** **** **** Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.08 0.34 0.34 0.11 0.37 0.37 Volume/Cap: 0.15 0.15 0.15 0.15 0.70 0.70 0.85 1.04 1.04 0.12 1.03 1.03 Delay/Veh: 39.1 39.1 39.1 39.1 46.7 46.7 91.1 75.2 75.2 50.3 72.8 72.8 AdjDel/Veh: 39.1 39.1 39.1 39.1 46.7 46.7 91.1 75.2 75.2 50.3 72.8 72.8 LOS by Move: D D D D D D F E E D E E HCM2kAvgO: 2 2 2 10 10 7 34 34 1 36 36 *******************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #24 16th St/3rd St ************************* Loss Time (sec): 10 Average Delay (sec/veh): 21.5
Optimal Cycle: 100 Level Of Service: C ************************** Street Name: 3rd St 16th St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Permitted Permitted Rights: Include Include Include Include Min. Green: 20 56 56 31 31 31 34 34 34 34 34 34 2 0 1 1 0 1 0 1 1 0 1 0 1 1 0 0 1 0 1 0 -----| Volume Module: Base Vol: 231 567 0 7 322 78 89 9 177 0 9 5 Initial Bse: 231 567 0 7 322 78 89 9 177 0 9 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 Ω 0 Ω 0 0 0 0 0 0 0 0 7 322 0 Initial Fut: 231 567 78 89 9 177 0 .5 PHF Volume: 266 652 0 8 370 90 102 10 203 0 10 6 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 266 652 0 8 370 90 102 10 203 FinalVolume: 266 652 0 8 370 90 102 10 203 0 10 6 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 0.95 0.95 0.33 0.92 0.92 0.75 0.81 0.81 0.95 0.90 0.90 Lanes: 2.00 2.00 0.00 1.00 1.61 0.39 1.00 1.00 1.00 0.00 1.29 0.71 Final Sat.: 3502 3610 0 625 2822 684 1433 1547 1547 0 2195 1220 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.08 0.18 0.00 0.01 0.13 0.13 0.07 0.01 0.13 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.25 0.56 0.00 0.31 0.31 0.31 0.34 0.34 0.34 0.00 0.34 0.34 Volume/Cap: 0.30 0.32 0.00 0.04 0.42 0.42 0.21 0.02 0.39 0.00 0.01 0.01 Delay/Veh: 30.6 11.9 0.0 24.2 27.7 27.7 23.7 21.9 25.5 0.0 21.9 21.9 AdjDel/Veh: 30.6 11.9 0.0 24.2 27.7 27.7 23.7 21.9 25.5 0.0 21.9 21.9 LOS by Move: C B A C C C C C A C C HCM2kAvgO: 3 5 0 0 6 6 2 0 5 0 0 ******************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) **************************

Intersection #25 Cesar Chavez St/3rd St

************************* Cycle (sec): 100 Critical Vol./Cap.(X): 1.193
Loss Time (sec): 12 Average Delay (sec/veh): 23.0
Optimal Cycle: 97 Level Of Service: C *************************

Approach: North Bound South Bound East Bound West Bound

Street Name: 3rd St Cesar Chavez St

Movement: L - T - R L - T - R L - T - R Control: Permit+Prot Permit+Prot Permitted Permitted Include Include Include Include Rights: Min. Green: 15 35 35 10 30 30 5 40 40 30 30 30 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 0 1 0 1 -----| Volume Module: Base Vol: 223 535 16 17 354 99 97 204 154 13 220 18

Initial Bse: 223 535 16 17 354 99 97 204 154 13 220 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 Initial Fut: 223 535 16 17 354 99 97 204 154 13 220 PHF Volume: 228 546 16 17 361 101 99 208 157 13 224 18 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 228 546 16 17 361 101 99 208 157 13 224 18 FinalVolume: 228 546 16 17 361 101 99 208 157 13 224 18

-----| Saturation Flow Module: Adjustment: 0.61 0.95 0.95 0.32 0.92 0.92 0.57 0.89 0.89 0.87 0.87 Lanes: 1.00 1.94 0.06 1.00 1.56 0.44 1.00 1.14 0.86 0.10 1.76 0.14 Final Sat.: 1166 3491 104 601 2728 763 1093 1925 1454 172 2913 238 _____|__|

Capacity Analysis Module:

Vol/Sat: 0.20 0.16 0.16 0.03 0.13 0.13 0.09 0.11 0.11 0.08 0.08 0.08 Crit Moves: **** **** Volume/Cap: 0.37 0.42 0.42 0.04 0.44 0.44 0.23 0.27 0.27 0.19 0.19

Delay/Veh: 20.5 23.5 23.5 20.7 28.5 28.5 20.1 20.3 20.3 19.6 19.6 19.6 AdjDel/Veh: 20.5 23.5 23.5 20.7 28.5 28.5 20.1 20.3 20.3 19.6 19.6 19.6 LOS by Move: C C C C C C C C B B B HCM2kAvgO: 4 7 7 0 6 6 2 4 4 3 3 3 ******************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******************* Intersection #26 Cesar Chavez St/Illinois St *************************

 Cycle (sec):
 100
 Critical Vol./Cap.(X):
 0.232

 Loss Time (sec):
 9
 Average Delay (sec/veh):
 20.3

 Optimal Cycle:
 100
 Level Of Service:
 C

 ************************* Street Name: Illinois St Cesar Chavez St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Rights: Include Include Include Include Include Min. Green: 20 20 20 20 20 20 71 71 71 71 71 71 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 130 84 3 13 62 37 35 94 107 1 86 24 Initial Bse: 130 84 3 13 62 37 35 94 107 1 86 24 Added Vol: 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 Initial Fut: 130 84 3 13 62 37 35 94 107 1 86 PHF Volume: 149 97 3 15 71 43 40 108 123 1 99 28 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 149 97 3 15 71 43 40 108 123 1 99 28 FinalVolume: 149 97 3 15 71 43 40 108 123 1 99 28 -----|----|-----| Saturation Flow Module: Adjustment: 0.65 1.00 1.00 0.68 0.94 0.94 0.80 0.80 0.80 0.97 0.97 Lanes: 1.00 0.97 0.03 1.00 0.63 0.37 0.30 0.79 0.91 0.01 0.77 0.22 Final Sat.: 1233 1825 65 1296 1123 670 449 1205 1371 17 1428 398 _____| Capacity Analysis Module: Vol/Sat: 0.12 0.05 0.05 0.01 0.06 0.06 0.09 0.09 0.09 0.07 0.07 0.07 Crit Moves: **** Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.71 0.71 0.71 0.71 0.71 0.71 Volume/Cap: 0.61 0.26 0.26 0.06 0.32 0.32 0.13 0.13 0.13 0.10 0.10 0.10 Delay/Veh: 40.7 34.2 34.2 32.5 34.7 34.7 4.6 4.6 4.6 4.6 4.6 4.6 AdjDel/Veh: 40.7 34.2 34.2 32.5 34.7 34.7 4.6 4.6 4.6 4.6 4.6 4.6 LOS by Move: D C C C C A A A A A HCM2kAvgO: 5 3 3 0 3 3 1 1 1 1 1 1 ********

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Existing + AC Event 2012 WeMon Jun 20, 2011 11:41:23

Transportation Impact Analysis Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative) *************************

*****	****	****	*****	****	****	****	****	****	*****	*****	*****
Intersection									*****	*****	*****
Cycle (sec):			1			Critic	cal Vo.	l./Car	o.(X):	(762
Loss Time (se	ec):		0			Avera	ge Dela	av (se	ec/veh)	:	17.2
Optimal Cycle	p •		0			Level	Of Se	rvice	•		C
Cycle (sec): Loss Time (sec) Optimal Cycle	*****	****	*****	****	****	*****	****	****	*****	*****	*****
Street Name:				n St						(eb) / 1	incoln
Approach:		rth Bo									
Movement:											
Control: Rights:	50	Incl	1911	51	Incl	1911	J	Incl	udo udo	Inc	211140
Min. Green:											0 0
Lanes:											
Volume Module	e:										
Base Vol:						2)8 5
Growth Adj:											
Initial Bse:	17	24	257	14	20	2	1	221	23	412 20)8 5
Added Vol:	0	0		0	0	0				0	0 0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0 0
Initial Fut:			257	14	20	2				412 20	08 5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.0	00 1.00
PHF Adj:						0.96		0.96		0.96 0.9	
PHF Volume:				15					24	429 23	
Reduct Vol:		0	0	0	0	0	0	0		0	
Reduced Vol:	18	25	268	15	21	2	1	230		429 23	L7 5
PCE Adj:											
MLF Adj:	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00 1 0	00 1 00
FinalVolume:									2.00	429 23	17 5
										429 2.	. /
Saturation F	low Mo	odule	:								
Adjustment:											
Lanes:											
Final Sat.:											
Capacity Ana											
Vol/Sat:				0 08	0 08	0.08	0 43	0 43	0.43	0.76 0.3	36 0.36
Crit Moves:			0.50		****		0.43	****		****	0.50
Delay/Veh:							12 7		12.7	25.9 11	7 11.7
Delay Adj:										1.00 1.0	
AdiDel/Veh:	13 =	13 5	13 6	100	10 2	100	12.7			25.9 11	
					10.2 B					25.9 II.	
LOS by Move: ApproachDel:	В	12 F	В	В	10.2			12.7			
		13.5			10.2					21	
Delay Adj:		1.00			1.00			1.00		1.0	
ApprAdjDel:		13.5			10.2			12.7		21	
LOS by Appr:		В			В			В			C
AllWayAvgQ:	0.9	0.9	0.9	0.1	0.1	0.1	0.7	0.7	0.7	2.6 0	.5 0.5

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

******	*****	*****	*****	****	*****	****	****	*****	****	****	*****
Intersection #28 Lake St/14th Ave											
Cycle (sec):		100			Critic	al Vol	L./Car	o.(X):		0.	540
Loss Time (s	ec):	100 0 0			Averag	re Dela	av (se	ec/veh)	:	1	1.7
Optimal Cycl	۵۰,۰	0			Level	Of Sei	cvice	•			В
******	~ • * * * * * * * * *	*****	****	****	*****	****	****	*****	****		
Street Name:		14t	h Ave					Lake	St		
Approach:									We		
Movement:								- R			
Control:	Stop	Sign	S	top S:	ign	St	top S	ign	St	top S:	ign
Rights:	In	clude		Incl	ıde		Incl	ıde		Incl	ude
Min. Green:	0	0 0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0 0	1	0 0	0 0	0 (1!	0 0	0 :	1 0	0 1
						1					
Volume Modul	e:										
Base Vol:	3	44 18	8	0	0	30	264	1	73	298	27
Growth Adj:	1.00 1.	00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		44 18			0	30	264	1	7.3	298	27
Added Vol:		0 0			0	0	0	0	0	0	0
PasserByVol:		0 0			0	0	0	0	0	0	0
Initial Fut:		44 18		0	0	30	264	1	73	298	27
	1.00 1.		-	1.00	1.00		1.00	1.00		1.00	1.00
	0.97 0.			0.97	0.97		0.97	0.97		0.97	0.97
PHF Volume:		45 19			0.97	31	272	1	75	307	28
Reduct Vol:	0	0 0			0	31	2 / 2		0	307	0
Reduced Vol:		45 19		-	0	31	-	1	7.5	307	28
PCE Adj:			-	1.00	-		1.00	_		1.00	1.00
_					1.00						
MLF Adj:				1.00	1.00		1.00			1.00	1.00
FinalVolume:				0	0	31		1			28
Saturation F											
Adjustment:	1.00 1.	00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.04 0.	68 0.28	1.00	0.00	0.00	0.10	0.89	0.01	0.20	0.80	1.00
Final Sat.:				0		77				569	841
											1
Capacity Ana					'	1		'	'		
Vol/Sat:			0.01	vvvv	xxxx	0 40	0.40	0.40	0.54	0.54	0.03
Crit Moves:		11 0.11	****	AAAA	AAAA	****	0.40	0.40	0.54	****	0.05
Delay/Veh:		.9 8.9		0.0	0.0		10.7	10.7	13 3	13.3	7.1
Delay Adi:				1.00	1.00		1.00	1.00		1.00	1.00
4 2					0.0			10.7			
AdjDel/Veh:					U.U *	10.7 B	10.7 B	10.7 B		13.3 B	7.1 A
LOS by Move:			A		^	В	_	В	В		А
ApproachDel:	. 8	.9		8.9			10.7			12.9	
Delay Adj: ApprAdjDel:	1.	00		1.00			1.00			1.00	
	8	. 9		8.9			10.7			12.9	
LOS by Appr:		A		A			В			В	
AllWayAvgQ:			0.0		0.0					1.1	0.0
*******	*****	*****	****	****	*****	****	****	*****	****	****	*****

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeMon Jun 20, 2011 11:41:23

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

******	****	*****		****							****	*****
Intersection					****	*****	****	****	****	****	****	*****
Cycle (sec): Loss Time (se Optimal Cycle		10	0.0			Critic	al Vo	l./Car	(X):		0.4	132
Loss Time (se	ec):		0			Averac	re Dela	av (se	c/veh)	:	1 (0.5
Optimal Cycle	p •		0			Level	Of Sei	ovice:	,			B
*****	· * * * * *	*****	*****	****	****	*****	****	*****	*****	****	****	****
Street Name:			15th	Ave					Lake	St		
Approach:	No	rth Bo	ound	Soi	ıth Bo	ound	Εa	ast Bo	und	We	est Bo	ound
Movement:	L	- T	- R	L -	- T	- R	L -	- T	- R	L ·	- T	- R
Control:		ton Si	 i.an			 i an		 -on Si	an		ton S	 i an
Rights:	J	Inalı	ıde	51	Thal	1911		Tnal.	.gii		Thal	140
Min. Green:			0	0	THCT	0	0		0		0	
Lanes:			0 0									
Volume Module												
Base Vol:			19	31	121	32	4	207	4	17	263	4
Growth Adi:												
Initial Bse:			19				4		4		263	1.0
Added Vol:								0	0			
PasserByVol:	0	0	0	0	0	0		0			0	
Initial Fut:					121				4		-	
User Adj:											1.00	
_		0.91					0.91		0.91		0.91	0.9
_				34			0.91					0.9
PHF Volume: Reduct Vol:					133			227	4		289	
Reduced Vol:							4					
					133							
PCE Adj:												
MLF Adj:											1.00	
FinalVolume:												
Saturation F.												
Adjustment:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
Lanes:												
Final Sat.:												
Capacity Ana												
Vol/Sat: Crit Moves:		0.06		0.31	0.31	0.31	0.33	0.33	0.33	0.43	0.43	0.4
Delay/Veh:				10 0	10 0		10 0		10 0		11.2	11.
Delay/ven: Delay Adi:											1.00	
AdiDel/Veh:											11.2	
									10.2 B		II.Z	
LOS by Move:	A	A 0 1	А	В	10 0	В	В	_	В	В	_	
ApproachDel:		8.4			10.2			10.2			11.2	
Delay Adj: ApprAdjDel:		1.00			1.00			1.00			1.00	
					10.2			10.2			11.2	
LOS by Appr:					В			В			В	
AllWayAvgQ:	0.0		0.0 *****									

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

***************** Intersection #30 Jackson St/Arguello Blvd ******************** Cycle (sec): 100 Critical Vol./Cap.(X): 0.908 Loss Time (sec): 0 Average Delay (sec/veh): 26.0 Optimal Cycle: 0 Level Of Service: D ************************* Street Name: Arguello Blvd Jackson St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 0 342 46 43 545 0 0 0 0 85 0 49 Initial Bse: 0 342 46 43 545 0 0 0 0 85 0 49
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 0 342 46 43 545 0 0 0 0 85 0 49 PHF Volume: 0 384 52 48 612 0 0 0 0 96 0 55 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 384 52 48 612 0 0 0 96 0 55 FinalVolume: 0 384 52 48 612 0 0 0 96 0 55 -----| Saturation Flow Module: Lanes: 0.00 0.88 0.12 0.07 0.93 0.00 0.00 0.00 0.00 0.63 0.00 0.37 Final Sat.: 0 611 82 53 675 0 0 0 353 0 203 ------| Capacity Analysis Module: Vol/Sat: xxxx 0.63 0.63 0.91 0.91 xxxx xxxx xxxx xxxx 0.27 xxxx 0.27 Crit Moves: **** **** Delay/Veh: 0.0 15.9 15.9 36.0 36.0 0.0 0.0 0.0 11.2 0.0 11.2 AdjDel/Veh: 0.0 15.9 15.9 36.0 36.0 0.0 0.0 0.0 11.2 0.0 11.2 LOS by Move: * C C E E * * * B * B ApproachDel: 15.9 36.0 xxxxxx
Delay Adj: 1.00 1.00 xxxxx
ApprAdjDel: 15.9 36.0 xxxxxx
LOS by Appr: C E * 11.2 1.00 11.2 AllWayAvgo: 1.5 1.5 1.5 5.7 5.7 5.7 0.0 0.0 0.0 0.3 0.3 0.3

Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2012 WeMon Jun 20, 2011 11:41:24 34th America's Cup Races

Transportation Impact Analysis

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2000 HCM	4-Way Stop	Method	(Future	Volume	Alternative)	
and the later after the later	and the six of the six of the six of the six of					++++

******	****	****	*****	****	****	*****	****	****	*****	****	*****	*****	
Intersection							****	****	*****	****	****	*****	
Cycle (sec):		10	0.0			Critic	al Vo	l./Car	o.(X):		0.8	354	
	oss Time (sec): 0					Average Delay (sec/ve						1.5	
Optimal Cycle	0			Level				. 21.0					
******		****		****	****					*****	*****		
Street Name:			Presidi						Pacifi				
Approach:	Mos					ound	177	ast Bo			est Bo	ann d	
Movement:			- R			– R			– R			– R	
Movement:													
Control:									ign				
Rights:	Include			Stop Sign Include			31	.op ع Inclı		Include			
2													
Min. Green:	-	-	0	-	-	0	0	-	0	-	-	0	
Lanes:		1!			1!			1!		. 0 (1!	0 0	
	1												
Volume Module Base Vol:		385	8	43	547	30	5	8	4	23	18	39	
								1.00	1.00				
Growth Adj:		1.00		1.00		1.00	1.00	1.00	1.00	1.00		1.00	
Initial Bse:		385	8	43	547	30			_		18	39	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:		385	8	43	547	30	5	8	4	23	18	39	
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	
PHF Adj:		0.95	0.95		0.95	0.95		0.95	0.95	0.95		0.95	
PHF Volume:	5	405	8	45	576	32	5	8	4	24	19	41	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			8	45	576	32	5	8	4	24	19	41	
PCE Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00	
FinalVolume:		405	8	45		32	5	8	4	24	19	41	
Saturation F													
Adjustment:			1.00					1.00			1.00		
Lanes:			0.02		0.88	0.05		0.47	0.24		0.22		
Final Sat.:				53			151		121		125	270	
Capacity Ana													
Vol/Sat:	0.58		0.58	0.85	0.85	0.85	0.03	0.03	0.03	0.15	0.15	0.15	
Crit Moves:		****			****			***				***	
Delay/Veh:				28.0		28.0	9.5		9.5		10.0	10.0	
Delay Adj:				1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:					28.0	28.0	9.5		9.5		10.0	10.0	
LOS by Move:	В	В	В	D	D	D	A	A	A	A	A	A	
ApproachDel:		14.3			28.0			9.5			10.0		
Delay Adj:		1.00			1.00			1.00			1.00		
ApprAdjDel:		14.3			28.0			9.5			10.0		
LOS by Appr:		В			D			A			A		
AllWayAvgQ:	1.3	1.3	1.3	4.3	4.3	4.3	0.0	0.0	0.0	0.1	0.1	0.1	
******	****	****	*****	****	****	*****	****	****	*****	*****	*****	*****	

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

***************** Intersection #32 Lombard St/Lvon St ******************* Cycle (sec): 0 Critical Vol./Cap.(X): 1.444 Loss Time (sec): 0 Average Delay (sec/veh): 120.4 Optimal Cycle: 0 Level Of Service: F ****************** -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 1! 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 146 22 7 22 56 200 164 480 94 5 328 19 Initial Bse: 146 22 7 22 56 200 164 480 94 5 328 19 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 159 24 8 24 61 217 178 522 102 5 357 21 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 159 24 8 24 61 217 178 522 102 5 357 21 FinalVolume: 159 24 8 24 61 217 178 522 102 5 357 21 ______ Saturation Flow Module: Lanes: 0.83 0.13 0.04 0.08 0.20 0.72 0.22 0.65 0.13 0.01 0.94 0.05 Final Sat.: 357 54 17 39 100 358 123 361 71 7 479 28 ------| Capacity Analysis Module: Vol/Sat: 0.44 0.44 0.44 0.61 0.61 0.61 1.44 1.44 1.44 0.74 0.74 0.74 Delay/Veh: 16.2 16.2 16.2 19.2 19.2 19.2 228.4 228 228.4 25.9 25.9 25.9 AdjDel/Veh: 16.2 16.2 16.2 19.2 19.2 19.2 228.4 228 228.4 25.9 25.9 25.9 LOS by Move: C C C C C F F F D D ApproachDel: 16.2 19.2 228.4 Delay Adj: 1.00 1.00 1.00 ApprAdjDel: 16.2 19.2 228.4 LOS by Appr: C C F 228.4 25.9 1.00 25.9

Note: Queue reported is the number of cars per lane.

AllWayAvgo: 0.6 0.6 0.6 1.3 1.3 1.3 33.8 33.8 33.8 2.3 2.3 2.3 **********************

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34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeMon Jun 20, 2011 11:41:24

	2000 1		Level (: >			
******									ternat:		****	*****	
Intersection							****	****	*****	*****	****	*****	
Cycle (sec):									p.(X):		1.		
Loss Time (s			Avera	ge Dela	av (s	ec/veh)):	: 130.1					
Optimal Cycl	e:	18	30			Level	Of Se	rvice	:			F	
******						****	****	****	****	****	****	*****	
Street Name:		Ι)ivisac	lero St	t					ard St			
Approach:				Soi	ath Bo	ound	E	ast B	ound		est B	ound	
Movement:			- R	L -	- T	- R	L ·	– T	R			- R	
Control:	Permitted			Permitted]	Permi	tted	I			
Rights:	Include			Include				Incl	ude	Include			
Min. Green:						27		54			54		
Y+R:		4.0							4.0				
			1 0			1 0			1 0				
Volume Modul													
Base Vol:		222			348	139		1742			2421		
Growth Adj:					1.00	1.00		1.00			1.00		
Initial Bse:	179	222	27	232	348	139	35	1742	172	1	2421	175	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
${\tt PasserByVol:}$	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	179	222	27	232	348	139	35	1742	172	1	2421	175	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
PHF Volume:	183	227	28	237	355	142	36	1778	176	1	2470	179	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	183	227	28	237	355	142	36	1778	176	1	2470	179	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	183	227	28	237	355	142	36	1778	176	1	2470	179	
Saturation F	low Mo	odule:											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.15	0.98	0.98	0.47	0.96	0.96	0.68	0.48	0.68	0.85	0.59	0.85	
Lanes:	1.00	0.89	0.11		0.71				0.19	0.01	2.85	0.14	
Final Sat.:						519				1			
Capacity Ana	lysis	Modul	e:										
Vol/Sat:		0.14	0.14	0.27	0.27	0.27	0.71	0.71	0.71	0.77	0.77	0.77	
Crit Moves:											****		
<pre>Green/Cycle:</pre>											0.60		
Volume/Cap:	2.17	0.45	0.45								1.28	1.28	
Delay/Veh:									105.4			148.1	
User DelAdj:									1.00		1.00	1.00	
AdjDel/Veh:										148.1		148.1	
LOS by Move:	F	С	С	E	D			F	F	F	F	F	
HCM2kAvgQ:	18	6	6	10	17	17	50	36	50			71	
*******									****	****	****	*****	
Note: Queue	report	ted is	the r	number	of ca	ars pe	r lane						

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #34 Lombard St/Fillmore St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.197 Loss Time (sec): 9 Average Delay (sec/veh): 107.1
Optimal Cycle: 180 Level Of Service: F **************************

Street Name: Fillmore St Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 27 27 27 27 27 54 54 54 54 54 54 1 0 0 1 0 0 1 0 1 0 0 1 1 1 0 0 1 1 1 0 -----| Volume Module: Base Vol: 47 195 36 179 407 159 39 1612 65 3 2296 120 Initial Bse: 47 195 36 179 407 159 39 1612 65 3 2296 120 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 0 0 36 179 407 159 3 2296 120 Initial Fut: 47 195 39 1612 65 PHF Volume: 49 205 38 188 428 167 41 1697 68 3 2417 126 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 49 205 38 188 428 167 41 1697 68 3 2417 126 FinalVolume: 49 205 38 188 428 167 41 1697 68 3 2417 126 -----|----|-----| Saturation Flow Module: Adjustment: 0.19 0.98 0.98 0.65 0.65 0.65 0.68 0.46 0.68 0.85 0.85 Lanes: 1.00 0.84 0.16 0.48 1.09 0.43 0.05 2.87 0.08 0.01 2.89 0.10 Final Sat.: 355 1567 289 596 1355 530 61 2519 102 4 3177 166 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.14 0.13 0.13 0.32 0.32 0.67 0.67 0.67 0.76 0.76 0.76 Crit Moves: ****

******************** Note: Queue reported is the number of cars per lane.

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Volume/Cap: 0.46 0.44 0.44 1.05 1.05 1.05 1.12 1.12 1.12 1.27 1.27 1.27

Delay/Veh: 28.8 25.9 25.9 79.5 79.5 79.5 82.0 82.0 82.0 142.7 143 142.7

AdjDel/Veh: 28.8 25.9 25.9 79.5 79.5 79.5 82.0 82.0 82.0 142.7 143 142.7

LOS by Move: C C C E E E F F F F F

HCM2kAvgO: 2 6 6 19 19 19 37 25 37 72 50 72

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) **************************

Intersection #35 Bay St/Laguna St

**************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.968 Loss Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 143 Level Of Service: 69.3 *************************

Street Name: Laquna St Bay St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted Include Include Include Ovl Rights: Min. Green: 18 18 18 34 34 34 28 28 28 28 28 28 0 0 1! 0 0 1 0 1! 0 0 0 2 0 1 0 1 0 0 2 -----| Volume Module: Base Vol: 253 0 114 529 151 13 0 210 343 258 362 1208 Initial Bse: 253 0 114 529 151 13 0 210 343 258 362 1208 Added Vol: 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 Initial Fut: 253 0 114 529 151 13 0 210 343 258 362 1208 PHF Volume: 264 0 119 551 157 14 0 219 357 269 377 1258 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 264 0 119 551 157 14 0 219 357 269 377 1258 FinalVolume: 264 0 119 551 157 14 0 219 357 269 377 1258 Saturation Flow Module: Adjustment: 0.93 1.00 0.93 0.96 0.96 0.96 1.00 0.95 0.85 0.75 0.75

Delay/Veh: 108.9 0.0 108.9 21.7 24.4 24.4 0.0 22.8 32.1 253.1 253 8.6

AdjDel/Veh: 108.9 0.0 108.9 21.7 24.4 24.4 0.0 22.8 32.1 253.1 253 8.6 LOS by Move: F A F C C C A C C F F A HCM2kAvgO: 19 0 19 7 11 11 0 2 10 42 42 10 ******************

Lanes: 0.69 0.00 0.31 1.62 0.35 0.03 0.00 2.00 1.00 0.42 0.58 2.00

Final Sat.: 1213 0 547 2950 643 55 0 3610 1615 589 826 2842

_____|__|__|

Vol/Sat: 0.22 0.00 0.22 0.19 0.24 0.24 0.00 0.06 0.22 0.46 0.46 0.44

Green/Cycle: 0.20 0.00 0.20 0.38 0.38 0.38 0.00 0.31 0.31 0.31 0.69

Volume/Cap: 1.09 0.00 1.09 0.49 0.65 0.65 0.00 0.19 0.71 1.47 1.47 0.64

Note: Queue reported is the number of cars per lane.

Capacity Analysis Module:

Crit Moves: **** ****

Include

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*********** Intersection #36 Bay St/Van Ness Ave **************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.838 Loss Time (sec): 10 Average Delay (sec/veh): 25.8 Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Van Ness Ave Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 23 23 23 23 23 57 57 57 57 57 57 1 0 2 1 0 0 1 1 1 0 0 1 1 0 1 0 1 0 1 -----| Volume Module: Base Vol: 87 173 163 5 329 191 9 620 155 161 1481 21 Initial Bse: 87 173 163 5 329 191 9 620 155 161 1481 21 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 Ω Initial Fut: 87 173 163 9 620 155 161 1481 5 329 191 PHF Volume: 89 177 166 5 336 195 9 633 158 164 1511 21 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 89 177 166 5 336 195 9 633 158 164 1511 21 FinalVolume: 89 177 166 5 336 195 9 633 158 164 1511 21 Saturation Flow Module: Lanes: 1.00 2.00 1.00 0.03 1.97 1.00 0.03 1.97 1.00 0.19 1.78 0.03 Final Sat.: 718 3206 1603 46 3013 1529 24 1648 808 266 2448 35 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.12 0.06 0.10 0.11 0.11 0.13 0.38 0.38 0.20 0.62 0.62 0.62 *** Crit Moves: Green/Cycle: 0.26 0.26 0.26 0.26 0.26 0.26 0.63 0.63 0.63 0.63 0.63 0.63 Volume/Cap: 0.48 0.22 0.41 0.44 0.44 0.50 0.61 0.61 0.31 0.97 0.97 0.97 Delay/Veh: 30.5 26.5 28.1 28.3 28.3 28.9 10.8 10.8 7.9 31.7 31.7 31.7 AdjDel/Veh: 30.5 26.5 28.1 28.3 28.3 28.9 10.8 10.8 7.9 31.7 31.7 LOS by Move: C C C C C B B A C C C HCM2kAvgO: 3 2 4 5 5 6 6 6 2 28 28 28 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #37 Bay St/Hyde St **************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.466 6.0

Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: ************************* Street Name: Hyde St Bay St

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted

Include Include Include Rights: Min. Green: 16 16 16 16 16 16 67 67 67 0 67 67 0 0 0 1 0 0 0 1! 0 0 0 1 0 1 0 0 0 2 1 0 -----| Volume Module: Base Vol: 0 36 10 2 69 19 2 761 32 0 1726 21 Initial Bse: 0 36 10 2 69 19 2 761 32 0 1726 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 69 Initial Fut: 0 36 10 19 2 761 32 0 1726 PHF Volume: 0 40 11 2 77 21 2 846 36 0 1918 23 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 0 40 11 2 77 21 2 846 36 0 1918 FinalVolume: 0 40 11 2 77 21 2 846 36 0 1918 23 -----| Saturation Flow Module:

Adjustment: 1.00 0.97 0.97 0.97 0.97 0.90 0.90 0.90 1.00 0.91 0.91 Lanes: 0.00 0.78 0.22 0.02 0.77 0.21 0.01 1.91 0.08 0.00 2.96 0.04 Final Sat.: 0 1444 401 41 1410 388 9 3256 137 0 5114 62 _____|__|

Capacity Analysis Module:

Vol/Sat: 0.00 0.03 0.03 0.05 0.05 0.26 0.26 0.26 0.00 0.37 0.37 Crit Moves: **** Green/Cycle: 0.00 0.18 0.18 0.18 0.18 0.18 0.74 0.74 0.74 0.74 0.74 Volume/Cap: 0.00 0.16 0.16 0.31 0.31 0.31 0.35 0.35 0.35 0.00 0.50 0.50 Delay/Veh: 0.0 31.5 31.5 32.7 32.7 32.7 4.1 4.1 4.1 0.0 4.8 4.8 AdjDel/Veh: 0.0 31.5 31.5 32.7 32.7 32.7 4.1 4.1 4.1 0.0 4.8 4.8 LOS by Move: A C C C C A A A A A

HCM2kAvqO: 0 1 1 3 3 3 4 4 4 0 8

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized Method (Future Volume Alternative)

∠\ ********			signai:								****	*****
Intersection												

Average Delay												
*******	****	****			****	*****	****					*****
Street Name: Approach:	N7	D	Bunke		D		г.		Alexano			
			– R									
	. ــــــــــــــــــــــــــــــــــــ	_ 1	- K	- ــــاا		- K	اا	_ 1	- K	- ـــاا	_ 1	- K
Control: Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Lanes:	1	0 1	0 0	0 (0 0	1 0	1 (0 0	0 1	0 (0 (0 0
Volume Module												
Base Vol:		237	0	0		25	41	0	177	0	0	0
Growth Adj:					1.00	1.00		1.00			1.00	
Initial Bse:			0	0		25	41	0	177	0	0	0
Added Vol:	0	0	0	0		0	0	0	0	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:			0	0		25	41				0	0
User Adj:			1.00		1.00	1.00		1.00				1.00
PHF Adj:		0.95	0.95		0.95	0.95		0.95	0.95		0.95	0.95
	57		0	0	315	26	43	0	186	0	0	0
Reduct Vol: FinalVolume:			0	0	-	0 26	43	-	0 186	0	0	0
rinaivoiume:			-					-		-	-	0
Critical Gap				1 1			1 1			1 1		1
Critical Gp:			xxxxx	×××××	xxxx	xxxxx	6.4	xxxx	6.2	×××××	××××	xxxxx
FollowUpTim:												
Capacity Modu	ıle:											
Cnflict Vol:	341	XXXX	XXXXX	XXXX	xxxx	XXXXX	691	xxxx	328	XXXX	xxxx	XXXXX
Potent Cap.:	1229	xxxx	XXXXX	XXXX	xxxx	XXXXX	413	xxxx	718	XXXX	xxxx	XXXXX
Move Cap.:	1229	XXXX	XXXXX	XXXX	XXXX	XXXXX	399	XXXX	718	XXXX	xxxx	XXXXX
Volume/Cap:								XXXX				XXXX
Level Of Serv												
2Way95thQ:												
Control Del: LOS by Move:								XXXX *			XXXX *	
Movement:			- RT						B - RT		- LTR	
						- RT						
Shared Cap.: SharedQueue:x												
Shrd ConDel:												
Shared LOS:			*								*	
											(XXXX	
ApproachDel: ApproachLOS:	21.	*		21.2	*			В.		21.2	*	
*********	****	****	*****	****	****	*****	****			****	****	*****
Note: Queue r	epor	ted is	s the r	number	of ca	ars pe	r lane					

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Future Volume Alternative)

Transportation Impact Analysis

Intersection #39 Alexander Ave/Ft.Baker (East) Rd ************************** Average Delay (sec/veh): 1.2 Worst Case Level Of Service: B[10.5] ******************* Street Name: Ft.Baker (East) Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound L-T-R L-T-R L-T-RMovement: Uncontrolled Uncontrolled Stop Sign Stop Sign Control: Include Include Include Rights: Include 0 0 0 1 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Lanes: Volume Module: Base Vol: 0 274 10 8 316 13 0 0 0 4 0 71 Initial Bse: 0 274 10 8 316 13 0 0 0 4 0 71 0 0 Added Vol: 0 0 0 0 Ω Ω Ω PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 274 10 8 316 13 0 0 0 PHF Volume: 0 282 10 8 326 13 0 0 0 4 0 73 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 282 10 8 326 13 0 0 0 4 0 -----|----|-----| Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx 7.1 6.5 6.2 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxx 2.2 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3 _____| Capacity Module: Cnflict Vol: xxxx xxxx xxxxx 293 xxxx xxxxx 673 642 332 637 643 288 Potent Cap.: xxxx xxxxx xxxxx 1280 xxxx xxxxx 372 395 714 445 394 756 Move Cap.: xxxx xxxxx xxxxx 1280 xxxx xxxxx 334 393 714 443 392 756 Level Of Service Module: LOS by Move: * * * A * * * * * * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared Cap.: xxxx xxxx xxxx xxxx xxxx xxxx xxxx 729 xxxxx Shared LOS: * * * * * * * * * B * ApproachDel: xxxxxx xxxxx ApproachLOS: * * 10.5 XXXXXX * В ___ Note: Queue reported is the number of cars per lane.

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Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******************* Intersection #40 Bush St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.415
Loss Time (sec): 8 Average Delay (sec/veh): 23.9
Optimal Cycle: 90 Level Of Service: C Street Name: Van Ness Ave Bush St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Prot+Permit Permitted Permitted Rights: Include Include Include Include Min. Green: 0 34 34 10 48 0 34 34 0 0 0 0 0 2 1 0 1 0 3 0 0 0 1 1 1 0 0 0 0 0 -----| Volume Module: Base Vol: 0 1591 117 211 2171 0 67 969 115 0 0 PHF Volume: 0 1693 124 224 2310 0 71 1031 122 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1693 124 224 2310 0 71 1031 122 0 0 FinalVolume: 0 1693 124 224 2310 0 71 1031 122 0 0 0 -----| Saturation Flow Module: Adjustment: 1.00 0.90 0.90 0.95 0.91 1.00 0.89 0.89 0.89 1.00 1.00 1.00 Lanes: 0.00 2.79 0.21 1.00 3.00 0.00 0.17 2.53 0.30 0.00 0.00 0.00 Final Sat.: 0 4783 352 1805 5187 0 295 4263 506 0 0 0 _____| Capacity Analysis Module: Vol/Sat: 0.00 0.35 0.35 0.12 0.45 0.00 0.24 0.24 0.24 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.00 0.40 0.40 0.56 0.53 0.00 0.38 0.38 0.38 0.00 0.00 0.00 Volume/Cap: 0.00 0.88 0.88 0.70 0.83 0.00 0.64 0.64 0.64 0.00 0.00 0.00 Delay/Veh: 0.0 29.8 29.8 16.5 20.0 0.0 23.7 23.7 23.7 0.0 0.0 0.0 AdjDel/Veh: 0.0 29.8 29.8 16.5 20.0 0.0 23.7 23.7 23.7 0.0 0.0 0.0 LOS by Move: A C C B C A C C A A A HCM2kAvgO: 0 21 21 4 18 0 11 11 11 0 0 ********

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeMon Jun 20, 2011 11:41:24

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******	****	****	* * * * * * *	****	****	*****	***	****	*****	****	****	*****
Intersection	****	****	*****	****	****							
Cycle (sec): Loss Time (se Optimal Cycle			90			Critic	al Vo	ol./Ca	p.(X):		1.	540
Loss Time (se	ec):		8			Averag	re De	av (s	ec/veh)	:	5.	5.3
Optimal Cycle	e:	1.3	2.7			Level	Of Se	rvice	:			E
*****	****	****	- · * * * * * * *	****	****	*****	***	****	*****	****	****	*****
Street Name:			Van Ne	ss Ave	=				Pine	St		
Approach: Movement:	No	rth Bo	ound	Soi	ıth Bo	ound	I	East B	ound	We	est B	ound
Movement:	L ·	- T	- R	L -	- T	- R	L	- T	- R	L ·	- T	- R
Control:	Pro	ot+Pei	rmit	Pı	rotect	ted		Permi	tted	. 1	Permi	tted
Rights: Min. Green:		Incl	ıde		Incl	ıde		Incl	ude		Incl	ude
Min. Green:	10	48	0	0	34	34	(0	ude 0	34	34	34
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	1	0 3	0 0	0 (2	1 0	0	0 0	0 0	0	1 2	1 0
			1	1						1		
Volume Module			'			'			'	'		'
Base Vol:	156	1503	0	0	2236	207	(0	0	122	1487	237
Growth Adj:						1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:						207	() 0	0	122	1487	237
Added Vol:	0	0	0	0	0	0	() ()	0	0	0	0
PasserByVol:						0) ()	0	0	0	0
Initial Fut:				0	2236	207) ()	0 0 0 0	122	1487	237
User Adj:						1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:									0.97			
PHF Volume:						213	(0	0			
Reduct Vol:	0	0	0	0	0	0	() 0	0	0	0	0
Reduced Vol:									0			
PCE Adi:												
MLF Adj:												
FinalVolume:												
Saturation F						'	1		'	'		'
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Ana						'			'	'		'
Vol/Sat:				0.00	0.49	0.49	0.00	0.00	0.00	0.28	0.28	0.28
Crit Moves:					****						****	
Green/Cycle:			0.00	0.00	0.42	0.42	0.00	0.00	0.00	0.38	0.38	0.38
Volume/Cap:								0.00			0.75	
Delay/Veh:							0.0				25.6	
User DelAdj:								1.00			1.00	
AdiDel/Veh:								0.0			25.6	
LOS by Move: HCM2kAvgQ:	3	10	0	0	42	42	() ()	A 0	14	14	14
· · · · · · · · · · · · · · · · · · ·							· · · · · · · · · · · · · · · · · · ·					

Note: Queue reported is the number of cars per lane.

24th Americals Cup Dages

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

******									ternati ******		****	*****
Intersection	#42 I	Lomba	rd St/V	an Nes	ss Ave	€						
Cycle (sec):			90			Critic					1.3	
Loss Time (se			7						ec/veh)		149	
	,	1					Of Se			•	143	7.Z F
Optimal Cycle				+++++						+++++		
Street Name:			Van Ne	SS AVE) I D	ound	_		Lomba			,
Approach:		rth B									est Bo	
Movement:			- R							L -		
Control:		otec		Pr					tted		ermit	
Rights:		Incl			Incl			Ovl	ccca		Incli	
Min. Green:	E 6	56	56	0	27	27	27		56	27		27
Y+R:		4.0	4.0	4.0		4.0		4.0	4.0		4.0	4.0
Lanes:			1 0			0 1			0 2			0 0
Volume Module												
Base Vol:	1191	262	34	0	546	156	133	112	1673	1	91	9
Growth Adj:					1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		262	34	0	546	156	133	112	1673	1.00	91	9
Added Vol:	1191	202	0	0	0.0	130	133		0	0	0	0
PasserByVol:		-	0	0	0	0	0	0	0	0	0	0
Initial Fut:				0						1		9
		262	34	-	546	156	133	112	1673	_	91	1.00
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	
_	0.93		0.93		0.93	0.93		0.93	0.93		0.93	0.93
PHF Volume:	1281	282	37	0	587	168	143	120	1799	1	98	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			37	0	587	168	143	120	1799	1	98	10
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			37	0	587	168	143		1799	1	98	10
Saturation Fl	'											
Saturation r				1000	1000	1000	1000	1000	1000	1000	1000	1900
			1900		1900			1900			1900	
Adjustment:					0.95	0.85		0.43			0.99	
	3.00				2.00	1.00		0.46			0.90	0.09
Final Sat.:				0		1615	440		1563		1690	167
Capacity Anal	'											
	0.24			0 00	0.16	0.10	0 22	0.32	1.15	0 06	0.06	0.06
Crit Moves:	****	0.17	0.17	0.00	****	0.10	0.32	0.32	****	0.00	0.00	0.00
		0 71	0.71	0 00	0.23	0.23	0 22	0.23		0 22	0.23	0.23
Green/Cycle: Volume/Cap:			0.71		0.23	0.23		1.41	1.62		0.25	0.25
	21.2		6.0	0.00			257.2		301.1		37.0	37.0
Delay/Veh:											1.00	1.00
User DelAdj:			1.00		1.00	1.00		1.00	1.00		37.0	37.0
AdjDel/Veh:	21.2		6.0	0.0			257.2	25 / F				
LOS by Move:					D	D	F	_	F	D	D	D
HCM2kAvgQ:		4		0			18	18	82	3	3	3
********	*****	****	* * * * * * *	*****	****	* * * * * * * *	* * * *	* * * * * *	* * * * * * *	****	* * * * * *	*****

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Note: Queue reported is the number of cars per lane.

Existing + AC Event 2012 WeThu Jun 30, 2011 08:59:46

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Embarcadero / Howard St

Cycle (sec):	100	Critical Vol./Cap.(X):	1.137
Loss Time (sec):	10	Average Delay (sec/veh):	77.6
Optimal Cycle:	180	Level Of Service:	E
******	*****	*********	*****

Optimal Cycl	e:	18	30	++++		Level	Of Sei	vice	:	+++++		E
Street Name:												
Approach:	No	rth Bo	nund	Soi	ith B	ound	Ea	ast B	ound	We We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control												
Control:	PI	Tnal	.eu	P	Tnal	rea ado	sp.	IIL P	nase	5P1	IIL PI	idse
Min Con-	1 5	THET	iue ^	1.0	11101	40	2.0	THET	uue	0	THET	uue ^
MIN. Green:	1.0	4.0	4 0	1.0	40	4.0	4.0	4 0	4.0	4 0	4 0	4.0
Rights: Min. Green: Y+R: Lanes:	1 (4.0	0 0	1 /	4.0	0 1	1 (4.0	0 0	4.0	4.0	0 0
Lanes:	1	J 3 	I	1	J Z	I	1) I:	I	1		I
Volume Modul			'			'	1		1	1		'
Base Vol:	121	1565	0	3	1058	400	438	0	339	0	0	0
Growth Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	1565	0	3	1058	400	438	0	339	0	0	0
<pre>Initial Bse: Added Vol: PasserByVol:</pre>	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	1565	0	3	1058	400	438	0	339	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	130	1683	0	3	1138	430	471	0	365	0	0	0
PHF Volume: Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	1683	0	3	1138	430	471	0	365	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F	low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Ana												
Vol/Sat:				0 00	0 34	0.53	0 22	0 00	0 41	0 00	0 00	0 00
Crit Moves:				0.00		****			****	0.00	0.00	0.00
Green/Cycle:				0 10						0 00	0 00	0.00
Volume/Cap:												
Delay/Veh:												
peral/ven:	±1.0	00.1	0.0	40.0	20.0	100.1	50.7	0.0	100.2	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*******	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Intersection ******							****	****	*****	****	****	*****
Cycle (sec):		9	90			Critic	al Vo	l./Car	o.(X):		0.	746
Loss Time (s	ec):	1	1.0			Averag	e Dela	av (se	ec/veh)	:	4	9.1
Optimal Cycl	,		90			Level						D
******				****	****					****	****	*****
Street Name:			Embarc						Folso			
Approach:		rth Bo			ıth B	nund	F:	oct Br			ot B	ound
Movement:			– R			– R			– R			- R
Control:												
Rights:	Ι.	Inali	100	1.1	Inal	ted ude	Sp.	Inali	1000	SP.	Inal	udo
Min. Green:	12		49	32			31		31	0		0
		4.0		4.0					4.0	-	-	-
Y+R:										4.0		4.0
Lanes:			0 0			1 0			0 1			0 0
Volume Modul		1 41 7	0	0	1075	0.5	070	0	007	0	0	0
Base Vol:		1417	0		1375	25	273	1 00	297	0	1 00	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1417	0		1375	25	273	0	297	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			0		1375	25	273	0	297	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.93	0.93		0.93	0.93		0.93	0.93		0.93	0.93
PHF Volume:		1524	0	-	1478	27	294	0	319	0	0	0
Reduct Vol:	0	-	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	1524	0	0	1478	27	294	0	319	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			0		1478	27		0	319		0	0
Saturation F	low M	odule:	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.70	1.00	1.00	0.97	0.87	0.83	1.00	0.59	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.96	0.04	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1679	2671	0	0	3599	65	3152	0	1114	0	0	0
Capacity Ana	lysis	Modu]	Le:									
Vol/Sat:	0.10	0.57	0.00	0.00	0.41	0.41	0.09	0.00	0.29	0.00	0.00	0.00
Crit Moves:		****		***			***					
Green/Cycle:	0.13	0.54	0.00	0.00	0.41	0.41	0.38	0.00	0.38	0.00	0.00	0.00
Volume/Cap:			0.00	0.00	1.00	1.00	0.24	0.00	0.75	0.00	0.00	0.00
Delay/Veh:	53.5	57.6	0.0	0.0	49.6	49.6	18.9	0.0	31.0	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:			0.0		49.6	49.6	18.9	0.0	31.0	0.0	0.0	0.0
LOS by Move:			A	0.0 A		13.0 D	В.	0.0 A	C C	0.0 A	0.0 A	
HCM2kAvgO:	4		0	0	2.4	2.2	3	0	8	0	0	0
******	_		-	-			-	-	-	-	-	-

Note: Queue reported is the number of cars per lane.

Scenario Report

Existing + AC Event 2012 Weekday PM Scenario:

Command:

Command: Default Command

Volume: Existing + AC Event 2012 Weekday PM

Geometry: Existing Weekday PM

Impact Fee: Default Impact Fee

Trip Generation: Default Trip Generation

Trip Distribution: Default Trip Distribution

Paths: Default Path Routes: Default Route

Configuration: Default Configuration

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeMon Jun 6, 2011 09:16:52

Signal Warrant Summary Report Future Met Intersection Base Met [Del / Vol] [Del / Vol] # 30 Jackson St/Arguello Blvd ??? No # 32 Lombard St/Lyon St ??? Yes

Page 2-1

Peak Hour Volume Signal Warrant Report [Urban] ******************* Intersection #30 Jackson St/Arguello Blvd ******************* Future Volume Alternative: Peak Hour Warrant NOT Met -----|----|-----|------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____|__| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 1! 0 0 Lanes: Initial Vol: 0 342 46 43 545 0 0 0 0 85 0 49 -----| Major Street Volume: Minor Approach Volume:

SIGNAL WARRANT DISCLAIMER

Minor Approach Volume Threshold: 226

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban] ******************* Intersection #32 Lombard St/Lyon St ********************** Future Volume Alternative: Peak Hour Warrant Met -----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Lanes: Initial Vol: 146 22 7 22 56 200 164 480 94 5 328 19 1090 Major Street Volume: Minor Approach Volume: Minor Approach Volume Threshold: 196

Transportation Impact Analysis

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing plus AC34 2012 Project Conditions

Weekend Midday Peak Hour

Level Of Service Computation Report

************************* Average Delay (sec/veh): 0.0 Worst Case Level Of Service: [0.0] ************************ Street Name: Columbus Ave Beach St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Include Include Include Include Rights: 0 0 1! 0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 Lanes: Volume Module: Base Vol: 0 0 0 0 0 0 0 0 0 0 0 Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 0 0 0 Ω 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 0 0 0 0 0 0 0 0 0 0 -----|----|-----| Critical Gap Module: _____| Capacity Module: Cnflict Vol: 0 0 0 0 0 0 0 0 0 0 0 Potent Cap.: 0 0 0 0 0 0 0 0 0 0 0 Move Cap.: 1 1 1 1 1 1 1 1 1 1 1 1 1 Level Of Service Module: LOS by Move: Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared Cap.: 0 0 0 0 0 0 0 0 0 0 0 Shared LOS: ApproachDel: 0.0 0.0 0.0 ApproachLOS: ___ Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******			peratio *****								*****	*****
Intersection	#2 No	orth :	Point S	t/Col	ımbus	Ave						
	****	****	*****	****	*****	*****	*****	*****	*****	****		
Cycle (sec):	,		90 9 0			Critic	aı vo.	ı./Cap).(X):		0.0	
Loss Time (se	ec):		9			Averag	e Dela	ay (se	ec/veh)	:	C	0.0
Optimal Cycle	e:					Level	Of Sei	rvice:	:			
						*****	****					*****
Street Name:			Columb			,			North P			,
Approach:												
Movement:												
Rights:		Incl	tted ude	_	Incli	ıde	_	Incli	ide	-	Inclu	ide
Min. Green:				28								
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	53 4.0	4.0	4.0	4.0
			1 0			1 0						
Volume Module			'			'			'			
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Growth Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Bse:		0		0	0	0	0	0	0	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00				0.00	0.00		0.00	0.00		0.00	0.00
PHF Volume:				0	0	0	0	0	0	0	0	0
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MLF Adj:					0.00	0.00	0.00	0.00		0.00	0.00	0.00
FinalVolume:		0		0	0	0		0		0	0	0
Saturation F	low M	odule	:									
Sat/Lane:	0	0	0	0	0	0	0	0	0	0	0	0
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Final Sat.:	0	0	0	0	0	0	0	0	0	0	0	0
Capacity Anal	lysis	Modu	le:									
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:												
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:												
HCM2kAvgQ:	0	0	0	0	0	0	0			0	-	0
*****	****	****	*****	****	****	*****	****	*****	*****	****	*****	*****

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeTue Jun 28, 2011 08:48:28

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 North Point St/Stockton St ************************* 90 Critical Vol./Cap.(X): 0.000 Cvcle (sec): 8 Average Delay (sec/veh): 0.0 Loss Time (sec): Optimal Cycle: Level Of Service: ************************

Street Name: Approach:			Stockt	on St				1	North P	oint S	St	
Approach:	No	rth B	ound	Soi	ath Bo	ound	Εa	ast Bo	ound	We	est B	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:												
Rights:		Incl	nde	-	Incli	nde	-	Incli	ıde		Incl	ıde
Min Green:	25	25	25	25	25	25	5.7	57	57	5.7	57	57
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Rights: Min. Green: Y+R: Lanes:	0 (0 1!	0 0	0 (1!	0 0	0 (1!	0 0	0	L 0	1 0
Volume Modul												
Base Vol:		0	0	0	0	0	0	0	0	0	0	0
Growth Adi:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Bse:	0	0	0	0	0	0	0	0	0	0	0	0.00
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Bse: Added Vol: PasserByVol: Initial Fut:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	0	0	0	0	0	0	0	0
User Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PHF Volume:	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:												
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MLF Adj:												
FinalVolume:												
Saturation F												
Sat/Lane:												
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Ana												
Vol/Sat: Crit Moves:				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Volume/Cap:												

LOS by Move:

HCM2kAvgO: 0 0 0 0 0 0 0 0 0 0 0

Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*********** Intersection #4 Bay St/Columbus Ave ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.396 Loss Time (sec): 9 Average Delay (sec/veh): 11.0 Optimal Cycle: 67 Level Of Service: B *************************** Street Name: Columbus Ave Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Permitted Permitted Ignore Include Include Include Min. Green: 8 31 31 0 19 19 47 47 47 50 50 50 2 0 0 1 0 0 1 0 1 0 0 1 1 0 1 0 1 0 1 -----| Volume Module: Base Vol: 298 0 69 1 0 0 0 955 33 32 156 0 Initial Bse: 298 0 69 1 0 0 0 955 33 32 156 0 Added Vol: 0
PasserByVol: 0 0 0 Ω 0 Λ 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 Ω Initial Fut: 298 0 69 1 0 0 0 955 33 32 156 0 PHF Volume: 304 0 0 1 0 0 0 974 34 33 159 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 304 0 0 1 0 0 0 974 34 33 159 0 FinalVolume: 304 0 0 1 0 0 974 34 33 159 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 1.00 1.00 0.90 0.95 0.95 0.95 0.95 0.85 0.75 0.75 0.95 Lanes: 2.00 1.00 0.00 1.00 0.00 1.00 0.00 2.00 1.00 0.34 1.66 0.00 _____|__|__| Capacity Analysis Module: Crit Moves: **** **** Green/Cycle: 0.22 0.00 0.00 0.22 0.00 0.00 0.00 0.68 0.68 0.68 0.68 0.00 Volume/Cap: 0.40 0.00 0.00 0.00 0.00 0.00 0.00 0.40 0.03 0.10 0.10 0.00 Delay/Veh: 30.4 0.0 0.0 27.5 0.0 0.0 0.0 6.4 4.7 4.9 4.9 0.0 AdjDel/Veh: 30.4 0.0 0.0 27.5 0.0 0.0 0.0 6.4 4.7 4.9 4.9 0.0 LOS by Move: C A A C A A A A A A A HCM2kAvgO: 4 0 0 0 0 0 0 6 0 1 1 0 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Bay St/Stockton St ***************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.393

Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 11.5

************************* Street Name: Stockton St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 20 20 20 20 20 20 63 63 63 63 63 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 -----| Volume Module: Base Vol: 128 0 59 0 0 0 0 623 151 29 66 0 Initial Bse: 128 0 59 0 0 0 0 623 151 29 66 Added Vol: 0 0 PasserByVol: 0 0 0 Ω Ω 0 0 0 Ω Ω 0 0 0 0 0 0 0 Ω Initial Fut: 128 0 59 0 0 0 0 623 151 PHF Volume: 132 0 61 0 0 0 642 156 30 68 Ω Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 132 0 61 0 0 0 642 156 30 68 FinalVolume: 132 0 61 0 0 0 642 156 30 68 0 -----| Saturation Flow Module: Adjustment: 0.75 1.00 0.75 1.00 1.00 1.00 0.95 0.92 0.92 0.74 0.74 0.95 Lanes: 0.68 0.00 0.32 0.00 1.00 0.00 0.00 1.61 0.39 0.61 1.39 0.00 Final Sat.: 977 0 450 0 1900 0 0 2821 684 855 1946 0 _____|__|__| Capacity Analysis Module: Crit Moves: **** Volume/Cap: 0.61 0.00 0.61 0.00 0.00 0.00 0.03 0.33 0.05 0.05 0.00 Delay/Veh: 39.9 0.0 39.9 0.0 0.0 0.0 5.6 5.6 4.2 4.2 0.0 AdjDel/Veh: 39.9 0.0 39.9 0.0 0.0 0.0 5.6 5.6 4.2 4.2 0.0 LOS by Move: D A D A A A A A A A A HCM2kAvgO: 6 0 6 0 0 0 5 5 0 0

Note: Queue reported is the number of cars per lane.

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Intersection #6 Bay St/Kearny St

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.344 Loss Time (sec): 9 Average Delay (sec/veh): 10.1 Optimal Cycle: 90 Level Of Service: B *************************** Street Name: Kearny St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 20 20 20 20 20 20 61 61 61 61 61 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 -----| Volume Module: Base Vol: 96 0 14 0 0 0 0 567 121 0 0 0 Initial Bse: 96 0 14 0 0 0 0 567 121 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 Ω 0 0 0 14 Initial Fut: 96 0 0 0 0 567 121 0 PHF Volume: 108 0 16 0 0 0 637 136 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 108 0 16 0 0 0 637 136 FinalVolume: 108 0 16 0 0 0 637 136 0 0

Saturation Flow Module:

Adjustment: 0.73 1.00 0.73 1.00 1.00 1.00 0.95 0.93 0.93 0.95 0.95 Lanes: 0.87 0.00 0.13 0.00 1.00 0.00 0.00 1.65 0.35 0.00 0.00 2.00 _____| Capacity Analysis Module:

-----|----|-----|

Crit Moves: **** **** Delay/Veh: 33.8 0.0 33.8 0.0 0.0 0.0 0.0 6.4 6.4 0.0 0.0 0.0 AdjDel/Veh: 33.8 0.0 33.8 0.0 0.0 0.0 0.0 6.4 6.4 0.0 0.0 0.0 LOS by Move: C A C A A A A A A A A HCM2kAvgO: 3 0 3 0 0 0 5 5 0 0

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************** Intersection #7 Broadway St/Sansome St

************* Cycle (sec): 80 Critical Vol./Cap.(X): 0.504 Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 80 Level Of Service: 15.7 *************************

Approach: North Bound South Bound East Bound West Bound

Street Name: Sansome St Broadway St

Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Split Phase Split Phase Permitted Permitted Rights: Include Include Include Include Min. Green: 27 27 27 0 0 0 44 44 0 0 44 44 0 1 0 1 0 0 0 0 0 0 0 1 1 0 0 0 1 1 0 -----| Volume Module: Base Vol: 367 100 18 0 0 0 114 449 0 0 175 38 Initial Bse: 367 100 18 0 0 114 449 0 0 175 0 Added Vol: 0 0 PasserByVol: 0 0 Ω Ω 0 0 0 Ω 0 0 0 0 0 0 0 0 Initial Fut: 367 100 18 0 0 0 114 449 0 0 175

PHF Volume: 390 106 19 0 0 0 121 478 0 0 186 40 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 390 106 19 0 0 121 478 0 0 186 FinalVolume: 390 106 19 0 0 121 478 0 0 186 40 -----| Saturation Flow Module:

Adjustment: 0.84 0.84 0.84 1.00 1.00 1.00 0.78 0.78 1.00 1.00 0.92 0.92 Lanes: 1.00 0.85 0.15 0.00 0.00 0.00 0.40 1.60 0.00 0.00 1.64 0.36 Final Sat.: 1590 1347 242 0 0 0 602 2372 0 0 2886 627 _____|__|

Capacity Analysis Module: Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55

Volume/Cap: 0.73 0.23 0.23 0.00 0.00 0.00 0.37 0.37 0.00 0.00 0.12 0.12 Delay/Veh: 27.1 19.1 19.1 0.0 0.0 0.0 10.3 10.3 0.0 0.0 8.7 8.7 AdjDel/Veh: 27.1 19.1 19.1 0.0 0.0 10.3 10.3 0.0 0.0 8.7 8.7 LOS by Move: C B B A A A B B A A A HCM2kAvgO: 10 2 2 0 0 0 5 5 0 0 1 1 ******************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******			perat10 *****								*****	*****
Intersection	#8 Bı	coadwa	ay St/B	attery	7 St							
Cycle (sec):						Critic					0.3	
Loss Time (se	٠():		30 9 70			Averag	e Dela	av (se	c/veh)		16	5.0
Optimal Cycle			70			Level	Of Ser	wice:		•		В.
******		****	, o * * * * * * *	*****	****					****	*****	
Street Name:			Batte						Broadw			
Approach:			nund	Soi	ith Bo	ound	Ea	ast Bo	nund	We	est Bo	nind
Movement:									- R			
			nase									
Rights:	- 1		ıde			ıde					Incli	
Min. Green:	0		0			44		17		17	17	17
	4.0	4.0	4.0					4.0	4.0	4.0		4.0
			0 0									0 0
Volume Module	∋:											
Base Vol:	0	0	0	15	286	96	0	308	161	34	117	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		0	0	15	286	96	0	308	161	34	117	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	15	286	96	0	308	161	34	117	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	0	0	16	308	103	0	331	173	37	126	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	16	308	103	0	331	173	37	126	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	16	308	103	0	331	173	37	126	0
Saturation Fl	Low Mo	odule	:									
Sat/Lane:						1900		1900			1900	
Adjustment:						0.91		0.90			0.77	
Lanes:								1.31		0.45		
Final Sat.:										660		0
Capacity Anal												
Vol/Sat:	0.00	0.00	0.00		0.12	0.12	0.00	0.15	0.15	0.06	0.06	0.00
Crit Moves:				****				***				
Green/Cycle:								0.34			0.34	0.00
Volume/Cap:			0.00	0.22				0.44	0.44		0.16	0.00
Delay/Veh:			0.0		9.3		0.0		20.9		18.7	0.0
User DelAdj:			1.00					1.00			1.00	1.00
AdjDel/Veh:			0.0				0.0		20.9		18.7	0.0
LOS by Move: HCM2kAvgQ:	A	A	A	A	A				C	В	В	A
				3			0		5	1	1	0
******	*****	****	*****	*****	****	*****	*****	*****	*****	****	*****	:****

Note: Queue reported is the number of cars per lane.

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Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) **************************

Intersection #9 Embarcadero/ Beach St/ Grant St

Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: **************************

Street Name: Embarcadero Beach St (EB)/Grant St (WB)
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Split Phase Split Phase Split Phase Rights: Include Include Include Include Min. Green: 17 17 17 26 26 0 0 0 26 19 19 19 0 1 0 1 0 0 1 0 0 0 0 0 0 1 0 0 1! 0 0 Volume Module: Base Vol: 0 0 0 0 0 0 0 0 0 0 0 Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 Ω PasserByVol: 0 0 0 0 0 0 Initial Fut: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 -----|----|-----| Saturation Flow Module: Sat/Lane: 0 0 0 0 0 0 0 0 0 0 0 0

_____| Capacity Analysis Module:

Crit Moves:

Final Sat.: 0 0 0 0 0 0 0 0 0 0 0

LOS by Move: HCM2kAvgO: 0 0 0 0 0 0 0 0 0 0 0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******			******								*****	*****
Intersection												
*******		****	*****	****	****	*****	****	*****	*****	****	****	*****
Cycle (sec):			90 14 0			Critic	al Vo	1./Car). (X):		0.0	000
Loss Time (s			1 4			Averag	re Del	av (se	c/veh)	:	(0.0
Optimal Cycl			0			Level	Of Se	rvice:		-		
*****		****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Embaro	adero			North	Point	St (E	B)/ K	earny	St (W
Approach:	No	rth Bo	ound	Soi	uth Bo	ound	E	ast Bo	ound	We	est Bo	ound
Movement:	L	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
Control: Rights:	P	rotect	ted]	Permit	ted	Sp	lit Ph	nase	Sp.	lit Ph	nase
		Incl	ıde		Incl	ıde		Inclu	ıde		Inclu	ıde
Min. Green:	15	36	0 4.0	0	17	17	20	20	20	20	20	20
Y+R:												
Lanes:	. 1	0 2	0 0	. 0 :	1 0	1 0	. 0	0 1!	0 1	. 0	1 0	0 1
M												
Volume Modul Base Vol:		0	0	0	0	0	0	0	0	0	0	0
Growth Adj:						0.00		0.00			0.00	0.00
Initial Bse:		0.00		0.00			0.00		0.00	0.00		0.00
Added Vol:				0	-	0	0		0	0		0
				0			0		0	0		0
PasserByVol: Initial Fut:	0	0	0		0		0		0	0	0	0
User Adj:								0.00		0.00		0.00
PHF Adi:					0.00	0.00		0.00	0.00		0.00	0.00
PHF Volume:	0	0	0	0	0	0	0	0	0	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MLF Adj:							0.00	0.00	0.00	0.00	0.00	0.00
FinalVolume:							0		0	-	0	0
Saturation F								0				
Sat/Lane:			0				0			0		0
Adjustment:			0.00					0.00	1.00		1.00	
Lanes: Final Sat.:										0.00	0.00	
Capacity Ana												
Vol/Sat:				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Crit Moves:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Volume/Cap:				0.00		0.00		0.00	0.00		0.00	0.00
Delay/Veh:			0.0	0.0		0.0		0.0	0.0	0.0		0.0
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LOS by Move:												
			0						0			0
******									*****	****	****	*****
Note: Queue	repor	ted is	s the n	umber	of ca	ars per	lane	•				

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34th America's Cup Races Transportation Impact Analysis

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Embarcadero / Bay St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.248 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 49 Level Of Service: 0.4 Level Of Service: ************************* Street Name: Embarcadero Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Ovl Rights: Include Include Min. Green: 42 53 0 0 25 25 7 0 42 0 0 2 0 2 0 0 0 0 1 1 0 1 0 0 0 2 0 0 0 0 Volume Module: Base Vol: 0 0 0 0 0 0 0 580 0 0 Initial Bse: 0 0 0 0 0 0 0 580 0 0 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 0 0 0 0 580 0 PHF Volume: 0 0 0 0 0 0 0 598 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 0 0 598 0 0 FinalVolume: 0 0 0 0 0 0 0 598 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.97 0.95 1.00 1.00 0.95 0.95 1.00 1.00 0.69 1.00 1.00 1.00 Final Sat.: 3686 3610 0 0 3610 0 1900 0 2615 0 0 _____| Capacity Analysis Module: Crit Moves:

Note: Queue reported is the number of cars per lane.

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LOS by Move: A A A A A A A A A A HCM2kAvgO: 0 0 0 0 0 0 0 1 0 0 0 ****************** -----

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******						(Future ******					****	*****
Intersection												
*******									*****	****	****	*****
Cycle (sec):			90			Critic	al Vol	L./Car	o.(X):		0.2	207
Cycle (sec): Loss Time (se Optimal Cycle	-c):		13			Averag						
Ontimal Cycle	٠.		69			Level				•		В
******										****	****	_
Street Name:			Embaro						St (EB)			
	Noi					ound		ast Bo	. ,		est Bo	. ,
Movement:			- R						- R		- T	
Control:						ed						
Rights:		Incl			Incl		- 1		ıde	- 1	Incl	
Min. Green:	1.0	40	0	10		0	16		16	7	7	
Y+R:	4.0			4.0			4.0			4.0		4.0
Lanes:			0 0			1 0					0	
Volume Module									'	'		
Base Vol:	0	0	0	0	504	76	83	0	16	0	0	0
Growth Adj:				1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	0	0	0	504	76	83	0	16	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	504	76	83	0	16	0	0	0
User Adj:	1.00		1.00	1.00		1.00		1.00	1.00	-	1.00	1.00
PHF Adi:	0.92		0.92	0.92		0.92		0.92	0.92		0.92	0.92
PHF Volume:	0.32	0.52	0.52	0.32	548	83	90	0.52	17	0.52	0.52	0.52
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	548	83	90	0	17	0	0	0
PCE Adi:		1.00	1.00	1.00		1.00		1.00	1.00	-	1.00	1.00
MLF Adj:		1.00	1.00	1.00				1.00	1.00		1.00	1.00
FinalVolume:		0	0		548	83	90	0	17	0	0	0
			-					-		-	-	-
Saturation Fl				'		'	'		'	'		
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.95		1.00				0.95			1.00	1.00
Lanes:		2.00		1.00				0.00	1.00		0.00	0.00
Final Sat.:		3610		1900				0	1691	0	0	0
Capacity Anal				'		'	'		'	'		
Vol/Sat:			0.00	0.00	0.12	0.12	0.05	0.00	0.01	0.00	0.00	0.00
Crit Moves:	0.00	0.00	0.00	0.00	****		****	0.00	0.01	0.00	0.00	0.00
Green/Cycle:	0 00	0 00	0.00	0 00	0.60	0.60	0 26	0.00	0.26	0 00	0.00	0.00
Volume/Cap:			0.00	0.00		0.21		0.00	0.04		0.00	0.00
Delay/Veh:			0.0	0.0		8.3	26.4		25.1	0.0	0.0	0.0
User DelAdj:			1.00	1.00				1.00	1.00	1.00		1.00
AdjDel/Veh:			0.0		8.3	8.3	26.4		25.1	0.0	0.0	0.0
LOS by Move:				0.0 A			20.4 C		23.1 C	0.0 A	0.0 A	0.0 A
HCM2kAvq0:	0	0		0		3	2	0	0	0	0	0

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Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative)

******									ernati			
Intersection												
*****		****	*****	****	****				****	****	*****	*****
Cycle (sec):		9	00 .1 73			Critic	al Vol	L./Car	o.(X):		0.1	L56
Loss Time (se	20).	1	1					-	ec/veh)		17	
Optimal Cycle		-	13			Level				•		В.
******		, *****	*****	****	****					****	*****	
Street Name:									(EB) /			
Approach:	No	rth Bo	Embarc word	auero	1+h D/	nund	LOIIDai	at De	ound	Datte	est Bo	
			D D	7	ים ווטג	– R	T III C	T T	– R	T	- Т	
	ь.	- 1	- K	т -	- 1	- K	ь -	- 1	- K			
Control:									nase			
Rights:	PI		.ea ide	PI		ide	Sp.		idse ide	sp.	Incli	
,	0			0			0.1					10e 6
Min. Green:			35			35			21			
Y+R:									4.0			
Lanes:						0 1			0 1			
Volume Module												
Base Vol:	0				332	189	0	4		9	4	0
Growth Adj:								1.00			1.00	
Initial Bse:	0		0	0		189	0	4		9	4	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	332	189	0	4	130	9	4	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	0	361	205	0	4	141	10	4	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	361	205	0	4	141	10	4	0
PCE Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:						1.00		1.00			1.00	1.00
FinalVolume:			0		361	205	0	4	141	10	4	0
			-				-	_				
Saturation Fl				1		1	1		'	1		1
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:									0.85		0.97	
Lanes:												
Final Sat.:							0.00		1615		565	0.00
												-
'	'											
Capacity Anal				0 00	0 10	0 10	0 00	0 00	0 00	0 01	0 01	0 00
Vol/Sat:	0.00	0.00	0.00	0.00	0.10	U.13 ****	0.00	0.00	0.09	****	0.01	0.00
Crit Moves:												
Green/Cycle:								0.56	0.56		0.07	
Volume/Cap:	0.00					0.33		0.00	0.16		0.12	0.00
Delay/Veh:			0.0	0.0	18.8	19.6	0.0		9.6		39.9	0.0
4 '												
User DelAdj:	1.00	1.00	1.00			1.00	1.00		1.00		1.00	1.00
User DelAdj: AdjDel/Veh:	1.00	1.00	1.00	0.0	18.8	19.6	0.0	8.7	9.6	39.9	39.9	0.0
User DelAdj: AdjDel/Veh: LOS by Move:	1.00 0.0 A	1.00 0.0 A	1.00	0.0	18.8		0.0			39.9		
User DelAdj: AdjDel/Veh:	1.00 0.0 A 0	1.00 0.0 A 0	1.00 0.0 A 0	0.0 A 0	18.8 B 3	19.6 B 4	0.0 A 0	8.7 A 0	9.6 A 2	39.9 D	39.9 D 0	0.0 A 0

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #14 Embarcadero / Green St / Davis St ***********************************
Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 74 1 0 24 0 24 24 24 0 74 1 0 1 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Rights: Include Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 24 24 0 24 24 0 24 24 0 24 24 24 0 24 24 0 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 24 0 24 24 24 24 24 24 24 24 24 24 24 24 24
Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Rights: Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 24 10 24 0 24 24 24 0 24 24 0 24 24 0 24 24 0 24 24 0 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 24 0 24 24 24 24 24 24 24 24 24 24 24 24 24
Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Rights: Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 24 10 24 0 24 24 24 0 24 24 0 24 24 0 24 24 0 24 24 0 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 0 24 24 24 24 0 24 24 24 24 24 24 24 24 24 24 24 24 24
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Movement: L - T - R <t< td=""></t<>
Movement: L - T - R <t< td=""></t<>
Control: Protected Protected Split Phase Split Phase Include Rights: Include Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 24 0 Y+R: 4.0<
Rights: Include 24 0 24 24 24 24 0 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 4.0
Lanes: 1 0 2 0 0 1 0 1 1 0 0 0 0 0 1 0 1 0 0 0 0
Volume Module: Base Vol: 0 0 0 0 331 15 0 0 7 0 0 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Volume Module: Base Vol: 0 0 0 0 0 331 15 0 0 7 0 0 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 0 0 0 0 331 15 0 0 7 0 0 0 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse: 0 0 0 0 331 15 0 0 7 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PHF Adj: 0.94 0.94 0.94 0.94 0.94 0.94 0.94 0.94
PHF Volume: 0 0 0 0 352 16 0 0 7 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 0 0 0 0 352 16 0 0 7 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 0 0 0 0 352 16 0 0 7 0 0 0
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 1.00 0.95 1.00 1.00 0.94 0.94 1.00 1.00 0.87 1.00 1.00 1.00
Lanes: 1.00 2.00 0.00 1.00 1.91 0.09 0.00 0.00 1.00 0.00 1.00 0.00
Final Sat.: 1900 3610
Capacity Analysis Module:
Vol/Sat: 0.00 0.00 0.00 0.00 0.10 0.10 0.00 0.0
Crit Moves: **** ****
Green/Cycle: 0.00 0.00 0.00 0.00 0.58 0.58 0.00 0.00
Volume/Cap: 0.00 0.00 0.00 0.00 0.18 0.18 0.00 0.00
Delay/Veh: 0.0 0.0 0.0 0.0 9.0 9.0 0.0 0.0 24.3 0.0 0.0 0.0
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 0.0 0.0 0.0 0.0 9.0 9.0 0.0 0.0 24.3 0.0 0.0 0.0
LOS by Move: A A A A A A A A A A A A A A A A A A A

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Note: Queue reported is the number of cars per lane.

Existing + AC Event 2012 WeTue Jun 28, 2011 08:48:28

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ******************

Intersection	#15	Embarcadero	/	Broadway	St,	/	Drumm St	

*******	******	**********	*****
Cycle (sec):	90	Critical Vol./Cap.(X):	0.302
Loss Time (sec):	17	Average Delay (sec/veh):	19.4
Optimal Cycle:	74	Level Of Service:	В

Loss Time (so	ec): e:		17 74			Averag Level	e Dela Of Sei	ay (se rvice	ec/veh) :	:	19	9.4 B
********** Street Name: Approach:	****	**** Emb	****** arcader	***** o-Dru	***** nm St	*****	****	****	****** Broadw	***** ay St	****	*****
Approach:	Noi	rth B	ound	Soi	ath B	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control: Rights: Min. Green: Y+R:	Pi	rotec	ted	Pi	rotec	ted	Sp.	Lit P	hase	Sp.	Lit Pl	nase
Rights:		Incl	ude .		Incl	ude		Incl	ude		Incl	ude .
Min. Green:	16	37	0	7	28	28	29	0	29	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:												
Volume Modul												
Base Vol:		0	0	0	303	3.0	0	0	245	0	0	0
Growth Adj:												
Initial Bse:												
Added Vol:												
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	0	3 U 3	3.0	0	0	2/15	0	0	0
User Adi:												
PHF Adj:	1 00	1 00	1 00	1 00	1 00	1 00			1.00			
PHF Volume:												
Reduct Vol:												
Reduced Vol:	0	0	0	0	303	30	0	0	245	0	0	0
PCE Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PCE Adj: MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	303	30	0	0	245	0	0	0
Saturation F	low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.97	0.95	1.00	1.00	0.94	0.94	1.00	1.00	0.85	1.00	1.00	1.00
Lanes:												
Final Sat.:												
Capacity Ana												
Vol/Sat:							0.00	0.00			0.00	0.00
Crit Moves:					****				****			
Green/Cycle:												
Volume/Cap:												
Delay/Veh:	0.0	0.0	0.0	0.0	23.7	23.7	0.0	0.0	13.5	0.0	0.0	0.0

Note: Queue reported is the number of cars per lane.

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AdjDel/Veh: 0.0 0.0 0.0 0.0 23.7 23.7 0.0 0.0 13.5 0.0 0.0 0.0 LOS by Move: A A A A C C A A B A A A 0 0 0 0 4 4 0 0 4 0 0 ******************* Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************ Intersection #16 Embarcadero / Washington St ****************** Loss Time (sec): 17 Average Delay (sec/veh): 16.4 Optimal Cycle: 78 Level Of Service: B *************************** Street Name: Embarcadero Washington St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 12 30 0 10 28 0 33 0 33 0 0 2 0 3 0 0 1 0 2 1 0 1 0 0 0 1 0 0 0 0 -----| Base Vol: 0 0 0 0 439 108 0 0 125 0 0 Initial Bse: 0 0 0 0 439 108 0 0 125 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 Initial Fut: 0 0 0 0 0 0 Ω 0 0 0 0 0 0 Ω 0 0 0 439 108 0 0 125 0 PHF Volume: 0 0 0 0 439 108 0 0 125 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 439 108 0 0 125 FinalVolume: 0 0 0 0 439 108 0 0 125 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.97 0.91 1.00 1.00 0.88 0.88 1.00 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 3.00 0.00 1.00 2.41 0.59 1.00 0.00 1.00 0.00 0.00 0.00 _____|__|__| Capacity Analysis Module: Crit Moves: **** Green/Cycle: 0.00 0.00 0.00 0.00 0.44 0.44 0.00 0.00 0.37 0.00 0.00 0.00 Delay/Veh: 0.0 0.0 0.0 0.0 15.6 15.6 0.0 0.0 19.7 0.0 0.0 0.0 AdjDel/Veh: 0.0 0.0 0.0 0.0 15.6 15.6 0.0 0.0 19.7 0.0 0.0 0.0 LOS by Move: A A A A B B A A B A A HCM2kAvgO: 0 0 0 0 3 3 0 0 2 0 0 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Transportation Impact Analysis

2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Embarcadero / Mission St

Cycle (sec): 90 Critical Vol./Cap.(X): 0.182 0.7

Loss Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 62 Level Of Service: ************************* Street Name: Embarcadero MIssion St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 0 52 0 52 52 52 28 0 28 0 0 0 0 0 3 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 -----| Volume Module: Base Vol: 0 0 0 0 376 188 0 0 0 0 0 Initial Bse: 0 0 0 0 376 188 0 0 0 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 0 376 188 0 0 Ω 0 0 0 0 0 0 0 0 0 PHF Volume: 0 0 0 0 404 202 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 404 202 0 0 0 0 0 FinalVolume: 0 0 0 0 404 202 0 0 0 0 0 -----| Saturation Flow Module: Adjustment: 1.00 0.62 1.00 1.00 0.59 0.86 1.00 1.00 1.00 1.00 1.00 1.00 Lanes: 0.00 3.00 0.00 0.00 2.24 0.76 0.00 1.00 0.00 0.00 0.00 0.00 Final Sat.: 0 3527 0 0 2501 1250 0 1900 0 0 0 _____|__|__| Capacity Analysis Module: Crit Moves: **** LOS by Move: A A A A A A A A A A HCM2kAvgO: 0 0 0 0 1 1 0 0 0 0 0

Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******									ernati			
Intersection												
***********							****	****	*****	****	****	*****
Cycle (sec):		1	0.0			Critic	al Vo	L./Car	o.(X):		0.3	373
Cycle (sec): Loss Time (sec) Optimal Cycle	201.	_	1.0			Averso	na Dala	27 / 64	oc/woh)		1	
Ontimal Cycle		1	00			Laval	Of Sa	cuice	ec/veh)	•		в
*******	: • * * * * * :	. * * * *	· · · · · · · · · · · · · · · · · · ·	*****	****	******	*****	*****	:****	****		
Street Name:			Embaro	radero					Harrie			
Approach:	No	rth B	ound	Soi	ıth B	nund	Ea	ast Bo	nind	We	est Bo	nund
Movement:	T	_ т	_ P	Т	_ т	_ P	т	_ т	_ P			
				ш I I ——— —			1			1		
Control: Rights:		Incl	uda	-	Incl	nda	op.	Incli	1000	op.	Incli	100
Min Croon:	0	11101	n n	0	63	63	27	27	27	0	111010	n
Min. Green: Y+R:	4 0	4 0	4 0	4 0	4 0	4 0	4 0	1 0	4 0	4 0	4 0	4 0
Lanes:	4.0	1.0	0 0	0.0	4.0	1 0	1 (4.0	0 1	4.0	4.0	0 0
Volume Module												
		1 1 6	0	0	211	2.40	106	0	74	0	0	0
Base Vol:					1.00							
Growth Adj:							196	1.00		1.00	1.00	1.00
Initial Bse:				0						-	0	0
Added Vol:		0			0		0		0	0	0	0
PasserByVol: Initial Fut:	0	0	0		0		0		0	0	0	0
				0			196	0	74	0	0	0
User Adj:					1.00			1.00			1.00	1.00
PHF Adj:					0.93			0.93	0.93		0.93	0.93
PHF Volume:	0	157	0	0	334	267	211	0	80	0	0	0
Reduct Vol:					0	0	0		0	0	0	0
Reduced Vol:					334		211		80	0	0	0
PCE Adj:					1.00			1.00			1.00	1.00
MLF Adj:						1.00		1.00		1.00	1.00	1.00
FinalVolume:										-	0	0
	'											
Saturation Fl												
Sat/Lane:									1900		1900	
Adjustment:						0.89		1.00				
Lanes:						0.72		0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2559	0	0	1527	1218	1805	0		0		0
Capacity Anal	Lysis	Modu	le:									
Vol/Sat:	0.00	0.06	0.00	0.00				0.00	0.05	0.00	0.00	0.00
Crit Moves:					****		****					
Green/Cycle:	0.00	0.63	0.00	0.00	0.63	0.63	0.27	0.00	0.27	0.00	0.00	0.00
Volume/Cap:				0.00	0.35	0.35	0.43		0.18	0.00	0.00	0.00
Delay/Veh:				0.0	8.9	8.9	30.8	0.0	28.2	0.0	0.0	0.0
User DelAdj:				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	7.3	0.0	0.0	8.9	8.9	30.8	0.0	28.2	0.0	0.0	0.0
LOS by Move:	A	A	A	A	A	A	С	A	С	A	A	A
HCM2kAvgQ:	0	1	0			6			2	0		0
*****	****	****	*****	*****	****	*****	****	****	*****	****	****	*****

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Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

						Computa						
*****									ernati		*****	******
Intersection												
******							****	*****	*****	****	****	*****
Cycle (sec):		10	0.0			Critic	al Vo	l./Car	o.(X):		0.3	333
Loss Time (se	ec):	1	0						ec/veh)			5.8
Optimal Cycle		-	95			Level				-		C
******					*****					****	****	
Street Name:			Embaro	adero					Bryan	t St		
Approach:	No	rth Bo	ound	Soi	ith Bo	ound	Εa	ast Bo		We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R		- T	
Control:		rotect		Pı			. 1				Permit	
Rights:		Inclu	ıde		Inclu	ıde		Inclu	ıde		Inclu	ıde
Min. Green:	21	41	41	16	36	36	28	28	28	28	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 () 1	1 0	1 (2	0 1	0 :	1 0	0 1	0	0 1!	0 0
Volume Module	e:											
Base Vol:	263	73	14	31	286	66	67	5	85	4	11	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	263	73	14	31	286	66	67	5	85	4	11	5
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	263	73	14	31	286	66	67	5	85	4	11	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	286	79	15	34	311	72	73	5	92	4	12	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	286	79	15	34	311	72	73	5	92	4	12	5
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	286	79	15	34	311	72	73	5	92	4	12	5
Saturation F:	low Mo	odule:	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.93	0.93	0.95	0.95	0.85	0.74	0.74	0.85	0.94	0.94	0.94
Lanes:	1.00	1.68	0.32	1.00	2.00	1.00	0.93	0.07	1.00	0.20	0.55	0.25
Final Sat.:		2956	567		3610	1615		98	1615	355		444
Capacity Anal												
Vol/Sat:		0.03	0.03	0.02		0.04	0.06	0.06	0.06	0.01	0.01	0.01
Crit Moves:	****				****			***				
Green/Cycle:				0.17		0.36		0.28	0.28		0.28	0.28
Volume/Cap:			0.06		0.24	0.12		0.20	0.20		0.04	0.04
Delay/Veh:		15.8	15.8		22.5	21.5		27.7	27.7		26.3	26.3
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			15.8	34.9		21.5		27.7	27.7		26.3	26.3
LOS by Move:		В	В	С		С	С	С	С	С	С	С
HCM2kAvgQ:	8	1	1	1		1	2		2	0	0	0
*****	****	*****	*****	****	*****	*****	****	****	*****	****	****	*****

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #20 Embarcadero / Brannan St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.143
Loss Time (sec): 11 Average Delay (sec/veh): 27.8
Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Brannan St Embarcadero Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 10 37 0 14 37 37 28 28 28 28 28 28 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 182 286 0 2 261 109 66 0 43 0 0 Initial Bse: 182 286 0 2 261 109 66 0 43 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 2 261 109 Initial Fut: 182 286 66 0 43 0 PHF Volume: 196 308 0 2 281 117 71 0 46 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 196 308 0 2 281 117 71 0 46 0 0 FinalVolume: 196 308 0 2 281 117 71 0 46 0 0 -----| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.11 0.09 0.00 0.00 0.08 0.07 0.04 0.00 0.03 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.12 0.41 0.00 0.16 0.45 0.45 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.90 0.21 0.00 0.01 0.17 0.16 0.13 0.00 0.09 0.00 0.00 0.00 Delay/Veh: 74.0 17.1 0.0 32.1 15.0 15.0 22.3 0.0 22.1 0.0 0.0 AdjDel/Veh: 74.0 17.1 0.0 32.1 15.0 15.0 22.3 0.0 22.1 0.0 0.0 0.0 LOS by Move: E B A C B B C A C A A A HCM2kAvgO: 6 3 0 0 2 2 1 0 1 0 0 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Transportation Impact Analysis

Intersection #21 Folsom St/Fremont St ************************* Cycle (sec): 75 Critical Vol./Cap.(X): 0.609
Loss Time (sec): 16 Average Delay (sec/veh): 30.4
Optimal Cycle: 77 Level Of Service: C ************************* Street Name: Fremont St (I-80 WB Off Ramp) Folsom St
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R

Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 19 19 19 19 19 19 21 21 0 21 21 0 1 0 1 0 1 1 0 1! 0 0 0 1 1 1 0 0 0 0 1 0 -----| Volume Module: Base Vol: 0 0 108 342 38 0 75 311 9 0 15 269 Initial Bse: 0 0 108 342 38 0 75 311 9 0 15 Added Vol: 0 0 0 0 0 PasserByVol: 0 0 0 0 Ω 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 Initial Fut: 0 0 108 342 38 0 0 0 Ω 9 0 75 311 PHF Volume: 0 0 111 353 39 0 77 321 9 0 15 277 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 111 353 39 0 77 321 9 0 15 277 FinalVolume: 0 0 111 353 39 0 77 321 9 0 15 277 Saturation Flow Module: Adjustment: 0.95 0.95 0.81 0.48 0.66 1.00 0.90 0.90 0.90 1.00 0.87 0.87

Capacity Analysis Module:

Vol/Sat: 0.00 0.00 0.07 0.21 0.23 0.00 0.08 0.08 0.08 0.00 0.18 0.18 Crit Moves: **** **** Green/Cycle: 0.00 0.00 0.25 0.25 0.25 0.00 0.27 0.27 0.27 0.00 0.27 0.27 Volume/Cap: 0.00 0.00 0.29 0.85 0.92 0.00 0.29 0.29 0.29 0.00 0.65 0.65

Lanes: 1.00 0.00 1.00 1.86 0.14 0.00 0.57 2.36 0.07 0.00 0.05 0.95

Final Sat.: 1805 0 1534 1684 173 0 973 4035 117 0 88 1569

_____|__|__|

Delay/Veh: 0.0 0.0 24.0 41.4 52.5 0.0 22.2 22.2 22.2 0.0 28.0 28.0 AdjDel/Veh: 0.0 0.0 24.0 41.4 52.5 0.0 22.2 22.2 22.2 0.0 28.0 28.0 LOS by Move: A A C D D A C C A C C HCM2kAvgO: 0 0 2 5 8 0 3 3 3 0 7 7 ******************

Note: Queue reported is the number of cars per lane.

24th Americals Cup Bases

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******			******			(rucure				ve) ****	*****	*****
Intersection	#22 F	King :	St/3rd	St								
Cycle (sec):		1	00			****** Critic Averag Level	al Voi	l./Car	o.(X):		0.4	163
Loss Time (se	ec):		10			Averag	e Dela	av (se	ec/veh)	:	30	0.4
Optimal Cycle			95			Level	Of Sei	rvice:	:			C
******			*****	****	****	*****	****	****	*****	****	****	*****
Street Name:				l St					King	St		
Approach:	Noi	cth B	ound	Sot	ıth Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
			- R			- R						
 Control:												
				Sp.	LIL PI	nase	Pi	roteci	_ea	PI	roteci	
Rights:		Ovl			TUCT	ude 0		Incli	ıae		Incl	
Min. Green:	26	26	26	. 0	0	0	20	46	46	13	39	39
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:												
Volume Module	'			1			1					
	50	418	137	0	0	0	1037	385	29	152	238	56
Growth Adj:			1.00		1.00			1.00	1.00		1.00	1.00
Initial Bse:		418	137	0	0		1037		29	152		56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50		137	0	0	0	1037		29	152		56
	1.00		1.00		1.00			1.00	1.00		1.00	1.00
PHF Adi:		0.96	0.96	0.96		0.96		0.96	0.96		0.96	0.96
PHF Volume:	52	435	143	0	0	0	1080	401	30	158	248	58
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
			143	0	0	0	1080	401	30	158	248	58
PCE Adi:	1.00		1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
MLF Adj:		1.00	1.00		1.00			1.00			1.00	1.00
FinalVolume:			143		0			401	30	158		58
Saturation Fl	Low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.87	0.87	0.87	1.00	1.00	1.00	0.92	0.94	0.94	0.92	0.55	0.92
Lanes:	0.41	3.46	1.13	0.00	0.00	0.00	3.00	1.86	0.14	2.00	1.75	0.25
Final Sat.:	682	5701	1868	0	0	0	5253	3324	250	3502	1845	434
Capacity Anal	Lysis	Modu.	le:									
Vol/Sat:		0.08	0.08	0.00	0.00	0.00		0.12	0.12	0.05	0.13	0.13
Crit Moves:	****						***				****	
Green/Cycle:					0.00				0.50		0.39	0.39
Volume/Cap:	0.29	0.29	0.19	0.00	0.00	0.00	0.82	0.24	0.24	0.32	0.34	0.34
Delay/Veh:		29.7	19.5	0.0				14.3		39.0	21.7	21.7
User DelAdj:			1.00		1.00			1.00			1.00	1.00
AdjDel/Veh:				0.0				14.3		39.0	21.7	21.7
LOS by Move: HCM2kAvgQ:	С	С	В	A	A	A	D	B 4	В	D		С
							13	4		2	3	5
******	****	****	*****	****	****	*****	****	****	*****	****	*****	*****

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeTue Jun 28, 2011 08:48:28

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*****									:ernati *****		*****	*****
Intersection												

Cycle (sec):		10	00			Critic	al Vol	l./Cap	o.(X):		0.4	
Loss Time (se	ec):					1110149	0 0010	~_ (0	,,	:	4 ().2
Optimal Cycle	⊖:	12	25			Level						D
*****	****	****	*****	*****	****	*****	****	****	*****	****	*****	*****
Street Name:			King	g St						St		
Approach:	Noi	rth Bo	ound	Soi	ith Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:											- T	
Control:	Pı	rotect	ted	Pı	otect	ed	Pı	rotect	ted	Pı	rotect	ed
Rights:			ude			ıde			ıde		Incl	
Min. Green:	28		28	28		28	1.0		42	1 4	45	4.5
Y+R:			4.0							4.0		
Lanes:									1 0			
Lanes:												
Volume Modul				1			1			1		
		2 -	22	C 1	102	1 (1	0.1	1264	0	41	101	E C
	24		23		193	161		1364	0	41		56
Growth Adj:						1.00		1.00			1.00	
Initial Bse:		35		64	193	161		1364	0	41		56
Added Vol:	0	0	-		0	0	-	0	0	-	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	35	23	64	193	161	81	1364	0	41	191	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	25	36	24	67	201	168	84	1421	0	43	199	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	25	36	24	67	201	168	84	1421	0	43	199	58
PCE Adj:		1.00				1.00	1.00			1 00	1.00	
MLF Adj:			1.00			1.00	1.00				1.00	
FinalVolume:				67		168	84		0		199	58
									-			
Saturation F												
Sat/Lane:				1000	1000	1900	1000	1000	1900	1000	1900	1900
												0.92
Adjustment:												
Lanes:												0.45
Final Sat.:						2295					2697	791
Capacity Ana												
Vol/Sat:			0.01	0.04			0.05				0.07	0.07
Crit Moves:	****							***		****		
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.08	0.34	0.00	0.11	0.37	0.37
Volume/Cap:	0.15	0.15	0.07	0.16	0.33	0.33	0.57	0.82	0.00	0.21	0.20	0.20
Delay/Veh:	39.1	39.1	38.3	39.3	40.8	40.8	60.7	41.0	0.0	51.0	27.2	27.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:							60.7		0.0		27.2	27.2
LOS by Move:			D		D		F.				C	C
HCM2kAvqO:	2	2		2		4	4	_	0	2	3	3
						_	_		*****	_	-	-

Note: Queue reported is the number of cars per lane.

Ath Americals Cup Dages

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******	****	****	*****	****	****	*****	****	****	*****	*****	****	*****	
*****	Intersection #24 16th St/3rd St												
Cycle (sec):		1	00			Critic	al Vo	l./Car	o.(X):		0.2	200	
Loss Time (se	ac) •		1.0			Averag	e Dela	av (se	c/veh)		1 (9.4	
Cycle (sec): Loss Time (se Optimal Cycle	٠., ٠	1 (0.0			Level	Of Set	rvice	•	-		R	
******	· * * * * *	****	******	****	****	*****	****	* * * * *	• * * * * * * *	*****	****	*****	
Street Name:									16th				
Approach:					1+h D	nund	E-	act D			c+ D	ound	
Movement:	110.	L CII D	Duna	, 301	ים ווטג	Juila	T 150	25 L D	– R	, WC	SC DO	Julia	
Movement:													
Diahta.	F.	Tnal	udo		Thal	ideu		Thal	ide.	Permitted Include			
	0.0	THET	ude	2.1	111011	uue 11	2.4	THET	34	2.4	THET	aue a 4	
Min. Green:			56										
Y+R:			4.0										
			1 0						1 0				
Volume Module		000				0.0			105			_	
Base Vol:					165			0		0	-	-	
Growth Adj:					1.00			1.00					
Initial Bse:			0		165	36	52		105	0	0	0	
Added Vol:			-		0	0	0	-	-	0	0	0	
PasserByVol:			0		0	0	0		0	0	0	0	
Initial Fut:					165		52			0	0	0	
User Adj:			1.00		1.00	1.00		1.00		1.00		1.00	
PHF Adj:			0.90		0.90	0.90		0.90		0.90		0.90	
PHF Volume:			0	4		40	58	0	117	0	0	0	
Reduct Vol:			0		0	0	0		0	0	0	0	
Reduced Vol:	114	374	0	4	183	40	58	0	117	0	0	0	
PCE Adj:					1.00	1.00		1.00		1.00	1.00	1.00	
MLF Adj:	1.00	1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	114	374		4					117	0		0	
Saturation F	low M	odule	:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.92	0.95	0.95	0.52	0.92	0.92	0.77	0.95	0.81	0.95	0.95	0.95	
Lanes:	2.00	2.00	0.00	1.00	1.64	0.36	1.00	1.00	1.00	0.00	0.00	2.00	
Final Sat.:	3502	3610	0	992	2883	629	1461	1805	1534	0	0	3610	
Capacity Anal	lysis	Modu.	le:										
Vol/Sat:	0.03	0.10	0.00	0.00	0.06	0.06	0.04	0.00	0.08	0.00	0.00	0.00	
Crit Moves:		****							****				
Green/Cycle:	0.25	0.56	0.00	0.31	0.31	0.31	0.34	0.00	0.34	0.00	0.00	0.00	
Volume/Cap:	0.13	0.19	0.00	0.01	0.21	0.21	0.12	0.00	0.22	0.00	0.00	0.00	
Delay/Veh:	29.1	10.8	0.0	23.9	25.5	25.5	22.8	0.0	23.8	0.0	0.0	0.0	
User DelAdj:					1.00			1.00		1.00	1.00	1.00	
AdiDel/Veh:					25.5	25.5		0.0		0.0	0.0	0.0	
					C					Α			
LOS by Move: HCM2kAvqQ:	1	3	0	0			1			0		0	
******										*****	****	*****	

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeTue Jun 28, 2011 08:48:28

Level Of Service Computation Report

*****									:ernati		****	*****
Intersection	#25 (Cesar	Chavez	St/3:	rd St							
Cycle (sec):		Τ(0			Critic	aı vo.	I./Car	o.(X):		1.(123
Loss Time (se	ec):	1	L2			Averag	ge Del	ay (se	ec/veh)	:	20	0.9
Cycle (sec): Loss Time (se Optimal Cycle	e:	5	97			Level	Of Se	rvice	:			C
******	****	****	*****	****	*****	*****	****	****	*****	****	****	*****
Street Name:			3rd	St				Ce	esar Ch	avez	St	
Approach:	Noi	rth Bo	ound	Soi	ith Bo	ound	E	ast Bo	ound	We	est Bo	ound
Movement:												
Control:	Par	cmi+_I	2rot	Dat	rmi+_I	rot '	'	Darmit	-+64	'	Darmit	-+64
Rights:	1 61	Tnal	100	1 61	Tnal	100		Tnal	ted ide	,	Tnal	.de
Kights:	1.5	THET	ide	1.0	THET	ide	_	THET	aue ao	2.0	THET	aue an
Min. Green: Y+R:	15	35	35	10	30	30	5	40	40	30	30	30
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
									1 0			
Volume Module												
Base Vol:	133	307	8	2	168	59	96	138	130	10	136	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	307	8	2	168	59	96	138	130	10	136	8
Added Vol:			0	0	0	0		0	0	0	0	0
PasserByVol:				0		0	0		0	0	0	0
Initial Fut:			8			59	96			10		8
												-
User Adj:								1.00	1.00		1.00	1.00
_		0.91			0.91			0.91	0.91		0.91	0.91
PHF Volume:		337			185	65	105		143	11		9
Reduct Vol:		0			0	0		0			0	0
Reduced Vol:	146	337	9	2	185	65	105	152	143	11	149	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:							105	152	143	11	149	9
							1			1		
Saturation F							'		'	'		,
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:											0.88	
Lanes:												
Final Sat.:										216		173
Capacity Ana												
Vol/Sat:		0.10	0.10	0.00	0.07	0.07	0.09			0.05	0.05	0.05
Crit Moves:	****							****				
Green/Cycle:	0.52	0.37	0.37	0.45	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.40
Volume/Cap:	0.20	0.26	0.26	0.00	0.24	0.24	0.22	0.22	0.22	0.13	0.13	0.13
Delay/Veh:									19.8		19.0	19.0
User DelAdj:							1.00				1.00	1.00
AdiDel/Veh:							19.9				19.0	19.0
								19.0 B		19.0 B		
LOS by Move: HCM2kAvgQ:	В	C	C A			C	В 2	В				
					3					2		2
******	****	*****	*****	****	*****	*****	****	****	*****	****	****	*****

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

*****	****	****	*****	****	****	:****	****	****	*****	****	****	*****
Intersection #26 Cesar Chavez St/Illinois St												
Cvcle (sec):		10	0.0			Critic	al Vol	L./Car	o.(X):		0.3	123
Loss Time (se	٠()،		9						ec/veh)	: 11.9		
Optimal Cycle			00			Level				В		
******				****	****					****	****	_
Street Name:			Illino					esar Ch				
Approach:	Nor	th Bo			ıth Bo	nund	Ea		ound		est Bo	nınd
Movement:			– R									
			ted									
Rights:	-	Incli	ıde	-	Incli	ide	_	Incl	ıde	-	Incl	ide
Min. Green:	20			20		20	71		71	71		71
Y+R:	4.0											4.0
			1 0								1!	
Volume Module	:									1		
Base Vol:	29	27	3	9	17	11	27	77	45		115	7
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	29	27	3	9	17	11	27	77	45	3	115	7
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	29	27	3	9	17	11	27	77	45	3	115	7
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
PHF Volume:	37	35	4	12	22	14	35	99	58	4	147	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	37	35	4	12	22	14	35	99	58	4	147	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	37	35	4	12	22	14	35	99	58	4	147	9
Saturation Fl				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:	1900		1900		1900			1900			1900	1900
-	0.74		0.99			0.94		0.81			0.99	0.99
Lanes:		0.90	0.10			0.39		1.04			0.92	0.06
Final Sat.:										45		105
 Capacity Anal												
	0.03		0.02	0.01	0.02	0.02	0.06	0.06	0.06	0.09	0.09	0.09
	****	2	0.02	J. U.	2	0.02	3.00		0.00	0.00	****	0.00
Green/Cycle:	0.20	0.20	0.20	0.20	0.20	0.20	0.71	0.71	0.71	0.71	0.71	0.71
Volume/Cap:			0.10		0.10			0.09			0.12	0.12
Delay/Veh:	33.1		32.8		32.8		4.5	4.5	4.5	4.6		4.6
User DelAdj:			1.00		1.00			1.00	1.00	1.00		1.00
AdjDel/Veh:			32.8		32.8	32.8	4.5		4.5	4.6		4.6
LOS by Move:			32.0 C		32.0 C			4.5 A			4.0 A	4.0 A
HCM2kAvqO:		1	1	0		1	1	1	1	2	2	2
ncmzkavgQ:												

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to ESA, SAN FRANCISCO

Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Existing + AC Event 2012 WeTue Jun 28, 2011 08:48:28

Level Of Service Computation Report

Transportation Impact Analysis

******									ternati		***	
Intersection	#27 I	incol	n Blvo	d/25th	St/E	L Camir	no del	Mar				
Cycle (sec): Loss Time (sec) Optimal Cycle			1			Critic	cal Vo.	I./Cap	o.(X):		1.2	202
Loss Time (se	ec):		0			Avera	ge Del	ay (se	ec/veh)	:	70	0.6
Optimal Cycle	e:		0			Level	Of Se	rvice	:			F
Street Name:			25tl	n St			El Car	mino d	del Mar	(eb)	/ Lir	ncoln
Approach: Movement:	Nor	th Bo	ound	So	uth Bo	ound	E	ast Bo	ound	We	st Bo	ound
Movement:	L -	- T	- R	L ·	- T	- R	L	- T	- R	L -	T	- R
Control:	St	op Si	gn	S ⁻	top Si	ign	S ⁻	top S:	ign ude	St	op Si	Lgn
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0	0 1!	0 0	0	1!	0 0	1 0	0	1 0
Volume Module	⊖:											
Base Vol:	20	22	701	25	16	2	1	239	27	361	166	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	22	701	25	16	2	1	239	27	361	166	13
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Bse: Added Vol: PasserByVol: Initial Fut:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	22	701	25	16	2	1	239	27	361	166	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	20	22	715	26	16	2	1	244	28	368	169	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	22	715	26	16	2	1	244	28	368	169	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:												
FinalVolume:	20	22	715	26	16	2	1	244	28	368	169	13
Saturation F	low Mc	dule:	:									
Adjustment:												
Lanes:	0.03	0.03	0.94	0.58	0.37	0.05	0.01	0.89	0.10	1.00	0.93	0.07
Final Sat.:												
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	1.20	1.20	1.20	0.10	0.10	0.10	0.53	0.53	0.53	0.78	0.36	0.36
Crit Moves:		****		****				***		****		
Delay/Veh:				11.6	11.6	11.6	17.3	17.3	17.3	31.6	13.5	13.5
Delay Adj:												
AdiDel/Veh:	125.8	126	125.8	11.6	11.6	11.6	17.3	17.3	17.3	31.6	13.5	13.5
* 0 0 1 14	_	_	_	-	-	-	C	С	C	D	В	В
ApproachDel:	1	25.8			11.6			17.3			25.6	
Delay Adi:		1.00			1.00			1.00			1.00	
ApprAdiDel:	1	25.8			11.6			1.00 17.3			25.6	
LOS by Appr:		F			В			C			D	
LOS by Move: ApproachDel: Delay Adj: ApprAdjDel: LOS by Appr: AllWayAvgQ:	20.5	20.5	20.5	0.1	0.1	0.1	1.1			2.8		0.5
******	****	****	****	****	****	*****						

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

************ Intersection #28 Lake St/14th Ave ************************* Loss Time (sec): 0 Average Delay (sec/veh): 18.2 Optimal Cycle: 0 Level Of Service: C Street Name: 14th Ave Lake St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 1 0 0 0 0 0 1! 0 0 0 1 -----| Volume Module: Base Vol: 2 430 10 3 0 0 16 175 6 68 151 14 Initial Bse: 2 430 10 3 0 0 16 175 6 68 151 1.4 Added Vol: 0 0
PasserByVol: 0 0
Initial Fut: 2 430 0 0 10 0 0 0 0 0 0 0 0 0 0 0 0 Ω Ω 0 0 0 0 16 175 3 0 6 68 151 PHF Volume: 2 500 12 3 0 0 19 203 7 79 176 16 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 2 500 12 3 0 0 19 203 7 79 176 16 FinalVolume: 2 500 12 3 0 0 19 203 7 79 176 16 _____|__| Saturation Flow Module: Lanes: 0.01 0.97 0.02 1.00 0.00 0.00 0.08 0.89 0.03 0.31 0.69 1.00 Final Sat.: 3 644 15 486 0 0 47 511 18 166 368 611 Capacity Analysis Module: Vol/Sat: 0.78 0.78 0.78 0.01 xxxx xxxx 0.40 0.40 0.40 0.48 0.48 0.03 Crit Moves: *** *** *** Delay/Veh: 23.1 23.1 23.1 9.5 0.0 0.0 12.4 12.4 12.4 14.4 14.4 8.4 AdjDel/Veh: 23.1 23.1 23.1 9.5 0.0 0.0 12.4 12.4 12.4 14.4 14.4 8.4 LOS by Move: C C C A * * B B B B A ApproachDel: 23.1 9.5 12.4
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 23.1 9.5 12.4
LOS by Appr: C A B 14.0 1.00 14.0 AllWayAvgo: 2.7 2.7 2.7 0.0 0.0 0.6 0.6 0.6 0.8 0.8 0.0 ********************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative) ****************

Intersection #29 Lake St/15th Ave *************************

Loss Time (sec): 0 Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: 8.9 ************************* Street Name: 15th Ave Lake St Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 3 3 15 19 125 11 1 160 2 10 134 6 Initial Bse: 3 3 15 19 125 11 1 160 2 10 134 6

Added Vol: 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 Initial Fut: 3 3 15 0 0 1 160 0 0 0 0 19 125 11 2 PHF Volume: 3 3 17 22 142 13 1 182 2 11 152 7 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 3 3 17 22 142 13 1 182 2 11 152 FinalVolume: 3 3 17 22 142 13 1 182 2 11 152 7

Saturation Flow Module: Lanes: 0.14 0.14 0.72 0.12 0.81 0.07 0.01 0.98 0.01 0.07 0.89 0.04 Final Sat.: 104 104 520 89 583 51 5 745 9 50 676 30

-----|----|

Capacity Analysis Module: Vol/Sat: 0.03 0.03 0.03 0.24 0.24 0.24 0.24 0.24 0.24 0.24 0.23 0.23

Crit Moves: **** **** Delay/Veh: 7.7 7.7 7.7 9.1 9.1 9.1 9.0 9.0 9.0 8.8 8.8 8.8 AdjDel/Veh: 7.7 7.7 7.7 9.1 9.1 9.1 9.0 9.0 9.0 8.8 8.8 8.8 LOS by Move: A A A A A A A A A A ApproachDel: 7.7 9.1 9.0
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 7.7 9.1 9.0
LOS by Appr: A A A A 9.0 8.8 1.00 8.8 A Δ

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

**********	*****	*****	*****	******	*****	*****	*****
Intersection #30 Jac				******	*****	*****	****
Cvcle (sec):	100		Critica	al Vol./Car).(X):	1.1	29
Loss Time (sec):	0		Average	e Delav (se	c/veh):	62	. 5
Optimal Cycle:	100 0 0		Level (of Service:			
*******	****	*****	*****	******	*****	*****	*****
Street Name:	Arguello Bly				Jackson		
Approach: North			und	East Bo			und
	T - R L						
Control: Stop							
Rights: Ir	nclude	Inclu	de	Inclu	ıde	Inclu	de
Min. Green: 0	0 0	0 0	0	0 0	0	0 0	0
Lanes: 0 0						0 0 1!	
Volume Module:							
		3 468	0	0 0	0	39 0	49
Growth Adj: 1.00 1.	.00 1.00 1.00	0 1.00	1.00	1.00 1.00	1.00 1	.00 1.00	1.00
Initial Bse: 0	768 27 30	3 468	0	0 0	0	39 0	49
Added Vol: 0	0 0	0 0	0	0 0	0	0 0	0
PasserByVol: 0	0 0	0 0	0	0 0	0	0 0	0
Initial Fut: 0	768 27 30	3 468	0	0 0	0	39 0	49
User Adj: 1.00 1.	.00 1.00 1.00	0 1.00		1.00 1.00	1.00 1	.00 1.00	1.00
PHF Adj: 0.94 0.	.94 0.94 0.94	4 0.94	0.94	0.94 0.94	0.94 0	.94 0.94	0.94
PHF Volume: 0 8	317 29 32	2 498	0	0 0	0	41 0	52
PHF Volume: 0 8 Reduced Vol: 0	0 0	0 0	0	0 0	0	0 0	0
Reduced Vol: 0 8	317 29 32	2 498	0	0 0	0	41 0	52
PCE Adj: 1.00 1.	.00 1.00 1.00	1.00	1.00	1.00 1.00	1.00 1	.00 1.00	1.00
MLF Adj: 1.00 1.	.00 1.00 1.00	0 1.00	1.00	1.00 1.00	1.00 1	.00 1.00	1.00
FinalVolume: 0 8							52
					-		
Saturation Flow Modu	ıle:						
Adjustment: 1.00 1.							
Lanes: 0.00 0.							0.56
Final Sat.: 0		3 667		0 0		245 0	308
					-		
Capacity Analysis Mo							
Vol/Sat: xxxx 1.			XXXX	XXXX XXXX	xxxx 0	.17 xxxx	0.17
CIIC HOVED.	***	****					****
Delay/Veh: 0.0 94				0.0 0.0		0.5 0.0	10.5
Delay Adj: 1.00 1.		0 1.00		1.00 1.00		.00 1.00	1.00
AdjDel/Veh: 0.0 94			0.0	0.0 0.0		0.5 0.0	10.5
LOS by Move: *	F F	C C	*	* *	*	в *	В
ApproachDel: 94	4.1	21.2		XXXXXX		10.5	
Delay Adj: 1.	.00	1.00		XXXXX		1.00	
ApproachDel: 94 Delay Adj: 1. ApprAdjDel: 94 LOS by Appr:	4.1	21.2 1.00 21.2 C		xxxxxx		10.5	
LOS by Appr:	F						
AllWayAygO: 18.0 18	3.0 18.0 2.6	5 2.6	2.6	0.0 0.0	0.0	0.2 0.2	0.2

Note: Queue reported is the number of cars per lane.

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AllWayAvgO: 18.0 18.0 18.0 2.6 2.6 2.6 0.0 0.0 0.0 0.2 0.2 0.2

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Pacific Ave/Presidio Blvd ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 1.036
Loss Time (sec): 0 Average Delay (sec/veh): 44.0
Optimal Cycle: 0 Level Of Service: E ************************

Street Name: Presidio Blvd Pacific Ave
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 3 774 11 14 461 18 10 1 1 15 11 31 Initial Bse: 3 774 11 14 461 18 10 1 1 15 11 31 Added Vol: 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 Initial Fut: 3 774 11 14 461 0 0 0 0 0 0 10 0 0 0 Ω 1 15 11 18 1 PHF Volume: 3 782 11 14 466 18 10 1 1 15 11 31 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 3 782 11 14 466 18 10 1 1 15 11 31 FinalVolume: 3 782 11 14 466 18 10 1 1 15 11 31 -----| Saturation Flow Module: Lanes: 0.01 0.98 0.01 0.03 0.93 0.04 0.84 0.08 0.08 0.26 0.19 0.55 Final Sat.: 3 754 11 21 680 27 413 41 41 144 105 297

-----| Capacity Analysis Module: Vol/Sat: 1.04 1.04 1.04 0.69 0.69 0.69 0.02 0.02 0.02 0.11 0.11 0.11 Crit Moves: *** *** *** Delay/Veh: 63.3 63.3 63.3 17.9 17.9 17.9 10.0 10.0 10.0 10.0 10.0 10.0 AdjDel/Veh: 63.3 63.3 63.3 17.9 17.9 17.9 10.0 10.0 10.0 10.0 10.0 10.0 LOS by Move: F F F C C C A A A A A

10.0 ApproachDel: 63.3 17.9
Delay Adj: 1.00 1.00 10.0 1.00 1.00 ApprAdjDel: 63.3 17.9 10.0 LOS by Appr: F C A 10.0 A AllWayAvgO: 11.9 11.9 11.9 2.0 2.0 2.0 0.0 0.0 0.1 0.1 0.1 *****************************

Note: Queue reported is the number of cars per lane.

Rights:

Include

Include

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

**************** Intersection #32 Lombard St/Lvon St ***************** Cycle (sec): 0 Critical Vol./Cap.(X): 3.015 Loss Time (sec): 0 Average Delay (sec/veh): 616.5
Optimal Cycle: 0 Level Of Service: F ************************** Street Name: Lyon St Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign Include Include Include Include Rights: Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 88 29 21 27 34 159 186 567 91 8 1677 18 Initial Bse: 88 29 21 27 34 159 186 567 91 8 1677 1.8 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 1 Initial Fut: 88 29 21 0 0 0 Ω Ω 0 0 0 27 34 159 186 567 91 8 1677 PHF Volume: 89 29 21 27 34 161 188 573 92 8 1694 18 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 89 29 21 27 34 161 188 573 92 8 1694 18 FinalVolume: 89 29 21 27 34 161 188 573 92 8 1694 18 _____|__| Saturation Flow Module: Lanes: 0.64 0.21 0.15 0.12 0.15 0.73 0.22 0.67 0.11 0.01 0.98 0.01 Final Sat.: 283 93 68 61 77 359 126 384 62 3 562 6 -----| Capacity Analysis Module: Vol/Sat: 0.31 0.31 0.31 0.45 0.45 0.45 1.49 1.49 1.49 3.02 3.02 3.02 Crit Moves: *** *** *** Delay/Veh: 14.3 14.3 14.3 15.6 15.6 15.6 247.9 248 247.9 925.6 926 925.6 AdjDel/Veh: 14.3 14.3 14.3 15.6 15.6 15.6 247.9 248 247.9 925.6 926 925.6 LOS by Move: B B B C C C F F F F F ApproachDel: 14.3 15.6 247.9
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 14.3 15.6 247.9
LOS by Appr: B C F 925.6 1.00 925.6 F AllWayAvgo: 0.4 0.4 0.4 0.8 0.8 0.8 37.9 37.9 37.9 145 145.2 ************************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 Lombard St/Divisadero St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 2.517
Loss Time (sec): 9 Average Delay (sec/veh): 568.2
Optimal Cycle: 180 Level Of Service: F

************************* Street Name: Divisadero St Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R

Control: Permitted Permitted Permitted Permitted

Include

Include

Min. Green: 27 27 27 27 27 54 54 54 54 54 54 1 0 0 1 0 1 0 0 1 0 0 1 1 1 0 0 1 1 1 0 -----| Volume Module: Base Vol: 186 733 39 198 276 81 191 2551 177 22 3795 559 Initial Bse: 186 733 39 198 276 81 191 2551 177 22 3795 559 Added Vol: 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 186 733 39 198 276 81 191 2551 177 22 3795 559 PHF Volume: 190 748 40 202 282 83 195 2603 181 22 3872 570 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 190 748 40 202 282 83 195 2603 181 22 3872 570 FinalVolume: 190 748 40 202 282 83 195 2603 181 22 3872 570 Saturation Flow Module:

Adjustment: 0.31 0.99 0.99 0.15 0.97 0.97 0.58 0.40 0.58 0.69 0.49 0.69 Lanes: 1.00 0.95 0.05 1.00 0.77 0.23 0.14 2.73 0.13 0.01 2.71 0.28 Final Sat.: 593 1790 95 281 1419 416 157 2092 145 15 2503 369 _____|__|

Capacity Analysis Module: Vol/Sat: 0.32 0.42 0.42 0.72 0.20 0.20 1.24 1.24 1.24 1.55 1.55 1.55 *** Crit Moves:

Volume/Cap: 1.07 1.39 1.39 2.39 0.66 0.66 2.07 2.07 2.07 2.58 2.58 Delay/Veh: 118.0 219 219.1 694.0 30.5 30.5 503.8 504 503.8 730.1 730 730.1 AdjDel/Veh: 118.0 219 219.1 694.0 30.5 30.5 503.8 504 503.8 730.1 730 730.1 LOS by Move: F F F F C C F F F F F HCM2kAvgQ: 10 51 51 21 10 10 136 96 136 228 160 228 *******************

Note: Queue reported is the number of cars per lane.

Intersection #34 Lombard St/Fillmore St

Saturation Flow Module:

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

	INTERSECTION #34 LONDARG St/FILIMORE St											
Cycle (sec):		9	90			Critic	al Vo	l./Car	o.(X):		2.3	169
Cycle (sec): Loss Time (se Optimal Cycle	ec):		9			Averag	e Dela	ay (se	ec/veh)	:	550	0.8
Optimal Cycle	e:	18	30			Level	Of Se	rvice	:			F
*****	*****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name: Approach:			Fillmo	re St					Lomba	rd St		
Movement:												
Control:												
Rights:												
Min. Green:									54			54
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:												
Volume Module												
Base Vol:							187			12		
Growth Adj:				1.00		1.00		1.00				
Initial Bse:				150		303	187					535
Added Vol:				0		0	0	-	-			0
PasserByVol:	-	-	-	-	-	0	-	-	0			0
Initial Fut:		702		150					56			
User Adj:			1.00	0.95	1.00	1.00		1.00			1.00	1.00
PHF Adj: PHF Volume:				158		319	197			13		
Reduct Vol:				138			197			13		0
Reduced Vol:				158		319	-			-		563
PCE Adi:					1.00	1.00		1.00			1.00	
MLF Adj:				1.00		1.00		1.00			1.00	1.00
FinalVolume:						319						
rinaivoiume:												
			1			.== [1

Final Sat.: 336 1825 65 364 753 736 161 2115 48 8 2697 371 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.19 0.40 0.40 0.43 0.43 0.43 1.22 1.22 1.22 1.52 1.52 1.52 Crit Moves: ****

Volume/Cap: 0.64 1.35 1.35 1.44 1.44 1.44 2.03 2.03 2.03 2.53 2.53 2.53 Delay/Veh: 40.0 200 200.1 241.7 242 241.7 484.7 485 484.7 708.4 708 708.4 AdjDel/Veh: 40.0 200 200.1 241.7 242 241.7 484.7 485 484.7 708.4 708 708.4 LOS by Move: D F F F F F F F F F F HCM2kAvgQ: 3 47 47 30 30 30 131 89 131 244 166 244

Adjustment: 0.18 1.00 1.00 0.49 0.49 0.49 0.58 0.40 0.58 0.76 0.52 0.76

Lanes: 1.00 0.97 0.03 0.39 0.82 0.79 0.15 2.81 0.04 0.01 2.74 0.25

Note: Queue reported is the number of cars per lane.

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Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) *************************

Intersection #35 Bay St/Laguna St

**************** Cycle (sec): 90 Critical Vol./Cap.(X): 1.565 Loss Time (sec): 10 Average Delay (sec/veh): Optimal Cycle: 180 Level Of Service: 235.6 *************************

Street Name: Laguna St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted

Include Include Include Ovl Rights: Min. Green: 18 18 18 34 34 34 28 28 28 28 28 28 0 0 1! 0 0 1 0 1! 0 0 0 0 2 0 1 0 1 0 0 2 -----|----|-----||-------|

Volume Module: Base Vol: 752 0 625 0 0 0 0 250 255 256 565 0 Initial Bse: 752 0 625 0 0 0 0 250 255 256 565 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 Initial Fut: 752 0 625 0 0 0 0 250 255 256 565

PHF Volume: 783 0 651 0 0 0 0 260 266 267 589 Ω Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 783 0 651 0 0 0 260 266 267 589 FinalVolume: 783 0 651 0 0 0 0 260 266 267 589 0

-----| Saturation Flow Module: Adjustment: 0.91 1.00 0.91 1.00 1.00 1.00 0.95 0.85 0.80 0.80 0.88 Lanes: 0.55 0.00 0.45 1.00 1.00 0.00 0.00 2.00 1.00 0.31 0.69 2.00 Final Sat.: 948 0 788 1900 1900 0 0 3610 1615 472 1042 3344

_____|__|__|

Capacity Analysis Module: Vol/Sat: 0.83 0.00 0.83 0.00 0.00 0.00 0.00 0.07 0.16 0.56 0.56 0.00 Crit Moves: ****

Volume/Cap: 1.56 0.00 1.56 0.00 0.00 0.00 0.00 0.20 0.46 1.56 1.56 0.00 Delay/Veh: 280.8 0.0 280.8 0.0 0.0 0.0 0.0 19.9 22.6 291.8 292 0.0 AdjDel/Veh: 280.8 0.0 280.8 0.0 0.0 0.0 19.9 22.6 291.8 292 0.0 LOS by Move: F A F A A A A B C F F A HCM2kAvgO: 103 0 103 0 0 0 0 3 6 61 61 0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

2000 HCM Operations Method (Future Volume Alternative)												
Intersection												
******						*****	****	****	*****	****	****	*****
Cycle (sec):			90			Critica	al Vo	l./Car	o.(X):		1.1	185
Loss Time (se	٠().		10					-	ec/veh)		159	
Optimal Cycle			80			Level (•	10.	F
*******				****	****					****	****	
Street Name:			Van Ne						Bay			
Approach:	No	rth B				ound	Ea	ast Bo			est Bo	nund
Movement:			- R			- R			- R		- T	
Control:			tted			ted			ted		Permit	
Rights:	_	Incl		_	Incl		_	Incl		_	Incli	
Min. Green:	23	23	23	23	23	23	57		57	57		57
Y+R:		4.0	4.0		4.0	4.0		4.0		4.0		4.0
Lanes:			1 0			1 0			0 1		L 0	
Volume Module			- '	1		'	1		'	I		1
Base Vol:	301	0	709	0	0	0	0	878	67	290	293	0
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1.00	709	0.00	0	0.00	1.00	878	67	290	293	0.00
Added Vol:	0	0	0	0	0	0	0	0 7 0	0	2 9 0	293	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		0	709	0	0	0	0	878	67	290	293	0
User Adi:	1.00	-	1.00	-	1.00	1.00	-	1.00	1.00		1.00	1.00
PHF Adj:	0.92		0.92		0.92	0.92		0.92	0.92		0.92	0.92
_		0.92	771	0.92	0.92	0.92	0.92	954	73	315	318	0.92
PHF Volume: Reduct Vol:	327 0	0	7 / 1	0	0	0	0	954	0	313	318	0
Reduct Vol:		-	771				-	954	73	315		
		0		0	0	0	0				318	0
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			771	. 0	0	0	. 0		73	315		0
Saturation Fl												
Sat/Lane:		1900		1000	1900	1900	1900	1900	1900	1000	1900	1900
Adjustment:			0.77		0.91	0.91		0.48			0.49	0.95
	1.00		1.00		3.00	0.00		2.00			1.01	0.00
Final Sat.:			1470	0.00		0.00		1805	808	932		0.00
												-
Capacity Anal												
	0.22		0.52	0 00	0.00	0.00	0 00	0.53	0.09	0 24	0.34	0.00
Crit Moves:	0.22	0.00	****	0.00	0.00	0.00	0.00	****	0.09	0.34	0.34	0.00
Green/Cycle:	0 26	0 00	0.26	0 00	0.00	0.00	0 00	0.63	0.63	0.63	0 62	0.00
Volume/Cap:			2.05		0.00	0.00		0.83	0.03		0.53	0.00
Delay/Veh:				0.0	0.0	0.0		18.3	6.8	9.6	9.6	0.00
4 '			1.00		1.00	1.00		1.00	1.00		1.00	1.00
User DelAdj:					0.0					9.6	9.6	0.0
AdjDel/Veh:			516.0	0.0		0.0		18.3	6.8			
LOS by Move:				A		A	A		A	A	A	A 0
HCM2kAvgQ:		0	77	0	0	0	0	12	1	5	5	-
							~ ~ * * * * T					

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeTue Jun 28, 2011 08:48:29

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) **************************

Intersection #37	Bay St/Hyde St		
**********	******	**********	* :
Cycle (sec):	90	Critical Vol./Cap.(X):	

Street Name: Hyde St Bay St

0.516 Loss Time (sec): 7 Average Delay (sec/veh): Optimal Cycle: 90 Level Of Service: 5.8 *************************

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 16 16 16 16 16 16 67 67 67 0 67 67 0 0 1! 0 0 0 0 1! 0 0 0 0 1 1 0 0 0 2 1 0

Volume Module: Base Vol: 7 0 63 0 0 0 1464 27 0 580 0 Initial Bse: 7 0 63 0 0 0 1464 27 0 580 0 0 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 Ω PasserByVol: 0 0 0 Initial Fut: 7 0 63 0 0 0 0 0 0 0 0 1464 0 580 27

PHF Volume: 7 0 66 0 0 0 0 1525 28 0 604 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 7 0 66 0 0 0 1525 28 0 604 0 FinalVolume: 7 0 66 0 0 0 01525 28 0 604 0

-----| Saturation Flow Module: Adjustment: 0.86 1.00 0.86 1.00 1.00 1.00 0.95 0.95 1.00 0.91 Lanes: 0.10 0.00 0.90 0.00 1.00 0.00 1.96 0.04 0.00 3.00 0.00 Final Sat.: 164 0 1475 0 1900 0 0 3534 65 0 5187 0

_____| Capacity Analysis Module:

Crit Moves: **** Green/Cycle: 0.18 0.00 0.18 0.00 0.00 0.00 0.00 0.74 0.74 0.00 0.74 0.00 Volume/Cap: 0.25 0.00 0.25 0.00 0.00 0.00 0.00 0.58 0.58 0.00 0.16 0.00 Delay/Veh: 32.3 0.0 32.3 0.0 0.0 0.0 5.5 5.5 0.0 3.3 0.0

AdjDel/Veh: 32.3 0.0 32.3 0.0 0.0 0.0 5.5 5.5 0.0 3.3 0.0 LOS by Move: C A C A A A A A A A A HCM2kAvgO: 2 0 2 0 0 0 10 10 0 2 0 *******************

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Unsignalized Method (Future Volume Alternative) ************************* Intersection #38 Alexander Ave/Bunker Rd ************************** Average Delay (sec/veh): 11.0 Worst Case Level Of Service: D[29.9] ******************* Street Name: Bunker Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R L - T - R Movement: -----| Uncontrolled Uncontrolled Stop Sign Control: Stop Sign Include Include Include Rights: Include 1 0 1 0 0 0 0 0 1 0 1 0 0 0 1 0 0 0 0 Lanes: Volume Module: Base Vol: 247 448 0 0 249 58 108 0 362 0 0 0 Initial Bse: 247 448 0 0 249 58 108 0 362 0 0 0 Ω Ω Added Vol: 0 0 Ω 0 0 0 Ω Ω Ω Ω 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 Initial Fut: 247 448 0 0 249 58 108 0 362 0 0 PHF Volume: 263 477 0 0 265 62 115 0 385 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 265 62 115 0 385 FinalVolume: 263 477 0 0 -----| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 xxxx 6.2 xxxxx xxxx xxxxx _____| Capacity Module: Cnflict Vol: 327 xxxx xxxxx xxxx xxxx xxxx 1298 xxxx 296 xxxx xxxx xxxxx Potent Cap.: 1244 xxxx xxxxx xxxx xxxx xxxx 180 xxxx 748 xxxx xxxx xxxxx Move Cap.: 1244 xxxx xxxxx xxxx xxxx xxxx 151 xxxx 748 xxxx xxxx xxxxx Volume/Cap: 0.21 xxxx xxxx xxxx xxxx xxxx 0.76 xxxx 0.51 xxxx xxxx xxxx Level Of Service Module: 2Way95thQ: 0.8 xxxx xxxxx xxxx xxxx xxxx 4.7 xxxx 3.0 xxxx xxxx xxxxx Control Del: 8.7 xxxx xxxxx xxxxx xxxx xxxx 80.3 xxxx 14.8 xxxxx xxxx xxxxx LOS by Move: A * * * * F * B * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT ApproachLOS: * xxxxx xxxx 29.9
ApproachLOS: * D XXXXXX ____ Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2012 WeWed Jun 29, 2011 08:58:03

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Unsignalized Method (Future Volume Alternative) ************************ Intersection #39 Alexander Ave/Ft.Baker (East) Rd ************************** Average Delay (sec/veh): 2.8 Worst Case Level Of Service: C[19.8] ******************* Street Name: Ft.Baker (East) Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound $L \ - \ T \ - \ R \quad L \ - \ T \ - \ R \quad L \ - \ T \ - \ R$ Movement: Uncontrolled Uncontrolled Stop Sign Control: Stop Sign Include Include Include Rights: Include $\begin{smallmatrix} 0 & 0 & 1! & 0 & 0 & 0 & 0 & 1! & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 1! & 0 & 0 \\ \end{smallmatrix}$ Lanes: Volume Module: Base Vol: 2 343 209 14 245 75 0 0 11 49 0 84 Initial Bse: 2 343 209 14 245 75 0 0 11 49 0 Added Vol: Ω Ο 0 0 0 0 0 Ω Ω Ω Ω PasserByVol: 0 0 0 0 0 0 0 0 0 0 Ω 0 Initial Fut: 2 343 209 14 245 75 0 0 11 PHF Volume: 2 394 240 16 282 86 0 0 13 56 0 97 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 2 394 240 16 282 86 0 0 13 -----| Critical Gap Module: _____| Capacity Module: Cnflict Vol: 368 xxxx xxxxx 634 xxxx xxxxx xxxx 325 882 919 514 Potent Cap.: 1202 xxxx xxxxx 958 xxxx xxxxx xxxx 721 269 273 564 Move Cap.: 1202 xxxx xxxxx 958 xxxx xxxxx xxxx 721 260 268 564 Level Of Service Module: LOS by Move: A * * A * * * B * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: * * * * * * * * * * C * 10.1 ApproachDel: xxxxxx xxxxxx ApproachLOS: * * * 19.8 В C ___ Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******						(Future *****					*****	*****
Intersection												
*******						*****	****	****	*****	****	****	*****
Cycle (sec):			90			Critic	al Vo	./Car	o.(X):		1.6	586
Loss Time (se	-c):		90 8 80			Averag						
Optimal Cycle		1.9	8.0						:		10.	F
******		****	*****	****	****	*****	****	****	*****	****	****	
Street Name:			Van Ne	ess Ave	÷				Bush	St		
	Noi					ound	Ea	ast Bo			est Bo	ound
Movement:						- R						
						rmit						
Rights:		Incl			Incl						Incl	
Min. Green:	0	34			48	0		34	34	0	0	0
Y+R:						4.0				4.0		4.0
Lanes:			1 0			0 0					0	
Volume Module				'		'			'	'		
	0	3011	117	230	2019	0	65	773	88	0	0	0
Growth Adj:					1.00			1.00	1.00		1.00	1.00
Initial Bse:		3011	117		2019	0	65	773	88	0	0	0
Added Vol:	0		0	0	0	0	0	0	0	0	0	0
PasserByVol:	-	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	3011	117		2019	0	65	773	88	0	0	0
User Adj:			1.00		1.00	1.00	1.00		1.00	-	1.00	1.00
PHF Adi:	0.97		0.97		0.97	0.97		0.97	0.97		0.97	0.97
PHF Volume:		3104	121		2081	0.57	67	797	91	0.57	0.57	0.57
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			121		2081		67	797	91	0	0	0
PCE Adi:		1.00	1.00		1.00			1.00		-	1.00	1.00
MLF Adj:		1.00	1.00		1.00			1.00			1.00	1.00
FinalVolume:			121		2081	0		797	91	0.00	1.00	0.00
										-	-	-
Saturation Fl												
Sat/Lane:			1900	1000	1000	1900	1900	1900	1900	1000	1900	1900
Adjustment:								0.89			1.00	1.00
_			0.11			0.00			0.29		0.00	0.00
Final Sat.:							355			0.00	0.00	0.00
											U	0
Capacity Anal												
Vol/Sat:				0 21	0 40	0.00	0 10	0.19	0.19	0 00	0.00	0.00
Crit Moves:		****		****	0.40	0.00	0.19	****	0.19	0.00	0.00	0.00
					0 52	0 00	0 20		0 20	0 00	0 00	0 00
Green/Cycle:				0.56				0.38			0.00	0.00
Volume/Cap:												
Delay/Veh:						0.0		21.7		0.0		0.0
User DelAdj:								1.00			1.00	1.00
AdjDel/Veh:					17.6	0.0		21.7	21.7	0.0		0.0
LOS by Move: HCM2kAvgQ:	A	F		C 5	В 15		C 8		C	A 0	A 0	A 0
HCM2kAvgQ:						0			8	-	-	-
							^ * * * * * * *			^ X X X X X		

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2012 WeTue Jun 28, 2011 08:48:29

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) ************************* Intersection #41 Pine St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.498 Loss Time (sec): 8 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 74.2 ************************* Street Name: Van Ness Ave Pine St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Prot+Permit Protected Permitted Permitted Include Rights: Include Include Min. Green: 10 48 0 0 34 34 0 0 0 34 34 34 1 0 3 0 0 0 0 2 1 0 0 0 0 0 0 1 2 1 0 Volume Module: Base Vol: 96 3004 0 0 2113 146 0 0 0 86 689 137 Initial Bse: 96 3004 0 0 2113 146 0 0 0 86 689 137 0 0 Ω 0 0 0 0 0 0 0 0 PHF Volume: 101 3162 0 0 2224 154 0 0 0 91 725 144 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Saturation Flow Module: Lanes: 1.00 3.00 0.00 0.00 2.81 0.19 0.00 0.00 0.08 3.02 0.60 Final Sat.: 1805 5187 0 0 4803 332 0 0 0 629 5038 1002 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.06 0.61 0.00 0.00 0.46 0.46 0.00 0.00 0.00 0.14 0.14 0.14 Crit Moves: **** **** Green/Cycle: 0.56 0.53 0.00 0.00 0.42 0.42 0.00 0.00 0.00 0.38 0.38 0.38 Delay/Veh: 9.9 90.2 0.0 0.0 77.5 77.5 0.0 0.0 0.0 20.4 20.4 20.4 AdjDel/Veh: 9.9 90.2 0.0 0.0 77.5 77.5 0.0 0.0 0.0 20.4 20.4 20.4 LOS by Move: A F A A E E A A A C C HCM2kAvgO: 1 48 0 0 36 36 0 0 0 5 5 5 ******************

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #42 Lombard St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.495
Loss Time (sec): 7 Average Delay (sec/veh): 212.0
Optimal Cycle: 180 Level Of Service: F ************************** Street Name: Van Ness Ave Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Permitted Permitted Include Ovl Include Include Min. Green: 56 56 56 0 27 27 27 27 56 27 27 27 3 0 0 1 0 0 0 2 0 1 0 1 0 0 2 0 0 0 1 0 -----| Volume Module: Base Vol: 2328 631 41 0 201 225 352 126 1914 0 79 5 Initial Bse: 2328 631 41 0 201 225 352 126 1914 0 79 5 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 Initial Fut: 2328 631 41 0 201 225 352 126 1914 0 79 5 PHF Volume: 2400 651 42 0 207 232 363 130 1973 0 81 5 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 2400 651 42 0 207 232 363 130 1973 FinalVolume: 2400 651 42 0 207 232 363 130 1973 0 81 5 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 0.99 0.99 1.00 0.95 0.85 0.40 0.40 0.41 1.00 0.99 0.99 Lanes: 3.00 0.94 0.06 0.00 2.00 1.00 0.74 0.26 2.00 0.00 0.94 0.06 Final Sat.: 5253 1768 115 0 3610 1615 554 198 1563 0 1773 112 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.46 0.37 0.37 0.00 0.06 0.14 0.65 0.65 1.26 0.00 0.05 0.05 Crit Moves: **** **** Green/Cycle: 0.48 0.71 0.71 0.00 0.23 0.23 0.23 0.23 0.71 0.00 0.23 0.23 Volume/Cap: 0.95 0.52 0.52 0.00 0.25 0.62 2.84 2.84 1.78 0.00 0.20 0.20 Delay/Veh: 38.8 8.2 8.2 0.0 36.9 43.7 887.9 888 371.3 0.0 36.5 36.5 AdjDel/Veh: 38.8 8.2 8.2 0.0 36.9 43.7 887.9 888 371.3 0.0 36.5 36.5 LOS by Move: D A A A D D F F F A D D HCM2kAvgO: 27 10 10 0 3 8 56 56 98 0 3 3

Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2012 WeThu Jun 30, 2011 09:01:42 Page 6-1

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Embarcadero / Howard St

************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.780
Loss Time (sec): 10 Average Delay (sec/veh): 145.3
Optimal Cycle: 95 Level Of Service: F

************************* Street Name: Embarcadero Howard St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 15 45 0 10 40 40 30 0 30 0 0 1 0 3 0 0 1 0 2 0 1 1 0 1! 0 0 0 0 0 0 -----| Volume Module: Base Vol: 475 0 0 0 197 177 0 0 197 0 0 Initial Bse: 475 0 0 0 197 177 0 0 197 0 0 Added Vol: 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 1 177 0 0 0 0 0 Ω 0 0 197 PHF Volume: 511 0 0 0 212 190 0 0 212 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 511 0 0 0 212 190 0 0 212 FinalVolume: 511 0 0 0 212 190 0 0 212 0 0 -----| Saturation Flow Module: Adjustment: 0.88 0.56 1.00 0.93 0.88 0.43 0.89 1.00 0.69 1.00 1.00 1.00 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.30 0.00 0.00 0.00 0.06 0.24 0.00 0.00 0.16 0.00 0.00 0.00 Crit Moves: **** ****

Note: Queue reported is the number of cars per lane.

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Volume/Cap: 1.52 0.00 0.00 0.00 0.16 0.59 0.00 0.00 0.54 0.00 0.00 0.00

Delay/Veh: 289.3 0.0 0.0 0.0 19.3 26.4 0.0 0.0 30.7 0.0 0.0 0.0

AdjDel/Veh: 289.3 0.0 0.0 19.3 26.4 0.0 0.0 30.7 0.0 0.0 0.0

LOS by Move: F A A A B C A A C A A A

HCM2kAvgO: 37 0 0 0 2 5 0 0 6 0 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

****************** Intersection #44 Embarcadero / Folsom St

Street Name: Embarcadero Folsom St Control: Protected Protected Split Phase Split Phase

Rights:		Includ	le		Inclu	de		Includ	de		Inclu	de	
Min. Green:	12	49	49	32	32	32	31	31	31	0	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	1 0	2 0	0	0 0	1	1 0	2 0	0 (1	0 0	0 (0 0	
													l
Volume Modul	e:												
Base Vol:	348	147	0	0	386	20	330	0	156	0	0	0	
Crossth Add.	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	

Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	348	147	0	0	386	20	330	0	156	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	348	147	0	0	386	20	330	0	156	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	374	158	0	0	415	22	355	0	168	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	374	158	0	0	415	22	355	0	168	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	374	158	0	0	415	22	355	0	168	0	0	0
C-+	1 1/1-	17										

FinalVolume:				0			355	-	168	-	0	0
Saturation Fl	Low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.70	1.00	1.00	0.96	0.87	0.83	1.00	0.59	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.89	0.11	2.00	0.00	1.00	0.00		0.00
Final Sat.:	1679	2671	0	0	3458	179	3152	0	1114	0	0	0
Capacity Anal	ysis	Modul	e:									
Vol/Sat:	0.22	0.06	0.00	0.00	0.12	0 12	0 11	0 00	0.15	0.00	0.00	0.00
						0.12	0.11	0.00	0.10			0.00
Crit Moves:	* * * *				***	0.12	****	0.00	0.13			0.00
Crit Moves: Green/Cycle:									0.34	0.00		0.00
CIIC MOVES.	0.19	0.54		0.00	****		****	0.00			0.00	
Green/Cycle:	0.19	0.54	0.00	0.00	**** 0.36 0.34	0.36	**** 0.34 0.33	0.00	0.34	0.00	0.00	0.00
Green/Cycle: Volume/Cap:	0.19 1.18 45.3	0.54 0.11 10.0	0.00	0.00	**** 0.36 0.34 21.4	0.36 0.34 21.4	**** 0.34 0.33	0.00	0.34	0.00	0.00 0.00 0.0	0.00

LOS by Move: F A A A C C C A C A A A HCM2kAvgQ: 18 1 0 0 5 4 4 0 4 0 0 0

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Scenario Report

Scenario: Existing + AC Event 2012 Weekend MID

Command:

Volume:
Existing + AC Event 2012 Weekend MID
Geometry:
Existing Weekday PM
Impact Fee:
Default Impact Fee
Trip Generation:
Default Trip Generation
Trip Distribution:
Default Path
Default Path

Paths: Default Path Routes: Default Route

Configuration: Default Configuration

Existing + AC Event 2012 WeMon Jun 6, 2011 09:15:34

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34th America's Cup Races Transportation Impact Analysis

	Signal Warrant	Summary Report	
Intersection		Base Met	Future Met
		[Del / Vol]	[Del / Vol]
# 27 Lincoln	Blvd/25th St/El Camino del	???	Yes
# 30 Jackson	St/Arguello Blvd	???	No
# 31 Pacific	Ave/Presidio Blvd	???	No
# 32 Lombard	St/Lyon St	???	Yes

SIGNAL WARRANT DISCLAIMER

Minor Approach Volume:

Minor Approach Volume Threshold: 359

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing + AC Event 2012 WeMon Jun 6, 2011 09:15:34

34th America's Cup Races Transportation Impact Analysis

Peak Hour Volume Signal Warrant Report [Urban] ********************* Intersection #30 Jackson St/Arguello Blvd ******************* Future Volume Alternative: Peak Hour Warrant NOT Met -----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign Lanes: Initial Vol: 0 768 27 30 468 0 0 0 39 0 49 1293 Major Street Volume: Minor Approach Volume: Minor Approach Volume Threshold: 151

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban] ******************** Intersection #31 Pacific Ave/Presidio Blvd *********************** Future Volume Alternative: Peak Hour Warrant NOT Met -----|----|-----|------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____|__| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Lanes: Initial Vol: 3 774 11 14 461 18 10 1 1 15 11 31 _____| Minor Approach Volume: 1281
Minor Approach Volume: 57
Minor Approach

SIGNAL WARRANT DISCLAIMER

Minor Approach Volume Threshold: 153

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing + AC Event 2012 WeMon Jun 6, 2011 09:15:34 34th America's Cup Races

> Transportation Impact Analysis Peak Hour Volume Signal Warrant Report [Urban]

********************* Intersection #32 Lombard St/Lyon St

Future Volume Alternative: Peak Hour Warrant Met

-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|----| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Lanes: Initial Vol: 88 29 21 27 34 159 186 567 91 8 1677 18

Minor Approach Volume: 2547
Minor Approach Volume: 220

Minor Approach Volume Threshold: -30 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

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Existing plus AC34 - 2013

Existing plus AC34 2013 Project Conditions

Weekday PM Peak Hour

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative) ************************* Intersection #1 Beach St/Columbus Ave ************************** Average Delay (sec/veh): 0.9 Worst Case Level Of Service: B[10.0] ******************* Street Name: Columbus Ave Beach St Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R Movement: Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Include Include Include Include Rights: 0 0 1! 0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 0 Lanes: Volume Module: Base Vol: 17 0 8 0 0 0 157 92 9 76 Initial Bse: 17 0 8 0 0 0 157 92 9 76 0 Added Vol: 0 0 0 0 0 0 0 Ω 0 0 Ω 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 Initial Fut: 17 0 8 0 0 0 0 157 92 PHF Volume: 18 0 9 0 0 0 167 98 Reduct Vol: 0 0 0 0 0 0 0 0 10 81 0 0 0 0 0 0 FinalVolume: 18 0 9 0 0 0 167 98 10 81 Ω -----| Critical Gap Module: _____| Capacity Module: Potent Cap.: 681 603 922 xxxx xxxx xxxxx xxxx xxxx xxxx 1311 xxxx xxxxx Level Of Service Module: LOS by Move: * * * * * * * * * A * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT SharedQueue:xxxxx 0.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 0.0 xxxx xxxxx Shared LOS: * B * * * * * * * A * * ApproachLOS: B * xxxxx xxxxx ApproachLOS: B * * XXXXXX ************************* Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******************* Intersection #2 North Point St/Columbus Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.210 Loss Time (sec): 9 Average Delay (sec/veh): 13.8 Optimal Cycle: 90 Level Of Service: B ************************** Street Name: Columbus Ave North Point St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Rights: Min. Green: 28 28 28 28 28 28 53 53 53 53 53 -----| Volume Module: Base Vol: 62 38 22 22 76 58 21 131 44 28 292 29 PHF Volume: 71 44 25 25 87 67 24 151 51 32 336 33 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 71 44 25 25 87 67 24 151 51 32 336 33 FinalVolume: 71 44 25 25 87 67 24 151 51 32 336 33 -----| Saturation Flow Module: Adjustment: 0.64 0.95 0.95 0.82 0.82 0.82 0.91 0.91 0.91 0.86 0.86 0.86 Lanes: 1.00 0.63 0.37 0.28 0.98 0.74 0.11 0.67 0.22 0.16 1.67 0.17 Final Sat.: 1212 1137 658 440 1519 1159 186 1159 389 263 2739 272 _____| Capacity Analysis Module: Vol/Sat: 0.06 0.04 0.04 0.06 0.06 0.06 0.13 0.13 0.13 0.12 0.12 0.12 Crit Moves: **** Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.31 0.59 0.59 0.59 0.59 0.59 0.59 Volume/Cap: 0.19 0.12 0.12 0.18 0.18 0.18 0.22 0.22 0.22 0.21 0.21 0.21 Delay/Veh: 23.8 22.7 22.7 23.1 23.1 23.1 9.2 9.2 9.2 8.9 8.9 8.9 AdjDel/Veh: 23.8 22.7 22.7 23.1 23.1 23.1 9.2 9.2 9.2 8.9 8.9 LOS by Move: C C C C C A A A A A HCM2kAvgO: 1 1 1 2 2 2 3 3 3 3 3 3 ******************* Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:00

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 North Point St/Stockton St

INCCIDENCE NO 1	OF CH FOIRE DE	, becekeen be	
******	********	**********	*****
Cycle (sec):	90	Critical Vol./Cap.(X):	0.342
Loss Time (sec):	8	Average Delay (sec/veh):	12.6
Optimal Cycle:	90	Level Of Service:	В
******	*********	*********	*****

Street Name:			Stockt	on St			North Point St							
Approach:	No	rth B	ound	South Bound			East Bound West					Bound		
Movement:														
Control:														
Rights:	0.5	Incli	lae	0.5	Inci	iae		Incli	ıae		Incl	uae		
Min. Green: Y+R:	25	25	25	25	25	25	5/	5/	5/	5/	5/	5/		
Lanes:														
Volume Module				1										
Base Vol:	23	53	32	14	37	22	17	320	57	7	152	5		
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Initial Bse:														
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	23	53	32	14	37	22	17	320	57	7	152	5		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89		
PHF Volume:	26	60	36	16	42	25	19	360	64	8	171	6		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	26	60	36	16	42	25	19	360	64	8	171	6		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:														
Saturation F														
Sat/Lane:										1900				
Adjustment:						0.91				0.89				
Lanes:														
Final Sat.:														
Capacity Ana														

AdjDel/Veh: 26.6 26.6 26.6 25.4 25.4 25.4 8.9 8.9 8.9 6.5 6.5 LOS by Move: C C C C C A A A A A HCM2kAvgO: 3 3 3 2 2 2 6 6 6 1 1 1

Note: Queue reported is the number of cars per lane.

Capacity Analysis Module:

Crit Moves: ****

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Vol/Sat: 0.07 0.07 0.07 0.05 0.05 0.05 0.24 0.24 0.24 0.05 0.05 0.05

Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.63 0.63 0.63 0.63 0.63 0.63

Volume/Cap: 0.26 0.26 0.26 0.17 0.17 0.17 0.38 0.38 0.38 0.09 0.09 0.09

Delay/Veh: 26.6 26.6 26.6 25.4 25.4 25.4 8.9 8.9 8.9 6.5 6.5

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*********** Intersection #4 Bay St/Columbus Ave ***************** Loss Time (sec): 9 Average Delay (sec/veh): 21.3
Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Columbus Ave Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Permitted Permitted Ignore Include Include Include Min. Green: 8 31 31 0 19 19 47 47 47 50 50 50 2 0 0 1 0 0 0 1 1 0 0 1 1 0 1 0 1 0 1 -----| Volume Module: Base Vol: 341 86 66 0 145 4 1 595 187 7 1160 34 4 1 595 187 Initial Bse: 341 86 66 0 145 7 1160 3.4 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 Ω 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 Ω 4 1 595 187 Initial Fut: 341 86 66 0 145 7 1160 PHF Volume: 363 91 0 0 154 4 1 633 199 7 1234 36 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 363 91 0 0 154 4 1 633 199 7 1234 36 FinalVolume: 363 91 0 0 154 4 1 633 199 7 1234 36 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 1.00 1.00 1.00 0.95 0.95 0.91 0.91 0.85 0.90 0.90 0.90 Lanes: 2.00 1.00 0.00 0.00 1.95 0.05 0.01 1.99 1.00 0.01 1.93 0.06 Final Sat.: 3502 1900 0 0 3499 97 6 3442 1615 20 3306 97 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.10 0.05 0.00 0.00 0.04 0.04 0.18 0.18 0.12 0.37 0.37 Crit Moves: **** **** Green/Cycle: 0.11 0.34 0.00 0.00 0.23 0.23 0.56 0.56 0.56 0.56 0.56 0.56 Volume/Cap: 0.91 0.14 0.00 0.00 0.19 0.19 0.33 0.33 0.22 0.67 0.67 0.67 Delay/Veh: 64.6 20.4 0.0 0.0 27.9 27.9 11.0 11.0 10.3 15.1 15.1 15.1 AdjDel/Veh: 64.6 20.4 0.0 0.0 27.9 27.9 11.0 11.0 10.3 15.1 15.1 15.1 LOS by Move: E C A A C C B B B B B HCM2kAvgO: 8 2 0 0 2 2 5 5 3 13 13 13 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Transportation Impact Analysis Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) ***************************** Intersection #5 Bay St/Stockton St

***************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.526 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 10.0 ************************* Street Name: Stockton St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Include Include Include Include Rights: Min. Green: 20 20 20 20 20 20 63 63 63 63 63 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 -----| Volume Module: Base Vol: 52 25 58 40 33 31 22 511 25 23 1120 63 Initial Bse: 52 25 58 40 33 31 22 511 25 23 1120 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 Ω 0 0 0 Ω 0 0 0 0 0 0 0 Initial Fut: 52 25 58 40 33 31 22 511 25 23 1120 PHF Volume: 57 27 63 43 36 34 24 555 27 25 1217 68 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 57 27 63 43 36 34 24 555 27 25 1217 68 FinalVolume: 57 27 63 43 36 34 24 555 27 25 1217 68 Saturation Flow Module: Lanes: 0.39 0.18 0.43 0.38 0.32 0.30 0.08 1.83 0.09 0.04 1.86 0.10 Final Sat.: 596 286 664 608 502 471 124 2879 141 64 3123 176 _____|__| Capacity Analysis Module: Vol/Sat: 0.09 0.09 0.09 0.07 0.07 0.07 0.19 0.19 0.19 0.39 0.39 Crit Moves: ****

Note: Queue reported is the number of cars per lane.

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Volume/Cap: 0.43 0.43 0.43 0.32 0.32 0.32 0.28 0.28 0.28 0.56 0.56 0.56

Delay/Veh: 33.9 33.9 33.9 31.7 31.7 31.7 5.3 5.3 5.3 7.6 7.6 7.6

AdjDel/Veh: 33.9 33.9 33.9 31.7 31.7 5.3 5.3 5.3 7.6 7.6 7.6

LOS by Move: C C C C C A A A A A

HCM2kAvgO: 4 4 4 3 3 3 3 3 10 10 10

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************* Intersection #6 Bav St/Kearnv St ***************** Loss Time (sec): 9 Average Delay (sec/veh): 19.4 Optimal Cycle: 90 Level Of Service: B ************************* Street Name: Kearny St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 20 20 20 20 20 20 61 61 61 61 61 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 -----| Volume Module: Base Vol: 156 3 133 2 3 14 10 545 59 52 1036 2 Initial Bse: 156 3 133 2 3 14 10 545 59 52 1036 Added Vol: 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 0 0 Ω 3 133 2 3 Initial Fut: 156 14 10 545 59 52 1036 2 PHF Volume: 173 3 148 2 3 16 11 606 66 58 1151 2 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 173 3 148 2 3 16 11 606 66 58 1151 2 FinalVolume: 173 3 148 2 3 16 11 606 66 58 1151 2 -----| Saturation Flow Module: Adjustment: 0.76 0.76 0.76 0.88 0.88 0.88 0.87 0.87 0.87 0.84 0.84 0.84 Lanes: 0.53 0.01 0.46 0.10 0.16 0.74 0.03 1.78 0.19 0.09 1.90 0.01 Final Sat.: 775 15 661 175 263 1227 54 2941 318 152 3026 6 _____|__|__| Capacity Analysis Module: Crit Moves: **** Green/Cycle: 0.22 0.22 0.22 0.22 0.22 0.22 0.68 0.68 0.68 0.68 0.68 0.68 Volume/Cap: 1.01 1.01 1.01 0.06 0.06 0.06 0.30 0.30 0.30 0.56 0.56 Delay/Veh: 86.8 86.8 86.8 27.9 27.9 27.9 6.2 6.2 8.6 8.6 8.6 AdjDel/Veh: 86.8 86.8 86.8 27.9 27.9 27.9 6.2 6.2 8.6 8.6 8.6 LOS by Move: F F F C C C A A A A A HCM2kAvgO: 15 15 15 0 0 0 4 4 4 10 10 10 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

***************************** Intersection #7 Broadway St/Sansome St ************* Cycle (sec): 80 Critical Vol./Cap.(X): 0.614 Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 80 Level Of Service: 15.6 ************************* Street Name: Sansome St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Split Phase Split Phase Permitted Permitted Rights: Include Include Include Include Min. Green: 27 27 27 0 0 0 44 44 0 0 44 44 Lanes: -----| Volume Module: Base Vol: 274 326 39 0 0 101 593 0 0 1056 107 Initial Bse: 274 326 39 0 0 101 593 0 0 1056 107 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 Ω Ω 0 0 0 0 0 0 0 0 0 0 0 0 101 593 Initial Fut: 274 326 39 0 0 1056 107 PHF Volume: 288 343 41 0 0 0 106 624 0 0 1112 113 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 288 343 41 0 0 0 106 624 0 0 1112 113 FinalVolume: 288 343 41 0 0 0 106 624 0 0 1112 113 Saturation Flow Module: Adjustment: 0.88 0.88 0.88 1.00 1.00 1.00 0.57 0.57 1.00 1.00 0.94 0.94 Lanes: 0.86 1.02 0.12 0.00 0.00 0.00 0.29 1.71 0.00 0.00 1.82 0.18 Final Sat.: 1436 1708 204 0 0 315 1848 0 0 3232 327 _____|__| Capacity Analysis Module: Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Delay/Veh: 22.8 22.8 22.8 0.0 0.0 13.2 13.2 0.0 0.0 13.0 13.0 AdjDel/Veh: 22.8 22.8 22.8 0.0 0.0 13.2 13.2 0.0 0.0 13.0 13.0 LOS by Move: C C C A A A B B B A A B B HCM2kAvgO: 8 8 8 0 0 0 7 7 0 0 10 10

Note: Queue reported is the number of cars per lane.

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Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Broadway St/Battery St ******************* Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 70 Level Of Service: 22.1 ************************** Street Name: Battery St Broadway St Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R

-----| Control: Split Phase Split Phase Permitted Permitted Include Include Include Include Min. Green: 0 0 0 44 44 44 17 17 17 17 17 17 0 0 0 0 0 0 1 0 1 0 0 0 1 1 0 0 1 1 0 0 -----| Volume Module: Base Vol: 0 0 0 54 718 252 0 372 257 37 912 0 Initial Bse: 0 0 0 54 718 252 0 372 257 37 912 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 Initial Fut: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 Ω

54 718 252 0 372 257 37 912 0 PHF Volume: 0 0 0 55 733 257 0 380 262 38 931 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 55 733 257 0 380 262 38 931 0 FinalVolume: 0 0 0 55 733 257 0 380 262 38 931 0 -----|----|-----|

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 0.91 0.91 0.91 1.00 0.89 0.89 0.86 0.86 1.00 Lanes: 0.00 0.00 0.00 0.11 1.40 0.49 0.00 1.18 0.82 0.08 1.92 0.00 Final Sat.: 0 0 0 182 2418 849 0 2005 1385 128 3150 0

_____|__|__| Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.30 0.30 0.30 0.00 0.19 0.19 0.30 0.30 0.00 Crit Moves: **** Green/Cycle: 0.00 0.00 0.00 0.55 0.55 0.55 0.00 0.34 0.34 0.34 0.34 0.00 Delay/Veh: 0.0 0.0 0.0 12.0 12.0 12.0 0.0 22.3 22.3 32.9 32.9 0.0

AdjDel/Veh: 0.0 0.0 0.0 12.0 12.0 12.0 0.0 22.3 22.3 32.9 32.9 0.0 LOS by Move: A A A B B B A C C C A HCM2kAvgO: 0 0 0 9 9 9 0 7 7 13 13 0 *******************

Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:00 Page 11-1

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Embarcadero/ Beach St/ Grant St

************************* Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 101 Level Of Service: 72.6 Level Of Service: ************************* Street Name: Embarcadero Beach St (EB)/Grant St (WB)
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R Control: Split Phase Split Phase Split Phase Split Phase Rights: Include Include Include Include Min. Green: 17 17 17 26 26 0 0 0 26 19 19 19 0 1 0 1 0 0 1 0 0 0 0 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 189 335 28 4 141 0 0 0 393 17 73 8 Initial Bse: 189 335 28 4 141 0 0 0 393 17 73 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 Ω Ω 0 0 0 0 0 0 0 28 4 141 0 0 393 Initial Fut: 189 335 0 PHF Volume: 205 364 30 4 153 0 0 0 427 18 79 9 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 205 364 30 4 153 0 0 0 427 18 79 FinalVolume: 205 364 30 4 153 0 0 0 427 18 79 9 -----| Saturation Flow Module:

Adjustment: 0.93 0.93 0.93 1.00 1.00 1.00 1.00 1.00 0.87 0.98 0.98 Lanes: 0.68 1.22 0.10 0.03 0.97 0.00 0.00 0.00 1.00 0.17 0.75 0.08 Final Sat.: 1205 2136 179 52 1846 0 0 0 1644 323 1387 152

_____|__| Capacity Analysis Module:

Vol/Sat: 0.17 0.17 0.17 0.08 0.08 0.00 0.00 0.00 0.26 0.06 0.06 0.06 Crit Moves: **** **** Green/Cycle: 0.17 0.17 0.17 0.26 0.26 0.00 0.00 0.00 0.26 0.19 0.19 Volume/Cap: 1.01 1.01 1.01 0.32 0.32 0.00 0.00 0.00 1.01 0.30 0.30 0.30 Delay/Veh: 82.2 82.2 82.2 30.8 30.8 0.0 0.0 83.7 35.8 35.8 35.8 AdjDel/Veh: 82.2 82.2 82.2 30.8 30.8 0.0 0.0 0.0 83.7 35.8 35.8 35.8

LOS by Move: F F F C C A A A F D D HCM2kAvgO: 15 15 15 4 4 0 0 0 20 3 3 3 ******************

Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*******			oerat10								***	*****
Intersection												
*******									*****	*****	***	*****
Cycle (sec).			20			Critic	al Vo	l /Car	(X) ·		0 4	108
Cycle (sec): Loss Time (se Optimal Cycle	ac).		1./1			Aversa	a Dal:	1., Car	oc/woh)		3,	1 9
Optimal Cual	cc).		30			Lovel	Of Cor	ay (Se	C/ VEII)	•	٥.	· · ·
*******	□• *****	*****	,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	****	****	******	*****	. VICE.	:****	******	***	*****
Street Name:										B)/ Kea		
Approach:	No	rth D	EIIIDAI C	auero	u+h D	nund	NOI CII	roint act Da	. ot (E	Wes	+ D	ound (W
Movement:			Dulla	7	u CII D	Duna	T T	T T	Duna	L -	יר טו	Duna
Control:												
Rights:												
Min. Green:	1 5	26	nae n	0	17	17	2.0	20	20	20	20	20
	1.0	4 0	4 0	4 0	1 /	1 0	4 0	4.0	4.0	4.0	4 0	4.0
Y+R:	4.0	4.0	0 0	4.0	1 0	1 0	4.0	4.0	0 1	4.0 0 1	4.0	0 1
Lanes:												
Volume Module												
Base Vol:		EOO	0	1	497	54	1.0	243	98	4	25	10
				1.00		1.00		1.00				1.00
Growth Adj: Initial Bse:				1.00		54	1.00		98	1.00 1		1.00
			0	_						_		
Added Vol:		0	0		0	0	0		0		0	0
PasserByVol:			0	0		0	0		-	0	0	0
Initial Fut:			0	1		54	19		98	4	25	10
_	1.00			1.00		1.00		1.00		1.00 1		1.00
PHF Adj:			0.95		0.95	0.95		0.95	0.95	0.95 0		0.95
PHF Volume:			0	1		57	20	256	103	4	26	11
Reduct Vol:		0	0	0		0	0	0	0		0	0
Reduced Vol:			0	1		57	20		103	4	26	11
PCE Adj:			1.00		1.00	1.00		1.00		1.00 1		1.00
MLF Adj:				1.00		1.00		1.00				1.00
FinalVolume:			0		523	57		256	103	4		11
Saturation F												
Sat/Lane:												
Adjustment:								0.96				
Lanes:												
Final Sat.:												
Capacity Ana												
Vol/Sat:	0.11	0.15	0.00	0.17	0.17	0.17		0.18	0.05	0.02	0.02	0.01
Crit Moves:		****					***			***		
Green/Cycle:	0.12	0.40	0.00	0.28	0.28	0.28	0.22	0.22	0.22	0.22	.22	0.22
Volume/Cap:	0.94	0.37	0.00	0.61	0.61	0.61	0.81	0.81	0.22	0.07	0.07	0.03
Delay/Veh:	84.9	19.2	0.0	29.3	29.3	29.3	43.5	43.5	28.7	27.7 2	27.7	27.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	.00	1.00
AdjDel/Veh:	84.9	19.2	0.0	29.3	29.3	29.3	43.5	43.5	28.7	27.7 2	27.7	27.4
LOS by Move:	F	В	A	С	С	С	D	D	С	С	С	C
HCM2kAvgQ:	5	5	0	7	7	7	9	9	2	1	1	0
*****	****	****	*****	****	****	*****	****	****	****	*****	***	*****

Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:00

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #11 Embarcadero / Bay St

******	*****	**********	******
Cycle (sec):	90	Critical Vol./Cap.(X):	0.654
Loss Time (sec):	7	Average Delay (sec/veh):	16.4
Optimal Cycle:	81	Level Of Service:	В

Optimal Cycl	e:	: 81 Level						Of Service:						
		Embarcadero												
Approach:	No	rth B	nind	Soi	ıth Bo	nıınd	E	ast Bo	nind	We	West Bound			
Movement:	Ι	- Т	- R	Ι	- T	- R	Ι	- Т	- R	Ι. –	Т	- R		
			I						I					
Control:	P	rotect	ted	Pı	rotect	ted	Sp	lit Pl	nase	IgS	it Pl	hase .		
Rights: Min. Green:		Incl	ude		Incl	ude		Ovl			Incl	ude		
Min. Green:	42	53	0	0	25	25	7	0	42	0	0	0		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:														
Volume Modul		606	0	0	745	0.5	1.0	0		0	0	0		
Base Vol:										1.00	1 00	-		
Growth Adj:										0				
Initial Bse:														
Added Vol: PasserByVol:							0	0	0	0	0	0		
Initial Fut:										0				
User Adj:				1.00				1.00						
PHF Adj:				0.92				0.92						
DHE Volume:	1100	7/16	0.92	0.92	910	103	17	0.92	721	0.92	0.92	0.92		
Peduct Vol:	1100	740	0	0	010	103	1 /	0	721	0	0	0		
PHF Volume: Reduct Vol: Reduced Vol:	1100	746	0	0	810	103	17	0	721	0	0	0		
PCE Adi:	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1.00	1 00	1 00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:														
Saturation F.														
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.92	0.87	1.00	1.00	0.86	0.86	0.95	1.00	0.69	1.00	1.00	1.00		
Lanes:	2.00	2.00	0.00	0.00	1.77	0.23	1.00	0.00	2.00	0.00	0.00	0.00		
Final Sat.:														
Capacity Ana														
Vol/Sat:														
Crit Moves: Green/Cycle:	****		0 00	0 0 0	****	0 00	****			0.06		0 00		
	0.47		0.00	0.00	0.38	0.38	0.08	0.00	0.54	0.00	0.00	0.00		

Note: Queue reported is the number of cars per lane.

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HCM2kAvgQ: 12 2 0 0 11 11 0 0 7 0 0 0 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*******			peratio									
										^ ^ ^ ^ ^ ^		
Intersection	****	****	****	****	****	****	****	****				
Cvcle (sec):		9	9.0			Critic	al Vo	l./Car	o.(X):		0.	714
Loss Time (se	-c)·	1	3			Averag	e Dela	av (se	c/veh)		23	3.1
Cycle (sec): Loss Time (sec) Optimal Cycle	_·	-	79			Level	Of Set	rvice:		•		C
******	* * * * * *	*****	*****	****	****	*****	*********					*****
Street Name: Approach:	No	rth Bo	nind	Soi	ıth Bo	nund	E.	ast Bo	ound	We	est Bo	ound
Movement:												
Control:												
Rights:		Incli	ıde		Incli	ide	Op.	Incli	ide	op.	Incli	ide
Min. Green:		40	0	1.0	40	ıde 0	16	16	16	7	7	7
Y+R: Lanes:	1 1	0 2	0 0	1 /	1 2	1 0	0	1 0	1 0	0 0	1.0	0 0
	1	0 2	0 0	1	J 2	_ U	1	1 0	I	1	, ,	0 0
Volume Module												
Base Vol:			0	1.0	1383	7	79	3.8.1	157	0	0	0
Growth Adj:						1.00			1.00		1.00	
Initial Bse:			0	18	1383							
Added Vol:		0	0	10	0	0	0	201	157 0	0	-	-
PasserByVol:				0			0	0	0	0	0	0
Initial Fut:					1383		79			0	0	-
User Adj:			1.00		1.00	1.00		1.00			1.00	-
PHF Adj:					0.90			0.90			0.90	
PHF Volume:			0.90		1537	8	88	423	174	0.90	0.90	0.90
Reduct Vol:		1439			1337				1/4	0	0	
Reduced Vol:	40	1/30	0	-	1537	-			174	0	-	-
PCE Adi:						1.00				-	1.00	
MLF Adj:						1.00		1.00			1.00	
_				20						1.00		
FinalVolume:												
Saturation F.				1			1					
Saturation F.				1000	1000	1000	1000	1900	1900	1000	1900	1900
,									0.90		1.00	
Adjustment: Lanes:												
Final Sat.:						26						
Capacity Ana				0 01	0 20	0 20	0 00	0 00	0 00	0 00	0 00	0 00
Vol/Sat:			0.00	****		0.30	0.20	0.20	0.20	0.00	0.00	0.00
Crit Moves:							0 05		0 05	0 00	0 00	0 00
Green/Cycle:						0.48		0.25			0.00	
Volume/Cap:				0.10				0.81			0.00	
Delay/Veh:			0.0		17.5	17.5		37.4			0.0	0.0
User DelAdj:				1.00				1.00			1.00	
AdjDel/Veh:				36.2					37.4	0.0		
LOS by Move:	D	C	A	D	В	В	D			A	A	A

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Note: Queue reported is the number of cars per lane.

HCM2kAvqQ:

34th America's Cup Races

Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:00

Level Of Service Computation Report

Transportation Impact Analysis

******						(Future						
Intersection	#13 1	Embaro	cadero/	Lomba	ard St	: / Bat	tery :	St				
Cycle (sec): Loss Time (sec) Optimal Cycle	ec): e:	<u>9</u> 1	90 11 91			Critic Averag Level	al Voi e Dela Of Sei	l./Cap ay (se rvice	o.(X): ec/veh) :	:	0.8	371 5.7 D
Street Name: Approach: Movement:	No:	rth Bo - T	ound - R	Soi L -	uth Bo - T	- R	E e	ast Bo - T	ound – R	We L -	est Bo - T	ound – R
Control: Rights:	P:	rotect Inclu	ed ide	Pi	rotect	ed ide	Sp.	lit Pl Incl	nase ude	Sp	lit Ph Inclu	nase ide
Min. Green: Y+R: Lanes:	4.0	0 1	4.0 1 0	4.0	4.0		4.0	4.0 1 0	4.0 0 1	0 (4.0	4.0
Volume Modul												
Base Vol: Growth Adj: Initial Bse:	1.00	1.00	1.00	12 1.00 12	1.00	563 1.00 563	30 1.00 30		1.00		1.00	
Added Vol: PasserByVol: Initial Fut:	0		0	0		0 0 563	0 0 30	0	0 0 392	0 0 40	0	0 0 28
User Adj: PHF Adj: PHF Volume:	1.00	1.00	1.00	1.00	1.00 0.92 1054	1.00 0.92 612	1.00	1.00	1.00	1.00	1.00	
Reduct Vol: Reduced Vol: PCE Adj:	0 112	0 1382	0 12	0 13	0 1054	0 612	0 33	0	0	0 43	0	0
MLF Adj: FinalVolume:	1.00 112	1.00 1382	1.00	1.00	1.00 1054	1.00 612	1.00	1.00	1.00	1.00 43	1.00	1.00
Saturation F												
Sat/Lane: Adjustment: Lanes: Final Sat.:	0.95 1.00 1805	0.95 1.98 3575	0.95 0.02 31	0.95 1.00 1805	0.95 2.00 3610	0.85 1.00 1615	0.96 0.81 1480	0.96 0.19 345	1.00 1615	0.94 0.41 730	548	0.94 0.28 511
Capacity Ana												
Vol/Sat: Crit Moves:	0.06	0.39	0.39			****			****	****		0.06
Green/Cycle: Volume/Cap: Delay/Veh:	0.62	0.94	0.94	0.07	0.70	0.90	0.08	0.29 0.08 23.1		0.89	0.07 0.89 92.5	
User DelAdj: AdjDel/Veh:	1.00 45.3	1.00 36.6	1.00 36.6	1.00 36.4	1.00 22.9	1.00	1.00 23.1	1.00 23.1	1.00	1.00	1.00 92.5	1.00 92.5
LOS by Move: HCM2kAvgQ: ******	3	21	21	0		17	1	_	15	6	6	F 6 *****

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #14 Embarcadero / Green St / Davis St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.537
Loss Time (sec): 14 Average Delay (sec/veh): 21.2
Optimal Cycle: 89 Level Of Service: C Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 1 0 2 0 0 1 0 1 1 0 0 0 1! 0 0 0 1 0 0 0 -----| Volume Module: Base Vol: 46 1336 0 4 1203 11 27 0 64 0 0 Initial Bse: 46 1336 0 4 1203 11 27 0 64 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 0 4 1203 Initial Fut: 46 1336 11 27 0 64 0 PHF Volume: 49 1421 0 4 1280 12 29 0 68 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 49 1421 0 4 1280 12 29 0 68 FinalVolume: 49 1421 0 4 1280 12 29 0 68 0 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.95 0.89 1.00 0.89 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 1.00 1.98 0.02 0.30 0.00 0.70 0.00 1.00 0.00 _____|__|__| Capacity Analysis Module: Crit Moves: **** **** Green/Cycle: 0.09 0.50 0.00 0.08 0.48 0.48 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.29 0.79 0.00 0.03 0.74 0.74 0.21 0.00 0.21 0.00 0.00 0.00 Delay/Veh: 38.9 20.9 0.0 38.5 20.4 20.4 25.9 0.0 25.9 0.0 0.0 0.0 AdjDel/Veh: 38.9 20.9 0.0 38.5 20.4 20.4 25.9 0.0 25.9 0.0 0.0 0.0 LOS by Move: D C A D C C C A C A A A HCM2kAvgO: 1 16 0 0 15 15 2 0 2 0 0 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) **************************

Intersection #15 Embarcadero / Broadway St / Drumm St *******************

Cycle (sec): 90 Critical Vol./Cap.(X): 0.729
Loss Time (sec): 17 Average Delay (sec/veh): 63.6
Optimal Cycle: 90 Level Of Service: E

************************* Street Name: Embarcadero-Drumm St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 16 37 0 7 28 28 29 0 29 0 0 0 2 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 573 1246 0 6 1035 235 119 0 319 0 0 0 0 Ω 0 0 Ω 0 319 PHF Volume: 573 1246 0 6 1035 235 119 0 319 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 FinalVolume: 573 1246 0 6 1035 235 119 0 319 0 0 Saturation Flow Module: Adjustment: 0.92 0.95 1.00 0.95 0.92 0.92 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 1.00 1.63 0.37 1.00 0.00 1.00 0.00 0.00 0.00 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.16 0.35 0.00 0.00 0.36 0.36 0.07 0.00 0.20 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.18 0.41 0.00 0.08 0.31 0.31 0.32 0.00 0.32 0.00 0.00 0.00 Volume/Cap: 0.92 0.84 0.00 0.04 1.16 1.16 0.20 0.00 0.61 0.00 0.00 0.00 Delay/Veh: 55.4 28.3 0.0 38.5 115 114.8 22.3 0.0 27.9 0.0 0.0 0.0 AdjDel/Veh: 55.4 28.3 0.0 38.5 115 114.8 22.3 0.0 27.9 0.0 0.0 0.0 LOS by Move: E C A D F F C A C A A A HCM2kAvgO: 8 15 0 0 30 30 2 0 7 0 0 ******************

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #16 Embarcadero / Washington St ******************* Loss Time (sec): 17 Average Delay (sec/veh): 36.8
Optimal Cycle: 90 Level Of Service: D ************************** Street Name: Embarcadero Washington St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 12 30 0 10 28 0 33 0 33 0 0 2 0 3 0 0 1 0 2 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 302 1674 0 9 1255 145 125 0 424 0 0 Initial Bse: 302 1674 0 9 1255 145 125 0 424 0 0 0 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 Ω 0 0 0 9 1255 145 125 Initial Fut: 302 1674 0 424 0 PHF Volume: 302 1674 0 9 1255 145 125 0 424 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 302 1674 0 9 1255 145 125 0 424 0 0 -----| Saturation Flow Module: Adjustment: 0.92 0.91 1.00 0.95 0.90 0.90 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 3.00 0.00 1.00 2.69 0.31 1.00 0.00 1.00 0.00 0.00 0.00 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.09 0.32 0.00 0.00 0.27 0.27 0.07 0.00 0.26 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.13 0.33 0.00 0.11 0.31 0.31 0.50 0.00 0.50 0.00 0.00 0.00 Volume/Cap: 0.65 0.97 0.00 0.04 0.88 0.88 0.14 0.00 0.53 0.00 0.00 0.00 Delay/Veh: 40.1 44.3 0.0 35.8 35.6 35.6 12.4 0.0 16.2 0.0 0.0 0.0 AdjDel/Veh: 40.1 44.3 0.0 35.8 35.6 35.6 12.4 0.0 16.2 0.0 0.0 0.0 LOS by Move: D D A D D D B A B A A A HCM2kAvgO: 4 19 0 0 12 12 2 0 8 0 0 *******************

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Note: Queue reported is the number of cars per lane.

Existing + AC Event 2013 WeThu Jun 30, 2011 09:02:44 Page 4-1

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Embarcadero / Mission St

************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.767
Loss Time (sec): 10 Average Delay (sec/veh): 2.3
Optimal Cycle: 63 Level Of Service: A *************************

Street Name: Embarcadero MIssion St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 0 52 0 52 52 52 28 0 28 0 0 0 0 1 2 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 -----| Volume Module: Base Vol: 2 2100 0 0 1629 179 0 0 0 0 0 Initial Bse: 2 2100 0 0 1629 179 0 0 0 0 0 0 0 0 0 0 0 Ω 0 0 0 0 PHF Volume: 2 2258 0 0 1752 192 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 2 2258 0 0 1752 192 0 0 0 0 0 FinalVolume: 2 2258 0 0 1752 192 0 0 0 0 0 -----| Saturation Flow Module: Adjustment: 0.86 0.58 1.00 1.00 0.61 0.90 1.00 1.00 1.00 1.00 1.00 1.00 Lanes: 0.01 2.99 0.00 0.00 2.79 0.21 0.00 1.00 0.00 0.00 0.00 0.00 Final Sat.: 3 3313 0 0 3233 355 0 1900 0 0 0 _____|__|__|

Note: Queue reported is the number of cars per lane.

Capacity Analysis Module:

Crit Moves: ****

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Delay/Veh: 3.0 3.0 0.0 0.0 1.6 1.6 0.0 0.0 0.0 0.0 0.0 0.0

AdjDel/Veh: 3.0 3.0 0.0 0.0 1.6 1.6 0.0 0.0 0.0 0.0 0.0 0.0

LOS by Move: A A A A A A A A A A

HCM2kAvgO: 11 7 0 0 5 7 0 0 0 0 0

Bryant St

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

	2000 ncm Operations Method (ruture volume Alternative)											
Intersection	#18 H	Embar	cadero	/ Harı	rison	St						
*****	****	****	*****	****	****	*****	****	****	*****	*****	***	*****
Cycle (sec):		1	00			Critic	al Vo	l./Cap	o.(X):		1.0	009
Loss Time (se	ec):		10	Critical Vol./Cap.(X): Average Delay (sec/veh): Level Of Service:					88.8			
Optimal Cycle	∋:	1	80	Level Of Service:					:	F		
******	****	****	*****	****	****	*****	****	****	*****	******		
Street Name:			Embarc	adero			Harrison St					
Approach:	No	rth B	ound	Sou	ıth Bo	ound	Εa	ast Bo	ound	We	st Bo	ound
Movement:	L -	- T	– R	L -	- T	– R	L -	- T	– R	L -	Τ	– R
Control:	I	Permi	tted	I	Permit	ted	Sp.	lit Pl	nase	Spl	it Pl	nase
Rights:		Incl	ude .		Incl	ıde		Incl	ıde		Incli	ıde
Min. Green:	0	63	0	0	63	63	27	27	27	0	0	0
Rights: Min. Green: Y+R: Lanes:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	. 0 () 2	0 0	. 0 () 1	1 0	. 1 () ()	0 1	. 0 0	0	0 0
Volume Module		1 400	0	0	1 - 1 7	450	100	0	1.00	0	0	0
Base Vol:								1 00				
Growth Adj:					1517				169		0.11	
Initial Bse: Added Vol:	0	1406	0	0					169	0		0
										-	-	-
PasserByVol: Initial Fut:	0	1 40 0	0	0	1 - 1 - 7	0 450	100	0	0 169	0		
User Adj:									1.00	-	-	-
PHF Adj:						0.93			0.93			
PHF Volume:						484			182			
Reduct Vol:							200		0		0	0
Reduced Vol:									182			
PCE Adj:						1.00			1.00			-
MLF Adj:												
FinalVolume:												0
												-
Saturation F	•			1		1	1		'	1		'
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:										1.00		
Lanes:												
Final Sat.:	0	2559	0	0	2045	607	1805	0	1615	0	0	0
Final Sat.:	l			I			1					
Capacity Ana												
Vol/Sat:				0.00	0.80	0.80	0.11	0.00	0.11	0.00	0.00	0.00
Crit Moves:							***					
Green/Cycle:							0.27	0.00	0.27	0.00	0.00	0.00
Volume/Cap:								0.00				
Delay/Veh:								0.0	30.7	0.0	0.0	0.0
User DelAdj:								1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	27.6	0.0	0.0	143	143.1	30.5	0.0	30.7	0.0	0.0	0.0
										A	А	A
LOS by Move: HCM2kAvgQ:	0	23	0	0	56	79	5	0	5	0		0
******	****	****	*****	****	****	*****	****	****	*****	*****	***	*****

Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:01

Embarcadero

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Embarcadero / Bryant St

Street Name:

Cycle (sec):	100	Critical Vol./Cap.(X):	0.726
Loss Time (sec):	10	Average Delay (sec/veh):	56.0
Optimal Cycle:	95	Level Of Service:	E
*******	******	**********	*******

Approach: North Bound South Bound East Bound West Bound

iipprodoii.	1101		Julia	000		o arra			J 4114	***		Juliu	
Movement:			- R			- R		- T		_	- T		
Control:	Pi	rotect	ted	Pı	rotect	ted]	Permit	ted	I	Permit	ted	
Rights:		Incl	ude		Incl	ude		Incl	ıde		Incl	ıde	
Min. Green:	21	41	41	16	36	36	28	28	28	28	28	28	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lanes:	1 () 1	1 0	1 (2	0 1	0 :	1 0	0 1	0 0	1!	0 0	
Volume Module	e:												
Base Vol:	141	1287	9	43	1594	49	79	6	168	75	62	39	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	141	1287	9	43	1594	49	79	6	168	75	62	39	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	141	1287	9	43	1594	49	79	6	168	75	62	39	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	
PHF Volume:	145	1327	9	44	1643	51	81	6	173	77	64	40	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	145	1327	9	44	1643	51	81	6	173	77	64	40	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Capacity Analysis Module:

HCM2kAvgO: 4 18 18 1 35 1 2 2 4 5 5 5

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************************* Intersection #20 Embarcadero / Brannan St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.515
Loss Time (sec): 11 Average Delay (sec/veh): 37.1
Optimal Cycle: 90 Level Of Service: D **************************

Street Name: Brannan St Embarcadero Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 10 37 0 14 37 37 28 28 28 28 28 28 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 57 1318 0 3 1554 280 121 0 15 0 0 Initial Bse: 57 1318 0 3 1554 280 121 0 15 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 3 1554 280 121 Initial Fut: 57 1318 0 15 0 PHF Volume: 59 1373 0 3 1619 292 126 0 16 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 59 1373 0 3 1619 292 126 0 16 FinalVolume: 59 1373 0 3 1619 292 126 0 16 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.03 0.38 0.00 0.00 0.45 0.18 0.07 0.00 0.01 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.11 0.41 0.00 0.16 0.45 0.45 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.29 0.93 0.00 0.01 0.99 0.40 0.22 0.00 0.03 0.00 0.00 0.00 Delay/Veh: 37.5 35.3 0.0 32.2 43.5 16.7 23.2 0.0 21.6 0.0 0.0 0.0

Note: Queue reported is the number of cars per lane.

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AdjDel/Veh: 37.5 35.3 0.0 32.2 43.5 16.7 23.2 0.0 21.6 0.0 0.0 0.0

LOS by Move: D D A C D B C A C A A A

HCM2kAvgO: 1 21 0 0 23 5 3 0 0 0 0 0

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #21 Folsom St/Fremont St

************************* Cycle (sec): 75 Critical Vol./Cap.(X): 0.582
Loss Time (sec): 16 Average Delay (sec/veh): 28.9
Optimal Cycle: 77 Level Of Service: C

************************* Street Name: Fremont St (I-80 WB Off Ramp) Folsom St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 19 19 19 19 19 19 21 21 0 21 21 0 1 0 1 0 1 1 0 1! 0 0 0 1 1 1 0 0 0 0 1 0 -----| Volume Module: Base Vol: 4 185 73 254 39 1 167 411 57 0 95 66 Initial Bse: 4 185 73 254 39 1 167 411 57 0 95 0 0 Added Vol: 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 Ω Initial Fut: 4 185 73 254 39 1 167 411 57 PHF Volume: 4 197 78 270 41 1 178 437 61 0 101 7.0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 4 197 78 270 41 1 178 437 61 0 101 FinalVolume: 4 197 78 270 41 1 178 437 61 0 101 70 Saturation Flow Module: Adjustment: 0.87 0.87 0.87 0.37 0.57 0.57 0.89 0.89 0.89 1.00 0.95 0.95 Lanes: 0.03 1.41 0.56 1.83 0.16 0.01 0.79 1.94 0.27 0.00 0.59 0.41 Final Sat.: 50 2325 917 1281 179 5 1329 3271 454 0 1059 736 _____|__| Capacity Analysis Module: Vol/Sat: 0.08 0.08 0.08 0.21 0.23 0.23 0.13 0.13 0.13 0.00 0.10 0.10 Crit Moves: **** **** Green/Cycle: 0.25 0.25 0.25 0.25 0.25 0.25 0.27 0.27 0.27 0.00 0.27 0.27 Volume/Cap: 0.34 0.34 0.34 0.85 0.94 0.94 0.49 0.49 0.49 0.00 0.35 0.35 Delay/Veh: 24.1 24.1 24.1 45.2 62.6 62.6 23.8 23.8 23.8 0.0 22.9 22.9 AdjDel/Veh: 24.1 24.1 24.1 45.2 62.6 62.6 23.8 23.8 23.8 0.0 22.9 22.9 LOS by Move: C C C D E E C C A C C HCM2kAvgO: 3 3 3 3 6 6 5 5 5 0 3 3 ******************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************* Intersection #22 King St/3rd St ******************* Loss Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: 95.7 ************************* Street Name: 3rd St King St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Split Phase Split Phase Protected Protected Ovl Include Include Include Rights: Min. Green: 26 26 26 0 0 0 20 46 46 13 39 39 0 1 2 1 1 0 0 0 0 0 3 0 1 1 0 2 0 1 1 0 -----| Volume Module: Base Vol: 76 713 265 0 0 0 855 974 14 283 1331 40 Initial Bse: 76 713 265 0 0 0 855 974 14 283 1331 40 Added Vol: 0 0 0 0 PasserByVol: 0 855 974 14 283 1331 0 0 0 0 Initial Fut: 76 713 265 PHF Volume: 78 735 273 0 0 0 881 1004 14 292 1372 41 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 78 735 273 0 0 0 881 1004 14 292 1372 41 FinalVolume: 78 735 273 0 0 0 881 1004 14 292 1372 41 -----| Saturation Flow Module: Adjustment: 0.87 0.87 0.87 1.00 1.00 1.00 0.92 0.95 0.95 0.92 0.57 0.95 Lanes: 0.36 3.38 1.26 0.00 0.00 0.00 3.00 1.97 0.03 2.00 1.96 0.04 Final Sat.: 593 5564 2068 0 0 5253 3552 51 3502 2119 64 _____| Capacity Analysis Module: Vol/Sat: 0.13 0.13 0.13 0.00 0.00 0.01 0.17 0.28 0.28 0.08 0.65 0.65 Crit Moves: **** **** Green/Cycle: 0.26 0.26 0.40 0.00 0.00 0.00 0.20 0.50 0.50 0.14 0.44 0.44 Volume/Cap: 0.51 0.51 0.33 0.00 0.00 0.00 0.84 0.57 0.57 0.59 1.47 1.47 Delay/Veh: 31.8 31.8 20.7 0.0 0.0 44.6 17.9 17.9 42.1 246 245.9 AdjDel/Veh: 31.8 31.8 20.7 0.0 0.0 44.6 17.9 17.9 42.1 246 245.9 LOS by Move: C C C A A A D B B D F F HCM2kAvgQ: 6 6 5 0 0 0 12 12 12 4 51 85 *******************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #23 King St/4th St

******	*****	************	*********
Cycle (sec):	100	Critical Vol./Cap.(X):	0.740
Loss Time (sec):	13	Average Delay (sec/veh):	78.4
Optimal Cycle:	125	Level Of Service:	E
*****	*****	**********	******

*****				****	****	*****	****	****	• *****	****	****	 *****
Street Name: Approach:												
Approach:	No:	rth B	ound	So	uth B	ound	Εá	ast B	ound	W	est B	ound
Movement:	L ·	- T	- R	L ·	– T	- R	L ·	- T	- R	L	– T	- R
Control:	P:	rotec	ted .	P-	rotec	ted .	P:	rotec	ted	P	rotect	ted
Rights:		Incl	ude		Incl	ude		Incl	ude		Incl	ude
Rights: Min. Green:	28	28	28	28	28	28	10	42	42	14	45	45
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	1 0	0 1	1	0 1	1 1	1 (0 2	1 0	1	0 1	1 0
Volume Module												
Base Vol:			50	56	304	432	116	1736	17	24	1348	34
Growth Adj:												
Initial Bse:												
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	52	50	56	304	432	116	1736	17	24	1348	34
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	8	55	53	59	320	455	122	1827	18	25	1419	36
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	8	55	53	59	320	455	122	1827	18	25	1419	36
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes:												
Final Sat.:	252	1635	1615	1805	2040	2899	1805	5132	50	1805	3507	88
Capacity Ana												
Vol/Sat: Crit Moves:												
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.08	0.34	0.34	0.11	0.37	0.37

Note: Queue reported is the number of cars per lane.

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Volume/Cap: 0.15 0.15 0.15 0.15 0.70 0.70 0.85 1.06 1.06 0.12 1.10 1.10

Delay/Veh: 39.1 39.1 39.1 39.1 46.7 46.7 91.1 80.9 80.9 50.3 96.1 96.1

AdjDel/Veh: 39.1 39.1 39.1 39.1 46.7 46.7 91.1 80.9 80.9 50.3 96.1 96.1

LOS by Move: D D D D D D F F F D F F

HCM2kAvgO: 2 2 2 10 10 7 35 35 1 42 42

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #24 16th St/3rd St ************************* Loss Time (sec): 10 Average Delay (sec/veh): 22.2 Optimal Cycle: 100 Level Of Service: C ************************** Street Name: 3rd St 16th St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Permitted Permitted Permitted Include Include Include Include Min. Green: 20 56 56 31 31 31 34 34 34 34 34 34 2 0 1 1 0 1 0 1 1 0 1 0 1 1 0 0 1 0 1 0 -----| Volume Module: Base Vol: 231 595 0 7 407 91 93 9 177 0 9 5 Initial Bse: 231 595 0 7 407 91 93 9 177 0 9 5 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 0 0 7 407 0 Initial Fut: 231 595 91 93 9 177 0 5 PHF Volume: 266 684 0 8 468 105 107 10 203 0 10 6 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 266 684 0 8 468 105 107 10 203 FinalVolume: 266 684 0 8 468 105 107 10 203 0 10 6 -----| Saturation Flow Module: Adjustment: 0.92 0.95 0.95 0.31 0.92 0.92 0.75 0.81 0.81 0.95 0.90 0.90 Lanes: 2.00 2.00 0.00 1.00 1.63 0.37 1.00 1.00 1.00 0.00 1.29 0.71 Final Sat.: 3502 3610 0 589 2871 642 1433 1547 1547 0 2195 1220 _____|__|__| Capacity Analysis Module: Vol/Sat: 0.08 0.19 0.00 0.01 0.16 0.16 0.07 0.01 0.13 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.25 0.56 0.00 0.31 0.31 0.31 0.34 0.34 0.34 0.00 0.34 0.34 Volume/Cap: 0.30 0.34 0.00 0.04 0.53 0.53 0.22 0.02 0.39 0.00 0.01 0.01 Delay/Veh: 30.6 12.0 0.0 24.2 28.9 28.9 23.8 21.9 25.5 0.0 21.9 21.9 AdjDel/Veh: 30.6 12.0 0.0 24.2 28.9 28.9 23.8 21.9 25.5 0.0 21.9 21.9 LOS by Move: C B A C C C C C A C C HCM2kAvgO: 3 6 0 0 7 7 2 0 5 0 0 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #25 Cesar Chavez St/3rd St *************************

Cycle (sec): 100 Critical Vol./Cap.(X): 1.193
Loss Time (sec): 12 Average Delay (sec/veh): 23.9
Optimal Cycle: 97 Level Of Service: C

************************** Street Name: 3rd St Cesar Chavez St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permit+Prot Permit+Prot Permitted Permitted Include Include Include Include Rights: Min. Green: 15 35 35 10 30 30 5 40 40 30 30 30 1 0 1 1 0 1 0 1 1 0 1 0 1 1 0 0 1 0 1 Volume Module: Base Vol: 223 561 16 17 431 107 100 204 154 13 220 18 Initial Bse: 223 561 16 17 431 107 100 204 154 13 220 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 Initial Fut: 223 561 16 17 431 107 100 204 154 13 220 PHF Volume: 228 572 16 17 440 109 102 208 157 13 224 18 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 228 572 16 17 440 109 102 208 157 13 224 18 FinalVolume: 228 572 16 17 440 109 102 208 157 13 224 18 Saturation Flow Module: Adjustment: 0.54 0.95 0.95 0.30 0.92 0.92 0.57 0.89 0.89 0.87 0.87 Lanes: 1.00 1.94 0.06 1.00 1.60 0.40 1.00 1.14 0.86 0.10 1.76 0.14 Final Sat.: 1034 3496 100 565 2805 696 1093 1925 1454 172 2913 238 _____|__| Capacity Analysis Module: Vol/Sat: 0.22 0.16 0.16 0.03 0.16 0.16 0.09 0.11 0.11 0.08 0.08 0.08 Crit Moves: **** ****

Volume/Cap: 0.40 0.44 0.44 0.04 0.52 0.52 0.23 0.27 0.27 0.19 0.19 Delay/Veh: 23.0 23.7 23.7 21.2 29.5 29.5 20.1 20.3 20.3 19.6 19.6 19.6

AdjDel/Veh: 23.0 23.7 23.7 21.2 29.5 29.5 20.1 20.3 20.3 19.6 19.6 19.6 LOS by Move: C C C C C C C B B B HCM2kAvgO: 4 7 7 0 7 7 2 4 4 3 3 3 **************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

2000 HCM Operations Method (Future Volume Alternative)														
Intersection #26 Cesar Chavez St/Illinois St														
Cvcle (sec):		1.	00 9 00			Critic	al 170	1 /Car	(Y) ·		0.2			
Loss Time (se		Τ,	0			7	ar vo.	., car	o. (A).		20			
Optimal Cycle		1	2			Averag	e per	ay (Se	. veii)	•	2(C C		
*********		1. . + + + + +	JU ++++++	+++++		rever	OI 56	rvice		+++++				
Street Name:			Illino	1s St		ound			esar Ch	avez		,		
Approach:											est Bo			
Movement:			- R											
Control:														
Rights:		Include Include Include Include												
Min. Green:		20	20		71	71	71	71	71					
Min. Green: Y+R:		4.0	4.0		20 4.0	20	4.0					4.0		
			1 0											
Lanes:						1 0			1 0					
Volume Module							1							
Base Vol:	130	84	3	13	62	37	35	94	107	1	86	24		
Growth Adj:					1.00	1.00		1.00	1.00	1.00		1.00		
Initial Bse:		84	3	13	62	37	35	94	107	1.00	86	24		
Added Vol:	130	04	0	13	02	0	0	94	0	0	0	0		
		0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:			3							-				
Initial Fut:		84	-	13	62	37	35	94	107	1	86	24		
	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00		
	0.87		0.87		0.87	0.87		0.87	0.87	0.87		0.87		
PHF Volume:		97	3	15	71	43	40	108	123	1	99	28		
	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:		97	3	15	71	43	40	108	123	1	99	28		
PCE Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00		
MLF Adj:			1.00		1.00	1.00		1.00		1.00		1.00		
FinalVolume:			3	15		43		108	123	1	99	28		
Saturation F														
Sat/Lane:					1900			1900			1900			
Adjustment:			1.00		0.94			0.80	0.80		0.97			
	1.00		0.03		0.63			0.79			0.77			
Final Sat.:			65		1123		449		1371		1428	398		
Capacity Ana	-4													
Vol/Sat:		0.05	0.05	0.01	0.06	0.06	0.09	0.09	0.09	0.07	0.07	0.07		
Crit Moves:								****						
Green/Cycle:			0.20		0.20			0.71	0.71		0.71	0.71		
Volume/Cap:			0.26		0.32	0.32		0.13	0.13	0.10		0.10		
Delay/Veh:			34.2		34.7	34.7	4.6	4.6	4.6	4.6	4.6	4.6		
User DelAdj:			1.00		1.00	1.00		1.00		1.00		1.00		
AdjDel/Veh:	40.7	34.2	34.2	32.5	34.7	34.7	4.6	4.6	4.6	4.6	4.6	4.6		
LOS by Move:				С		C	A	A	A	A	A	A		
HCM2kAvgQ:			3	0	-	3	1	_	1	1	1	1		
*****	****	****	*****	****	****	*****	****	****	*****	*****	****	*****		

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Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

*****	****	****	****	****	****	*****	****	****	*****	****	****	*****
Intersection	#27 I	Lincol	ln Blvd	/25th	St/E	l Camin	o del	Mar				
Cycle (sec): Loss Time (sec) Optimal Cycle	e:		1 0 0	****	****	Level	ge Dela Of Sei	ay (se rvice:	ec/veh)		1	785 7.9 C
Street Name: Approach: Movement:	Noi L -	oth Bo	25th ound - R	St Sou L	uth Bo	ound - R	El Car Ea L -	mino d ast Bo - T	del Mar ound - R	(eb) We	/ Linest Bo	ncoln ound - R
Control: Rights: Min. Green: Lanes:	St 0 0 (iop Si Inclu 0 1!	ign ide 0	. St 0 0 (top Si Incli 0 1!	ign ude 0	. St 0 0 (top Si Inclu 0 0 1!	ign ude 0	0 1 (iop Si Inclu 0	ign ude 0 1 0
Volume Module	•											
Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut:	17 0 0		260 1.00 260 0 0	14 1.00 14 0 0	1.00	1.00	1 1.00 1 0 0	221 1.00 221 0 0 221	23 1.00 23 0 0	423 1.00 423 0 0 423	1.00	5 1.00 5 0 0
User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol:	1.00 0.96 18 0	1.00 0.96 25 0 25	1.00 0.96 271 0 271	1.00 0.96 15 0	1.00 0.96 21 0 21	1.00 0.96 2 0 2	1.00 0.96 1 0	1.00 0.96 230 0 230	1.00 0.96 24 0 24	1.00 0.96 441 0 441	1.00 0.96 217 0 217	1.00 0.96 5 0
PCE Adj: MLF Adj: FinalVolume:	1.00		1.00 271	1.00 15		1.00	1.00	230	1.00	1.00 1.00 441	1.00 217	1.00
Saturation Fi Adjustment: Lanes: Final Sat.:	1.00 0.06 35	1.00 0.08 49	1.00 0.86 531	0.39 183	0.56 261	0.05 26	0.01	0.90 537	0.09 56	1.00 562	0.98 597	0.02
Capacity Anal Vol/Sat: Crit Moves:	lysis	Modul	le: 0.51		0.08			0.43		0.78		0.36
Delay/Veh:	1.00 13.7 B	13.7 1.00 13.7	13.7 1.00 13.7 B	1.00 10.3	10.3 1.00 10.3 B 10.3 1.00 10.3	10.3 B	1.00 12.8	12.8 1.00 12.8 B 12.8 1.00 12.8	12.8 B	27.6 1.00 27.6	1.00	11.8 1.00 11.8 B
AllWayAvgQ:	0.9					0.1		0.7			0.5	0.5
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

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Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

***************** Intersection #28 Lake St/14th Ave ******************* Loss Time (sec): 0 Average Delay (sec/veh): 11.7 Optimal Cycle: 0 Level Of Service: B *********************** Street Name: 14th Ave Lake St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 1 0 0 0 0 0 1! 0 0 0 1 -----| Volume Module: Base Vol: 3 47 18 8 0 0 30 264 1 73 298 27 PHF Volume: 3 48 19 8 0 0 31 272 1 75 307 28 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 3 48 19 8 0 0 31 272 1 75 307 28 FinalVolume: 3 48 19 8 0 0 31 272 1 75 307 28 _____| Saturation Flow Module: Lanes: 0.04 0.70 0.26 1.00 0.00 0.00 0.10 0.89 0.01 0.20 0.80 1.00 Final Sat.: 27 420 161 550 0 0 77 675 3 139 568 838 -----| Capacity Analysis Module: Vol/Sat: 0.12 0.12 0.12 0.01 xxxx xxxx 0.40 0.40 0.40 0.54 0.54 0.03 Crit Moves: **** **** Delay/Veh: 9.0 9.0 9.0 8.9 0.0 0.0 10.7 10.7 10.7 13.4 13.4 7.1 AdjDel/Veh: 9.0 9.0 9.0 8.9 0.0 0.0 10.7 10.7 10.7 13.4 13.4 7.1 LOS by Move: A A A A * * B B B B A ApproachDel: 9.0 8.9 10.7 13.0 Delay Adj: 1.00 1.00 1.00 ApprAdjDel: 9.0 8.9 10.7 LOS by Appr: A A B 1.00 13.0 AllWayAvgo: 0.1 0.1 0.1 0.0 0.0 0.6 0.6 0.6 1.1 1.1 0.0 *******************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

******	****	*****	*****	****	****	*****	****	****	*****	*****	****	*****
Intersection *******	****	****	****	****	****	*****	****	****	*****	****	****	*****
Cycle (sec):		10	0			Critic	al Vo	l./Cap	o.(X):		0.4	436
Loss Time (s	ec):		0			Averag	e Del	ay (se	ec/veh)	:	10	0.6
Optimal Cycl	e:		0			Level	Of Se	rvice	:			
*****	****	*****			****	*****	****	****	*****	*****	****	*****
Street Name:				Ave					Lake			
Approach:												
Movement:	L -	- T	- R	L -	- T	- R	L .	- T	- R	L -	- T	- R
Control:												
Rights:		Incli	ide		Incli	ıde	U	Incli	ıde		Incli	ıde
Rights: Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 (1!	0 0	0 (1!	0 0	0	0 1!	0 0	0 0) 1!	0 0
							1					
Volume Module	e:											
Base Vol:	7	5							4			
Growth Adj:												
<pre>Initial Bse: Added Vol:</pre>	7	5	19	31	132	32	4	207	4	17	263	4
PasserByVol: Initial Fut:	0	0	0	0	0	0	0	0	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:							0.91					
PHF Volume: Reduct Vol:	0	0	0	34	145	35	4	227	4 0	19	289	4
Reduced Vol:	9	5	21	3.4	1/15	35	4		4			
PCE Adj:												
MLF Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation F												
Adjustment:												
Lanes:												
Final Sat.:	137	98	373	103	440	107	13	673	13	43	663	10
Capacity Ana				0 00	0 00	0 00	0 04	0 24	0 04	0 11	0 11	0 11
Vol/Sat:	0.06	0.06	0.06	0.33	U.33		0.34	****		****		0.44
Crit Moves: Delay/Veh:	0 5	0 6	0 5	10 4			10 2					11.3
Delay Adj:							1.00					
AdjDel/Veh:												
LOS by Move:												
ApproachDel:		8.5			10.4			10.3	_		11.3	_
ApproachDel: Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		8.5			10.4			10.3				
ApprAdjDel: LOS by Appr:		A			В			В			В	

Note: Queue reported is the number of cars per lane.

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AllWayAvgO: 0.0 0.0 0.0 0.4 0.4 0.4 0.5 0.5 0.5 0.7 0.7

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

	2000 ncm 4-way stop method (ruture votume atternative)												
Intersection	Intersection #30 Jackson St/Arguello Blvd												
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	Ξ,	0			Averag	e Dela	av (se	ec/veh)	:	2	7.7	
Optimal Cycle	∋:		0			Level	Of Sei	rvice	:			D	
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****	
Street Name:		1	Arguell	o Blvo	i				Jacks	on St			
Approach:	Noi	rth_Bo	ound_	Sot	ıth_Bo	ound_	Ea	ast Bo	ound_	We	est_Bo	ound_	
Movement:	ь.	- T	- R	ь -	- T	- R	ь -	- T	- R	ь -	- T	- R	
Control:	St	.op S:	ian	St	.op Si	ian	St	.op S:	 ian	St	.op S:	 Lan	
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde	
Rights: Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0	
Lanes:													
Volume Module: Base Vol:													
Growth Adj:									1.00				
Initial Bse:				43						85		49	
Added Vol:	0	0				0				0		0	
Added Vol: PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:			46	43		0		0		85	0	49	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:			0.89		0.89			0.89			0.89		
PHF Volume:			52	48					0	96	0	55	
Reduct Vol: Reduced Vol:		0	0 52		0		0		0	0		0	
PCE Adj:					625				1.00		1.00		
MLF Adj:									1.00		1.00		
FinalVolume:													
Saturation Fl													
Adjustment:								1.00			1.00		
Lanes:													
Final Sat.:													
Capacity Anal				1		1	1		1	1		1	
Vol/Sat:				0.93	0.93	xxxx	xxxx	xxxx	xxxx	0.27	xxxx	0.27	
Crit Moves:			****							***			
Delay/Veh:	0.0	16.2	16.2	38.9	38.9	0.0	0.0	0.0	0.0	11.3	0.0	11.3	
Delay Adj:									1.00		1.00		
AdjDel/Veh:	0.0	16.2	16.2	38.9	38.9	0.0	0.0				0.0		
LOS by Move:	*	C	С	Е	E	*	*		*			В	
Approachuel:		1 00			38.9		XX	XXXXX			11.3		
Annradinel.		16 2			38 0		2	, , , , , , , , , , , , , , , , , , ,			11.3		
LOS by Move: ApproachDel: Delay Adj: ApprAdjDel: LOS by Appr:		10.2			50.9 E			*			11.J		
LOS by Appr: AllWayAvgQ:	1.5	1.5	1.5	6.3	6.3	6.3	0.0	0.0	0.0	0.3	0.3	0.3	
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****	

Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:01

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #31 Pacific Ave/Presidio Blvd

~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~			
Cycle (sec):	100	Critical Vol./Cap.(X):	0.870
Loss Time (sec):	0	Average Delay (sec/veh):	22.7
Optimal Cycle:	0	Level Of Service:	С
******	*****	*********	*****

Street Name: Approach:		1	Presidi	io Blv	d				Pacifi	c Ave		
Approach:	No	rth B	ound	Soi	ath B	ound	Εa	ast Bo	ound	W∈	st Bo	ound
Movement:												
Control:	St	top S	ign	St	top S	ign	St	op S	ign	St	op Si	Lgn
Rights: Min. Green:		Incl	ude		Incl	ude		Incl	ıde		Incl	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:												
Volume Module												
Base Vol:												
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:												
Added Vol:												
PasserByVol:												
Initial Fut:	5	388	8	43	558	30	5	8	4	23	18	39
User Adj:												
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:												
Reduct Vol:												
Reduced Vol:	5	408	8	45	587	32	5	8	4	24	19	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	5	408	8	45	587	32	5	8	4	24	19	41
Saturation F	low M	odule	:									
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.97	0.02	0.07	0.88	0.05	0.29	0.47	0.24	0.29	0.22	0.49

Final Sat.: 9 691 14 52 675 36 151 241 121 159 125 270 -----|

Capacity Analysis Module:

Vol/Sat: 0.59 0.59 0.59 0.87 0.87 0.03 0.03 0.03 0.15 0.15 0.15 Crit Moves: **** **** **** AdjDel/Veh: 14.5 14.5 14.5 29.8 29.8 29.8 9.6 9.6 9.6 10.0 10.0 10.0 LOS by Move: B B B D D D A A A A A 9.6 ApproachDel: 14.5 29.8 9.6
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 14.5 29.8 9.6
LOS by Appr: B D A 10.0 1.00 10.0 A

AllWayAvgO: 1.3 1.3 1.3 4.7 4.7 4.7 0.0 0.0 0.0 0.2 0.2 0.2 ****************************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #32 Lombard St/Lyon St												
Cycle (sec):			0			Critic	cal Vo	l./Car	o.(X):		1.5	524
Loss Time (se	ec):		0			Averag	re Dela	av (se	ec/veh)	:	139	9.4
Optimal Cycle			0				Of Se					F
******		****	*****	****	****					****	****	*****
Street Name:			Lvon	S+					Lomba	rd St		
Approach:	No.	rth Bo	4		ıth Bo	ound	F:	ast Bo			est Bo	nund
Movement:		- T				– R			- R		- T	
Control:			ign						ign	•	op Si	
Rights:	3	Tral	1911	اد	Tral	ign	٥			٥١	-	_
	Include											
Min. Green:	-	-	-	-	-	-	-	-	-	-	-	0
Lanes:		0 1!			1!			1!			1!	
Volume Module	•											
Base Vol:	146	22	7	22	56	200	164	515	94	5	340	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	146	22	7	22	56	200	164	515	94	5	340	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserBvVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	146	22	7	22	56	200	164	515	94	5	340	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	159	24	8	24	61	217	178	560	102	5	370	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	24	8	24	61	217	178	560	102	5	370	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	159	24	8	24	61	217	178	560	102	5	370	21
	ı											
Saturation Fl												
Adjustment:		1.00			1.00	1.00		1.00			1.00	1.00
Lanes:		0.13	0.04		0.20	0.72		0.67			0.94	0.05
Final Sat.:	354		17	39		355		367		7		27
 Capacity Anal	•											
Vol/Sat:	-	0.45	0.45	0 61	0.61	0.61	1 52	1.52	1.52	0 77	0.77	0.77
Crit Moves:	****	0.10	0.10	0.01	****	0.01	1.02	****	1.02	****	0.,,	•••
Delay/Veh:	16 4	16.4	16.4	19 4	19.4	19 4	262.9	263	262.9	27.9	27 9	27.9
Delay Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:		16.4	16.4		19.4		262.9		262.9	27.9		27.9
LOS by Move:	C	C C	. C		C.	. C	F F	205 F	202.5 F	27.5 D		D D
ApproachDel:		16.4		C	19.4	C	-	262.9	T.	D	27.9	
Delay Adj:		1.00			1.00		•	1.00			1.00	
ApprAdjDel:		16.4			19.4			262.9			27.9	
		16.4 C			19.4 C		•	202.9 F			27.9 D	
LOS by Appr: AllWayAvgO:	0 6	0.6	0.6	1 2	1.3	1.3	30 0	38.8	38.8	2.6	2.6	2.6

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Note: Queue reported is the number of cars per lane.

Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:01

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #33 Lombard St/Divisadero St ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.178

Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: 111.4 Level Of Service: *************************

Street Name: Divisadero St Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Permitted Include Include Rights: Include Include Min. Green: 27 27 27 27 27 54 54 54 54 54 54 1 0 0 1 0 1 0 0 1 0 0 1 1 1 0 0 1 1 1 0 -----|----|-----||-------| Volume Module: Base Vol: 179 187 27 147 241 85 17 1805 172 1 2514 147 Initial Bse: 179 187 27 147 241 85 17 1805 172 1 2514 147 0 0 0 0 0 0 Added Vol: 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 85 17 1805 172 Initial Fut: 179 187 27 147 241 1 2514 147 PHF Volume: 183 191 28 150 246 87 17 1842 176 1 2565 150 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 183 191 28 150 246 87 17 1842 176 1 2565 150 FinalVolume: 183 191 28 150 246 87 17 1842 176 1 2565 150 Saturation Flow Module: Adjustment: 0.35 0.98 0.98 0.52 0.96 0.96 0.75 0.52 0.75 0.85 0.59 0.85 Lanes: 1.00 0.87 0.13 1.00 0.74 0.26 0.02 2.79 0.19 0.01 2.88 0.11 Final Sat.: 673 1629 235 986 1350 476 26 2771 264 1 3252 190 _____| Capacity Analysis Module:

Vol/Sat: 0.27 0.12 0.12 0.15 0.18 0.18 0.66 0.66 0.66 0.79 0.79 0.79

Volume/Cap: 0.91 0.39 0.39 0.51 0.61 0.61 1.11 1.11 1.11 1.31 1.31 1.31 Delay/Veh: 68.4 25.4 25.4 27.4 28.9 28.9 75.0 75.0 75.0 163.2 163 163.2 AdjDel/Veh: 68.4 25.4 25.4 27.4 28.9 28.9 75.0 75.0 75.0 163.2 163 163.2 LOS by Move: E C C C C E E E F F F HCM2kAvgO: 8 5 5 4 9 9 45 33 45 77 54 77

******************* Note: Queue reported is the number of cars per lane.

Crit Moves: ****

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #34 Lombard St/Fillmore St												
Cycle (sec): Loss Time (sec) Optimal Cycle			90			Critic	al Vol	L./Cap	o.(X):		1.0	094
Loss Time (se	ec):		9			Averag	e Dela	ay (se	ec/veh;):	103	3.6
Optimal Cycle	e:	18	30			Level	Of Ser	rvice	:			F
******	****	****	*****	****	****	*****	*****	****	****	*****	****	*****
Street Name:			Fillmo							ard St		
Approach:	Noi	rth Bo	ound	Sou	ith Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Approach: Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
				1		I	1			11		1
Control: Rights:	I	Permit	ted	E	Permit	ted	I	Permit	tted	I	Permit	ted
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	1 (0 0	1 0	0 1	L 0	1 0	0 1	1	1 0	0 :	l 1	1 0
Volume Module	e:											
Base Vol:	47	160	36	94	300	105	21	1608	65	3	2415	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:						105						
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Added Vol: PasserByVol: Initial Fut:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	47	160	36	94	300	105	21	1608	65	3	2415	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:									0.95		0.95	
PHF Volume:						111						
						0		0			0	
Reduct Vol: Reduced Vol:	19	168	38	99	316	111	22	1693	6.8	3	25/12	97
PCE Adi:												
MLF Adj:												1.00
FinalVolume:												
	4.7	100		1	310			1093	0.0	ــــــا ا	2342	I
Saturation Fl												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.36	0.97	0.97	0.72	0.72	0.72	0.74	0.50	0.74	0.85	0.58	0.85
Lanes:												
Final Sat.:	678	1508	339	515	1642	575	36	2764	112	4	3210	122
							I					
Capacity Anal												
Vol/Sat:				0.19	0.19	0.19	0.61	0.61	0.61	0.79	0.79	0.79
Crit Moves:					***						****	
Green/Cycle:	0.30	0.30	0.30	0.30	0.30	0.30	0.60	0.60	0.60	0.60	0.60	0.60
Volume/Cap:								1.02			1.32	
Delay/Veh:								44.9		165.6		
User DelAdj:									1.00			1.00
AdiDel/Veh:										165.6		
												F
LOS by Move: HCM2kAvgQ:	1	5	5	Q	Q	2	28	19	28	80	55	80
*********	.***	****	*****	*****	****	*****	****	.****	*****	*****	****	
N		, ,		,	_							

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2013 WeFri Jun 24, 2011 15:01:33

Level Of Service Computation Report

*****						(Future						
Intersection												
*****					****	*****	****	****	*****	****	****	*****
Cycle (sec):		9	0			Critic	al Vo	L./Car	o.(X):		0.	776
Loss Time (se	ec):	1	.0			Averag		-		:		1.4
Optimal Cycle	,		0			Level				•	0.	C
*****				****						****	****	
Street Name:			Lagun	a St.					Bav	St		
Approach:					ıth Bo	ound	Ea	ast Bo		We	est B	nınd
Movement:						- R					- T	
Control:		rotect		Pı			' I			'	Permi	
Rights:		Inclu			Incl		_	Incl		_	Ovl	
Min. Green:	1.9	18	18	34		34	2.8	28	28	28		28
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0		4.0	
Lanes:			0 0			0 0			0 1			0 2
Volume Module				1			1			1		
Base Vol:	212	0	73	529	151	13	0	210	220	135	363	1208
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1.00	73	529	151		0	210	220	135	363	1208
						13						
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		0	73	529	151	13	0	210	220	135	363	1208
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.96	0.96		0.96	0.96		0.96	0.96		0.96	0.96
PHF Volume:		0	76	551	157	14	0	219	229	141	378	1258
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		0	76	551	157	14	0	219	229	141	378	1258
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	221	0	76	551	157	14	0	219	229	141	378	1258
Saturation F.	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.93	0.96	0.96	0.96	1.00	0.95	0.85	0.81	0.81	0.75
Lanes:	0.74	0.00	0.26	1.62	0.35	0.03	0.00	2.00	1.00	0.27	0.73	2.00
Final Sat.:	1315	0	453	2950	643	55	0	3610	1615	419	1127	2842
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.17	0.00	0.17	0.19	0.24	0.24	0.00	0.06	0.14	0.34	0.34	0.44
Crit Moves:			****	***							****	
Green/Cvcle:	0.20	0.00	0.20	0.38	0.38	0.38	0.00	0.31	0.31	0.31	0.31	0.69
Volume/Cap:				0.49		0.65		0.19			1.08	0.64
Delay/Veh:		0.0	50.8		24.4	24.4	0.0		25.5		94.7	8.6
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:		0.0	50.8		24.4	24.4		22.8	25.5		94.7	8.6
LOS by Move:			D . 0	C	24.4 C	24.4 C	0.0 A		23.3 C	74.7 F	74.7 F	0.0 A
HCM2kAvqO:	11	0	11	7		11	0	2	5	19	19	10

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*********** Intersection #36 Bay St/Van Ness Ave ***************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.792 Loss Time (sec): 10 Average Delay (sec/veh): 20.9 Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Van Ness Ave Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 23 23 23 23 23 57 57 57 57 57 57 1 0 2 1 0 0 1 1 1 0 0 1 1 0 1 0 1 0 1 -----| Volume Module: Base Vol: 88 173 167 5 329 191 9 575 159 174 1358 21 Initial Bse: 88 173 167 5 329 191 9 575 159 174 1358 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω Initial Fut: 88 173 167 5 329 191 9 575 159 174 1358 PHF Volume: 90 177 170 5 336 195 9 587 162 178 1386 21 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 90 177 170 5 336 195 9 587 162 178 1386 21 FinalVolume: 90 177 170 5 336 195 9 587 162 178 1386 21 -----|----|-----| Saturation Flow Module: Lanes: 1.00 2.00 1.00 0.03 1.97 1.00 0.03 1.97 1.00 0.22 1.75 0.03 Final Sat.: 718 3202 1601 46 3013 1529 26 1651 808 308 2404 37 _____|__| Capacity Analysis Module: Vol/Sat: 0.13 0.06 0.11 0.11 0.11 0.13 0.36 0.36 0.20 0.58 0.58 0.58 *** Crit Moves: Green/Cycle: 0.26 0.26 0.26 0.26 0.26 0.26 0.63 0.63 0.63 0.63 0.63 0.63 Volume/Cap: 0.49 0.22 0.42 0.44 0.44 0.50 0.56 0.56 0.32 0.91 0.91 0.91 Delay/Veh: 30.6 26.5 28.2 28.3 28.3 28.9 10.1 10.1 7.9 21.8 21.8 21.8 AdjDel/Veh: 30.6 26.5 28.2 28.3 28.3 28.9 10.1 10.1 7.9 21.8 21.8 21.8 LOS by Move: C C C C C B B A C C C HCM2kAvgO: 3 2 5 5 5 6 5 5 2 22 22 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) ************************** Intersection #37 Bay St/Hyde St **************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.440 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 5.9 ************************* Street Name: Hyde St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Include Include Include Include Rights: Min. Green: 16 16 16 16 16 16 67 67 67 0 67 67 0 0 0 1 0 0 0 1! 0 0 0 1 0 1 0 0 0 2 1 0 -----| Volume Module: Base Vol: 0 36 10 2 69 19 2 720 32 0 1617 21 Initial Bse: 0 36 10 2 69 19 2 720 32 0 1617 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 Ω 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 36 10 2 69 19 2 720 32 0 1617 PHF Volume: 0 40 11 2 77 21 2 800 36 0 1797 23 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 40 11 2 77 21 2 800 36 0 1797 23 FinalVolume: 0 40 11 2 77 21 2 800 36 0 1797 23 -----| Saturation Flow Module: Adjustment: 1.00 0.97 0.97 0.97 0.97 0.90 0.90 0.90 1.00 0.91 0.91 Lanes: 0.00 0.78 0.22 0.02 0.77 0.21 0.01 1.91 0.08 0.00 2.96 0.04 Final Sat.: 0 1444 401 41 1410 388 9 3252 145 0 5110 66 _____|__| Capacity Analysis Module: Vol/Sat: 0.00 0.03 0.03 0.05 0.05 0.25 0.25 0.25 0.00 0.35 0.35 Crit Moves: **** Green/Cycle: 0.00 0.18 0.18 0.18 0.18 0.18 0.74 0.74 0.74 0.74 0.74 Volume/Cap: 0.00 0.16 0.16 0.31 0.31 0.31 0.33 0.33 0.33 0.00 0.47 0.47 Delay/Veh: 0.0 31.5 31.5 32.7 32.7 32.7 4.0 4.0 4.0 0.0 4.6 4.6 AdjDel/Veh: 0.0 31.5 31.5 32.7 32.7 32.7 4.0 4.0 4.0 0.0 4.6 4.6 LOS by Move: A C C C C A A A A A HCM2kAvgO: 0 1 1 3 3 3 4 4 4 0 7 7 ******************

Note: Queue reported is the number of cars per lane.

Ω

0

6 0 81

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Intersection #38 Alexander Ave/Bunker Rd													
Average Delay													
Street Name:			Bunke							der Ave			
Approach:					ıth Bo	nund	E					nund	
Movement:													
Control:													
Rights:													
		1 1	n n	0 (111011	1 n	1 /) U	n 1	0 (11101	0 0	
Growth Adj:					1.00				1.00		1.00		
Initial Bse:			0		302		41		187	0	-	0	
Added Vol:			0	0		0	0			0	0	0	
PasserByVol: Initial Fut:	0	0	0	0	0	0 26	0	0	0	0	0	0	
Initial Fut:	58	238	0	0	302	26	41	0	187	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
PHF Volume:	61	251	0	0	318	27	43	0	197	0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	61	251								0	0	0	
Critical Gap	Modu!	le:											
Critical Gp:	4.1	XXXX	XXXXX	XXXXX	XXXX	XXXXX	6.4	XXXX	6.2	XXXXX	XXXX	XXXXX	
FollowUpTim:													
Capacity Modu													
Cnflict Vol:													
Potent Cap.:													
Move Cap.:	1225	XXXX	XXXXX	XXXX	XXXX	XXXXX	391	XXXX	715	XXXX	XXXX	XXXXX	
Volume/Cap:													
Level Of Serv	vice N	4odul	∋:										
2Way95thQ:													
Control Del:											XXXX	XXXXX	
LOS by Move:											*		
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT	
Shared Cap.:	XXXX	xxxx	XXXXX	XXXX	xxxx	XXXXX	XXXX	xxxx	XXXXX	XXXX	XXXX	XXXXX	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX	
Shrd ConDel:												XXXXX	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	
ApproachDel:	XX	xxxxx		XX	xxxxx			12.6		X	xxxxx		

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Note: Queue reported is the number of cars per lane.

ApproachLOS:

В

34th America's Cup Races

Existing + AC Event 2013 WeWed Jun 29, 2011 08:58:54

Intersection #39 Alexander Ave/Ft.Baker (East) Rd

FinalVolume: 0 282 11 8 327 15

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative) *************************

Transportation Impact Analysis

************************* Average Delay (sec/veh): 1.4 Worst Case Level Of Service: B[10.8]

***** Street Name: Ft.Baker (East) Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound

L-T-R L-T-R L-T-R Movement: Uncontrolled Uncontrolled Stop Sign Stop Sign Control: Include Include Rights: Include Include 0 0 0 1 0 0 0 1! 0 0 0 0 0 0 1 0 0 1! 0 0 Lanes: Volume Module: Base Vol: 0 274 11 8 317 15 0 0 2 6 0 79

Initial Bse: 0 274 11 8 317 15 0 0 2 6 0 0 Added Vol: 0 0 0 0 0 0 Ω 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 274 11 8 317 15 0 0 2

PHF Volume: 0 282 11 8 327 15 0 0 2 6 0 81 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0

-----|----|-----| Critical Gap Module:

0 0 2

_____| Capacity Module:

Potent Cap.: xxxx xxxx xxxx 1279 xxxx xxxxx xxxx 712 391 392 756 Move Cap.: xxxx xxxx xxxxx 1279 xxxx xxxxx xxxx xxxx 712 388 390 756

Level Of Service Module:

2Way95thO: xxxx xxxx xxxxx 0.0 xxxx xxxxx xxxx 0.0 xxxx xxxx xxxx LOS by Move: * * * A * * * B * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT

Shared LOS: * * * * * * * * * B * ApproachDel: xxxxx xxxx xxxxx ApproachLOS: * * 10.1 10.8 * В В ___

Note: Queue reported is the number of cars per lane. *******************

Include

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************* Intersection #40 Bush St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.415 Loss Time (sec): 8 Average Delay (sec/veh): 24.9 Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Van Ness Ave Bush St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Prot+Permit Permitted Permitted Include Include Include Include Min. Green: 0 34 34 10 48 0 34 34 0 0 0 0 0 2 1 0 1 0 3 0 0 0 1 1 1 0 0 0 0 0 -----| Volume Module: Base Vol: 0 1650 117 227 2009 0 67 969 115 0 0 Initial Bse: 0 1650 117 227 2009 0 67 969 115 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 1 171 227 2009 0 0 0 0 0 0 0 0 0 0 0 67 969 115 0 PHF Volume: 0 1755 124 241 2137 0 71 1031 122 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1755 124 241 2137 0 71 1031 122 FinalVolume: 0 1755 124 241 2137 0 71 1031 122 0 0 -----| Saturation Flow Module: Adjustment: 1.00 0.90 0.90 0.95 0.91 1.00 0.89 0.89 0.89 1.00 1.00 1.00 Lanes: 0.00 2.80 0.20 1.00 3.00 0.00 0.17 2.53 0.30 0.00 0.00 0.00 Final Sat.: 0 4795 340 1805 5187 0 295 4263 506 0 0 _____|__| Capacity Analysis Module: Vol/Sat: 0.00 0.37 0.37 0.13 0.41 0.00 0.24 0.24 0.24 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.00 0.39 0.39 0.56 0.53 0.00 0.38 0.38 0.38 0.00 0.00 0.00 Volume/Cap: 0.00 0.93 0.93 0.72 0.77 0.00 0.64 0.64 0.64 0.00 0.00 0.00 Delay/Veh: 0.0 34.3 34.3 17.4 18.1 0.0 23.7 23.7 23.7 0.0 0.0 0.0 AdjDel/Veh: 0.0 34.3 34.3 17.4 18.1 0.0 23.7 23.7 23.7 0.0 0.0 0.0 LOS by Move: A C C B B A C C A A A HCM2kAvgO: 0 23 23 5 16 0 11 11 11 0 0 *******************

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Note: Queue reported is the number of cars per lane.

Existing + AC Event 2013 WeMon Jun 20, 2011 11:43:02 Page 43-1

Intersection #41 Pine St/Van Ness Ave

Include

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.508
Loss Time (sec): 8 Average Delay (sec/veh): 42.7
Optimal Cycle: 129 Level Of Service: D

************************* Street Name: Van Ness Ave Pine St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L}

Control: Prot+Permit Protected Permitted Permitted

Include

Include

Min. Green: 10 48 0 0 34 34 0 0 0 34 34 34 1 0 3 0 0 0 0 2 1 0 0 0 0 0 0 1 2 1 0 -----| Volume Module: Base Vol: 156 1562 0 0 2090 207 0 0 122 1487 420 Initial Bse: 156 1562 0 0 2090 207 0 0 122 1487 420 Added Vol: 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 156 1562 0 0 2090 207 0 Ω 0 0 0 0 0 0 0 0 122 1487 420 PHF Volume: 161 1610 0 0 2155 213 0 0 0 126 1533 433 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 161 1610 0 0 2155 213 0 0 0 126 1533 433 FinalVolume: 161 1610 0 0 2155 213 0 0 126 1533 433

Saturation Flow Module: Lanes: 1.00 3.00 0.00 0.00 2.73 0.27 0.00 0.00 0.00 0.24 2.93 0.83 Final Sat.: 1805 5187 0 0 4658 461 0 0 0 399 4867 1375 _____|__|

Capacity Analysis Module:

Rights:

Vol/Sat: 0.09 0.31 0.00 0.00 0.46 0.46 0.00 0.00 0.00 0.31 0.31 0.31 Crit Moves: **** **** Green/Cycle: 0.56 0.53 0.00 0.00 0.42 0.42 0.00 0.00 0.00 0.38 0.38 0.38 Volume/Cap: 0.57 0.58 0.00 0.00 1.10 1.10 0.00 0.00 0.00 0.83 0.83 0.83 Delay/Veh: 12.1 14.5 0.0 0.0 77.0 77.0 0.0 0.0 0.0 28.0 28.0 28.0 AdjDel/Veh: 12.1 14.5 0.0 0.0 77.0 77.0 0.0 0.0 28.0 28.0 28.0 LOS by Move: B B A A E E A A A C C C

HCM2kAvgO: 3 10 0 0 34 34 0 0 0 17 17 17

******************* Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) *************************

Intersection #42 Lombard St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.286
Loss Time (sec): 7 Average Delay (sec/veh): 117.2
Optimal Cycle: 180 Level Of Service: F ************************** Street Name: Van Ness Ave Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Permitted Permitted Include Ovl Include Include Min. Green: 56 56 56 0 27 27 27 27 56 27 27 27 3 0 0 1 0 0 0 2 0 1 0 1 0 0 2 0 0 1! 0 0 -----| Volume Module: Base Vol: 1246 265 34 0 557 163 136 112 1516 1 91 9 Initial Bse: 1246 265 34 0 557 163 136 112 1516 1 91 9 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 1246 265 34 0 557 163 136 112 1516 1 91 9 PHF Volume: 1340 285 37 0 599 175 146 120 1630 1 98 10 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 1340 285 37 0 599 175 146 120 1630 FinalVolume: 1340 285 37 0 599 175 146 120 1630 1 98 10 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 0.98 0.98 1.00 0.95 0.85 0.42 0.42 0.41 0.99 0.99 0.99 Lanes: 3.00 0.89 0.11 0.00 2.00 1.00 0.55 0.45 2.00 0.01 0.90 0.09 Final Sat.: 5253 1655 212 0 3610 1615 442 364 1563 19 1690 167 _____|__| Capacity Analysis Module: Vol/Sat: 0.26 0.17 0.17 0.00 0.17 0.11 0.33 0.33 1.04 0.06 0.06 0.06 Crit Moves: **** **** Green/Cycle: 0.48 0.71 0.71 0.00 0.23 0.23 0.23 0.23 0.71 0.23 0.23 0.23 Volume/Cap: 0.53 0.24 0.24 0.00 0.72 0.47 1.43 1.43 1.47 0.25 0.25 0.25 Delay/Veh: 21.6 6.1 6.1 0.0 44.6 39.8 267.6 268 233.4 37.0 37.0 37.0 AdjDel/Veh: 21.6 6.1 6.1 0.0 44.6 39.8 267.6 268 233.4 37.0 37.0 37.0 LOS by Move: C A A A D D F F F D D D HCM2kAvgO: 11 4 4 0 12 6 19 19 67 3 3 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Embarcadero / Howard St *************************

Cycle (sec): 100 Critical Vol./Cap.(X): 1.585
Loss Time (sec): 10 Average Delay (sec/veh): 148.3
Optimal Cycle: 180 Level Of Service: F ************************* Street Name: Embarcadero Howard St Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 15 45 0 10 40 40 30 0 30 0 0 1 0 3 0 0 1 0 2 0 1 1 0 1! 0 0 0 0 0 0 Volume Module: Base Vol: 121 1606 0 3 1058 570 494 0 536 0 0 Initial Bse: 121 1606 0 3 1058 570 494 0 536 0 0 0 0 0 Ω PHF Volume: 130 1727 0 3 1138 613 531 0 576 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 130 1727 0 3 1138 613 531 0 576 Saturation Flow Module: Adjustment: 0.88 0.56 1.00 0.88 0.88 0.43 0.80 1.00 0.73 1.00 1.00 1.00

Crit Moves: **** **** Green/Cycle: 0.15 0.47 0.00 0.10 0.42 0.42 0.33 0.00 0.33 0.00 0.00 0.00 Volume/Cap: 0.52 1.14 0.00 0.02 0.80 1.80 0.82 0.00 1.80 0.00 0.00 0.00

Delay/Veh: 41.0 97.0 0.0 40.6 28.7 399.9 35.0 0.0 399.5 0.0 0.0 0.0 AdjDel/Veh: 41.0 97.0 0.0 40.6 28.7 399.9 35.0 0.0 399.5 0.0 0.0 0.0 LOS by Move: D F A D C F D A F A A A HCM2kAvgO: 3 28 0 0 16 52 14 0 70 0 0 *******************

Lanes: 1.00 3.00 0.00 1.00 2.00 1.00 1.30 0.00 0.70 0.00 0.00 0.00

_____|__|

Vol/Sat: 0.08 0.54 0.00 0.00 0.34 0.76 0.27 0.00 0.59 0.00 0.00 0.00

Note: Queue reported is the number of cars per lane.

Capacity Analysis Module:

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Cycle (sec): 90 Critical Vol./Cap.(X): 1.077
Loss Time (sec): 10 Average Delay (sec/veh): 77.2
Optimal Cycle: 180 Level Of Service: E

Optimal Cycle	e:	1	80			Level	Of Se	y (se	:	•	,	7.2 E
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Embaro	cadero					Folso	om St		
Approach:	No	rth B	ound	Soi	ıth Bo	ound	Εċ	ast Bo	ound	We	est B	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	P1	rotec	 ted	P1	otect	 -ed	Sp	 lit Pl	 nase	Sp.	 lit Pl	hase
Rights:		Incl	ıde		Incli	ıde	op.	Incli	ıde	Op.	Incl	ıde
Rights: Min. Green:	12	49	49	32	32	32	31	31	31	0	0	0
Y+R:												
Lanes:	1 (0 2	0 0	0 () 1	1 0	2	0 0	0 1	0 (0 0	0 0
Volume Module			0	0	1 - 70	٥٦	202	0	200	0	0	0
Base Vol:					1.00				396 1.00		1.00	
Growth Adj:					1.00	1.00						
Initial Bse: Added Vol:				0	15 / 2	25	303	0	396 0	0	0	
PasserByVol:				0	0	0	0	0	0	0		0
Initial Fut:									396			
User Adj:					1.00			1.00			1.00	-
PHF Adj:					0.93			0.93			0.93	
								0.93				
PHF Volume: Reduct Vol:	100	1334	0	0	1000	27 0	0		0		-	-
Reduced Vol:									426			
PCE Adj:									1.00			
MLF Adi:								1.00			1.00	
FinalVolume:						27						0
Saturation F												
Sat/Lane:								1900			1900	
Adjustment:											1.00	
Lanes:						0.03		0.00			0.00	
Final Sat.:										0		
Capacity Ana												
Vol/Sat:				0.00	0.47	0.47	0.10	0.00	0.38	0.00	0.00	0.00
Crit Moves:			0.00	0.00			0.10	0.00	****	0.00	0.00	0.00
Green/Cycle:			0.00	0.00	0.41	0.41	0.34	0.00	0.34	0.00	0.00	0.00
Volume/Cap:				0.00					1.11		0.00	
Delay/Veh:						97.5			108.4			
User DelAdj:					1.00			1.00			1.00	
AdjDel/Veh:						97.5			108.4			
LOS by Move:						F						
HCM2kAvgQ:			0				3				0	0
******			*****	****	****	*****	****	****	*****	****	****	*****

Note: Queue reported is the number of cars per lane.

Scenario Report

Existing + AC Event 2013 Weekday PM Scenario:

Command:

Command: Default Command

Volume: Existing + AC Event 2013 Weekday PM

Geometry: Existing Weekday PM

Impact Fee: Default Impact Fee

Trip Generation: Default Trip Generation

Trip Distribution: Default Trip Distribution

Paths: Default Path Routes: Default Route

Configuration: Default Configuration

Existing + AC Event 2013 WeMon Jun 6, 2011 09:17:14 Page 2-1 34th America's Cup Races Transportation Impact Analysis Signal Warrant Summary Report Future Met Intersection Base Met [Del / Vol] [Del / Vol] # 30 Jackson St/Arguello Blvd ??? No

???

Yes

32 Lombard St/Lyon St

Peak Hour Volume Signal Warrant Report [Urban] ******************* Intersection #30 Jackson St/Arguello Blvd ******************** Future Volume Alternative: Peak Hour Warrant NOT Met -----|----|-----|------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____|__| Control: Stop Sign Stop Si Initial Vol: 0 345 46 43 556 0 0 0 0 85 0 49 -----| Major Street Volume:

Minor Approach Volume: SIGNAL WARRANT DISCLAIMER

Minor Approach Volume Threshold: 222

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing + AC Event 2013 WeMon Jun 6, 2011 09:17:14

34th America's Cup Races Transportation Impact Analysis

Peak Hour Volume Signal Warrant Report [Urban] ******************* Intersection #32 Lombard St/Lyon St ********************** Future Volume Alternative: Peak Hour Warrant Met -----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Lanes: Initial Vol: 146 22 7 22 56 200 164 515 94 5 340 19 Minor Approach Volume: 1137
Minor Approach Volume: 279 Minor Approach Volume Threshold: 185

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing plus AC34 2013 Project Conditions

Weekend Midday Peak Hour

Level Of Service Computation Report

Intersection #1 Beach St/Columbus Ave ************************** Average Delay (sec/veh): 0.0 Worst Case Level Of Service: [0.0] ************************ Street Name: Columbus Ave Beach St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Uncontrolled Uncontrolled Include Include Include Include Rights: 0 0 1! 0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 Lanes: Volume Module: Base Vol: 0 0 0 0 0 0 0 0 0 0 0 Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 0 0 0 Ω 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 0 0 0 0 0 0 0 0 0 0 -----|----|-----| Critical Gap Module: _____| Capacity Module: Cnflict Vol: 0 0 0 0 0 0 0 0 0 0 0 Potent Cap.: 0 0 0 0 0 0 0 0 0 0 0 Move Cap.: 1 1 1 1 1 1 1 1 1 1 1 1 1 Level Of Service Module: LOS by Move: Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared Cap.: 0 0 0 0 0 0 0 0 0 0 0 Shared LOS: ApproachDel: 0.0 0.0 0.0 ApproachLOS: ___

Note: Queue reported is the number of cars per lane.

North Point St

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 North Point St/Columbus Ave ************************* Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: 0.0

************************** Street Name: Columbus Ave North Point St North Bound South Bound East Bound West Bound Approach:

Control:	P	ermit	ted	P	ermit	ted	P	ermitt	ed	P	ermit	ted
Rights:		Inclu	.de		Inclu	ıde		Includ	de		Inclu	ıde
Min. Green:	28	28	28	28	28	28	53	53	53	53	53	53
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0	0	1 0	0 1	0	1 0	0 0	1! (0 0	0 1	0	1 0
Volume Module	:											
D 77 7	0	0	0	0	0	0	0	0	0	0	0	0

Movement: L - T - R L - T - R L - T - R

0 0 0 0 0 0 0 0 0 0 0 Base Vol: Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 Ω 0 Ω Ω Ω Ω 0 Ω 0 0 0 0 Ω Ω 0 0 Initial Fut: 0 0 0 0 0 0 0 0 0 0 PHF Volume: 0 0 0 0 0 0 0 0 0 0 0

Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0

-----|----|-----| Saturation Flow Module: Sat/Lane: 0 0 0 0 0 0 0 0 0 0 0 0 Final Sat.: 0 0 0 0 0 0 0 0 0 0 0

_____|__| Capacity Analysis Module:

Crit Moves:

HCM2kAvgO: 0 0 0 0 0 0 0 0 0 0 0 *******************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************** Intersection #3 North Point St/Stockton St

************************* Loss Time (sec): 8 Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: 0.0

Street Name: Stockton St

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Permitted Permitted Permitted Permitted Include Include Include Include Rights: Min. Green: 25 25 25 25 25 25 57 57 57 57 57

Volume Module: Base Vol: 0 0 0 0 0 0 0 0 0 0 0 Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 Ω Ω 0 0 Ω Ω 0 0 0 0 0 0 Ω

Initial Fut: 0 0 0 0 0 0 0 0 0 PHF Volume: 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0

-----| Saturation Flow Module: Sat/Lane: 0 0 0 0 0 0 0 0 0 0 0 0 Final Sat.: 0 0 0 0 0 0 0 0 0 0 0

_____|__| Capacity Analysis Module:

Crit Moves:

LOS by Move: HCM2kAvgO: 0 0 0 0 0 0 0 0 0 0 0

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*********** Intersection #4 Bay St/Columbus Ave ***************** Loss Time (sec): 9 Average Delay (sec/veh): 11.0 Optimal Cycle: 67 Level Of Service: B ************************** Street Name: Columbus Ave Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Permitted Permitted Ignore Include Include Include Min. Green: 8 31 31 0 19 19 47 47 47 50 50 50 2 0 0 1 0 0 1 0 1 0 0 1 1 0 1 0 1 0 1 -----| Volume Module: Base Vol: 298 0 69 1 0 0 0 962 33 32 159 0 Initial Bse: 298 0 69 1 0 0 0 962 33 32 159 0 Added Vol: 0
PasserByVol: 0 0 0 Ω 0 Λ 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 Ω Initial Fut: 298 0 69 1 0 0 0 962 33 32 159 0 PHF Volume: 304 0 0 1 0 0 982 34 33 162 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 304 0 0 1 0 0 982 34 33 162 0 FinalVolume: 304 0 0 1 0 0 982 34 33 162 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 1.00 1.00 0.90 0.95 0.95 0.95 0.95 0.85 0.75 0.75 0.95 Lanes: 2.00 1.00 0.00 1.00 0.00 1.00 0.00 2.00 1.00 0.34 1.66 0.00 _____|__|__| Capacity Analysis Module: Crit Moves: **** **** Green/Cycle: 0.22 0.00 0.00 0.22 0.00 0.00 0.00 0.68 0.68 0.68 0.68 0.00 Volume/Cap: 0.40 0.00 0.00 0.00 0.00 0.00 0.00 0.40 0.03 0.10 0.10 0.00 Delay/Veh: 30.5 0.0 0.0 27.5 0.0 0.0 0.0 6.4 4.7 4.9 4.9 0.0 AdjDel/Veh: 30.5 0.0 0.0 27.5 0.0 0.0 0.0 6.4 4.7 4.9 4.9 0.0 LOS by Move: C A A C A A A A A A A HCM2kAvgO: 4 0 0 0 0 0 0 6 0 1 1 0 *******************

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Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Street Name: Stockton St Bay St

Intersection #5 Bay St/Stockton St *****************

Cycle (sec): 90 Critical Vol./Cap.(X): 0.395 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 11.5 *************************

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 20 20 20 20 20 20 63 63 63 63 63 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 -----|

Volume Module: Base Vol: 128 0 59 0 0 0 0 625 153 29 66 0 Initial Bse: 128 0 59 0 0 0 0 625 153 29 66 Added Vol: 0 0 PasserByVol: 0 0 0 Ω Ω 0 0 0 Ω Ω 0 0 0 0 0 0 0 Ω Initial Fut: 128 0 59 0 0 0 0 625 153 PHF Volume: 132 0 61 0 0 0 644 158 30 68 Ω

FinalVolume: 132 0 61 0 0 0 644 158 30 68 0 -----| Saturation Flow Module:

Reduced Vol: 132 0 61 0 0 0 644 158 30 68

0 0 0 0 0 0

Adjustment: 0.75 1.00 0.75 1.00 1.00 1.00 0.95 0.92 0.92 0.74 0.74 0.95 Lanes: 0.68 0.00 0.32 0.00 1.00 0.00 0.00 1.61 0.39 0.61 1.39 0.00 Final Sat.: 977 0 450 0 1900 0 0 2813 689 854 1944 0 _____|__|__|

Capacity Analysis Module:

Reduct Vol: 0 0

Vol/Sat: 0.14 0.00 0.14 0.00 0.00 0.00 0.00 0.23 0.23 0.04 0.04 0.00 Crit Moves: **** Volume/Cap: 0.61 0.00 0.61 0.00 0.00 0.00 0.03 0.33 0.05 0.05 0.00 Delay/Veh: 39.9 0.0 39.9 0.0 0.0 0.0 5.6 5.6 4.2 4.2 0.0

AdjDel/Veh: 39.9 0.0 39.9 0.0 0.0 0.0 5.6 5.6 4.2 4.2 0.0 LOS by Move: D A D A A A A A A A A HCM2kAvgO: 6 0 6 0 0 0 5 5 0 0 *******************

Note: Queue reported is the number of cars per lane.

0

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0 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #6 Bav St/Kearnv St ****************** Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 9.9 ************************** Street Name: Kearny St Bay St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Permitted Permitted Permitted Permitted Include Include Include Include Min. Green: 20 20 20 20 20 20 61 61 61 61 61 61 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 1 0 1 0 -----| Volume Module: Base Vol: 96 0 14 0 0 0 0 568 122 0 0 Initial Bse: 96 0 14 0 0 0 0 568 122 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 Ω 0 0 0 14 Initial Fut: 96 0 0 0 0 568 122 0 PHF Volume: 99 0 14 0 0 0 586 126 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 99 0 14 0 0 0 586 126 FinalVolume: 99 0 14 0 0 0 0 586 126 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.73 1.00 0.73 1.00 1.00 1.00 0.95 0.92 0.92 0.95 0.95 Lanes: 0.87 0.00 0.13 0.00 1.00 0.00 0.00 1.65 0.35 0.00 0.00 2.00 _____| Capacity Analysis Module: Crit Moves: **** Delay/Veh: 33.0 0.0 33.0 0.0 0.0 0.0 0.0 6.2 6.2 0.0 0.0 0.0 AdjDel/Veh: 33.0 0.0 33.0 0.0 0.0 0.0 0.0 6.2 6.2 0.0 0.0 0.0 LOS by Move: C A C A A A A A A A A HCM2kAvgO: 3 0 3 0 0 0 0 4 4 0 0 0 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #7 Broadway St/Sansome St *************

Cycle (sec): 80 Critical Vol./Cap.(X): 0.868 Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 81 Level Of Service: 23.7

************************* Street Name: Sansome St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R \mathbb{L} Control: Split Phase Split Phase Permitted Permitted Rights: Include Include Include Include Min. Green: 27 27 27 0 0 0 44 44 0 0 44 44 -----| Volume Module: Base Vol: 367 564 18 0 0 0 308 837 0 0 359 38 Initial Bse: 367 564 18 0 0 0 308 837 0 0 359 Added Vol: 0 0 PasserByVol: 0 0 0 Ω Ω 0 0 0 0 0 0 0 0 0 0 0 0 Ω Initial Fut: 367 564 18 0 0 0 308 837 0 0 359 PHF Volume: 390 600 19 0 0 0 328 890 0 0 382 40 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 390 600 19 0 0 328 890 0 0 382 FinalVolume: 390 600 19 0 0 328 890 0 0 382 40 Saturation Flow Module: Adjustment: 0.89 0.89 0.89 1.00 1.00 1.00 0.68 0.68 1.00 1.00 0.94 0.94 Lanes: 0.77 1.19 0.04 0.00 0.00 0.00 0.54 1.46 0.00 0.00 1.81 0.19 Final Sat.: 1311 2015 64 0 0 0 693 1884 0 0 3219 341 _____|__| Capacity Analysis Module: Vol/Sat: 0.30 0.30 0.30 0.00 0.00 0.00 0.47 0.47 0.00 0.00 0.12 0.12 Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Delay/Veh: 33.3 33.3 33.3 0.0 0.0 0.0 20.9 20.9 0.0 0.0 9.2 9.2

Note: Queue reported is the number of cars per lane.

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AdjDel/Veh: 33.3 33.3 33.3 0.0 0.0 0.0 20.9 20.9 0.0 0.0 9.2 9.2

LOS by Move: C C C A A A C C A A A A

HCM2kAvgO: 16 16 16 0 0 0 17 17 0 0 3 3

0

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) *************

Intersection #8 Broadway St/Battery St ****************** Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 70 Level Of Service: 20.2 Level Of Service: ************************** Street Name: Battery St Broadway St Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R

------| Control: Split Phase Split Phase Permitted Permitted Include Include Include Include Min. Green: 0 0 0 44 44 44 17 17 17 17 17 17 0 0 0 0 0 0 1 0 1 0 0 0 1 1 0 0 1 1 0 0 -----| Volume Module: Base Vol: 0 0 0 15 402 157 0 696 161 34 240 0

Initial Bse: 0 0 0 15 402 157 0 696 161 34 240 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 Initial Fut: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω 0 Ω 15 402 157 0 696 161 34 240 0 PHF Volume: 0 0 0 16 432 169 0 748 173 37 258 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 16 432 169 0 748 173 37 258 0 FinalVolume: 0 0 0 16 432 169 0 748 173 37 258 0 -----|----|-----|

Saturation Flow Module: Adjustment: 1.00 1.00 1.00 0.91 0.91 0.91 1.00 0.92 0.92 0.69 0.69 1.00 Lanes: 0.00 0.00 0.00 0.05 1.40 0.55 0.00 1.62 0.38 0.25 1.75 0.00 Final Sat.: 0 0 0 90 2415 943 0 2850 659 327 2305 0 _____|__|__|

Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.18 0.18 0.18 0.00 0.26 0.26 0.11 0.11 0.00 Crit Moves: **** Green/Cycle: 0.00 0.00 0.00 0.55 0.55 0.55 0.00 0.34 0.34 0.34 0.34 0.00 Volume/Cap: 0.00 0.00 0.00 0.33 0.33 0.33 0.00 0.78 0.78 0.33 0.33 0.00 Delay/Veh: 0.0 0.0 0.0 10.0 10.0 10.0 0.0 27.2 27.2 20.0 20.0 0.0 AdjDel/Veh: 0.0 0.0 0.0 10.0 10.0 10.0 0.0 27.2 27.2 20.0 20.0 0.0 LOS by Move: A A A A A A A C C B B A HCM2kAvgO: 0 0 0 4 4 4 0 10 10 3 3 0 *******************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************** Intersection #9 Embarcadero/ Beach St/ Grant St

************************* 0.0

Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: ************************** Street Name: Embarcadero Beach St (EB)/Grant St (WB)
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Split Phase Split Phase Split Phase Split Phase Rights: Include Include Include Include Min. Green: 17 17 17 26 26 0 0 0 26 19 19 19 0 1 0 1 0 0 1 0 0 0 0 0 0 1 0 0 1! 0 0 -----| Volume Module: Base Vol: 0 0 0 0 0 0 0 0 0 0 0 Initial Bse: 0 0 0 0 0 0 0 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 Ω Ω 0 0 Ω Ω 0 0 0 0 0 0 0 Ω Initial Fut: 0 0 0 0 0 0 0 0 0 0 PHF Volume: 0 0 0 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 0 0 0 0 0 0 0 -----| Saturation Flow Module: Sat/Lane: 0 0 0 0 0 0 0 0 0 0 0 0 0 Final Sat.: 0 0 0 0 0 0 0 0 0 0 0 _____|__|__| Capacity Analysis Module: Crit Moves:

Note: Queue reported is the number of cars per lane.

LOS by Move:

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HCM2kAvgO: 0 0 0 0 0 0 0 0 0 0 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

*****						(Future *****					****	*****		
Intersection	#10 H	Embar	cadero/	North	n Poin	nt St /	Kearı	ny St						
Cycle (sec): 90 Loss Time (sec): 14 Optimal Cycle: 0														
Street Name:			Embarc						st (E					
Approach:	No	cth B									West Bound			
Movement:			- R	L -	- T	- R	L -	- T	- R	L -	- T	- R		
				 Permitted										
Rights:	1.1	Incl				ıde	Sp.		ıde					
Min. Green:	15	36			17		20		20	20		20		
Y+R:		4.0				4.0								
Lanes:			0 0			1 0			0 1		L 0			
Volume Module			1	1		1	1		1	1		1		
Base Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Growth Adj:				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Initial Bse:		0		0	0	0	0	0	0	0	0	0		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:		0	0	0	0	0	0	0	0	0	0	0		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	0.00		0.00		0.00	0.00		0.00	0.00		0.00	0.00		
PHF Volume:	0	0	0.00	0	0	0	0	0	0	0	0	0		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:		0	0	0	0	0	0	0	0	0	0	0		
	0.00				0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
MLF Adj:			0.00		0.00	0.00		0.00	0.00		0.00	0.00		
FinalVolume:				0	0	0	0	0	0	0	0	0		
							I							
Saturation Fl	Low Mo	odule	:											
Sat/Lane:	0	0	0	0	0	0	0	0	0	0	0	0		
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Lanes:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Final Sat.:				0	0	0		0	0	0	0	0		
Capacity Anal	Lysis	Modu.	le:											
Vol/Sat:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Crit Moves:														
Green/Cycle:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Volume/Cap:	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Delay/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
LOS by Move:														
HCM2kAvgQ:	0	0	0	0			0		0	0	0	0		
*****	****	****	*****	****	****	*****	****	****	*****	****	*****	*****		

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) *************************

Intersection #11 Embarcadero / Bay St

****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.248 Loss Time (sec): 7 Average Delay (sec/veh):
Optimal Cycle: 49 Level Of Service: 0.4 Level Of Service:

Approach: North Bound South Bound East Bound West Bound

Street Name: Embarcadero Bay St

Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Ovl Include Rights: Include Min. Green: 42 53 0 0 25 25 7 0 42 0 0 2 0 2 0 0 0 0 1 1 0 1 0 0 0 2 0 0 0 0 0 Volume Module:

Base Vol: 0 0 0 0 0 0 0 581 0 0 Initial Bse: 0 0 0 0 0 0 0 581 0 0 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 0 0 0 0 581 0 PHF Volume: 0 0 0 0 0 0 0 599 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 0 0 599 0 0

FinalVolume: 0 0 0 0 0 0 0 599 0 0 -----| Saturation Flow Module:

Adjustment: 0.97 0.95 1.00 1.00 0.95 0.95 1.00 1.00 0.69 1.00 1.00 1.00 Final Sat.: 3686 3610 0 0 3610 0 1900 0 2615 0 0 _____|

Capacity Analysis Module:

Crit Moves: LOS by Move: A A A A A A A A A A

HCM2kAvgO: 0 0 0 0 0 0 0 1 0 0 0 ******************

Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #12 Embarcadero / Chestnut St / Sansome St													
Cycle (sec):		9	90			Critic	al Vol	L./Car	o.(X):	0.208			
Loss Time (se	Loss Time (sec): 13							av (se	ec/veh)	:	10	0.9	
Optimal Cycle								rvice				В	
******										*****	****	*****	
Street Name: Embarcadero Chestnut St (EB) / Sansome (WB)													
Approach:	No	rth Bo				ound				, Juli			
Movement:						- R						- R	
Control:								Split Phase					
Rights:		Incl			Incl			Incl		Include			
Min. Green:	10		0	10		0	16		16	7		7	
Y+R:	4.0		4.0			-			4.0		4.0	4.0	
Lanes:						1 0			1 0			0 0	
	Volume Module:												
Base Vol:	0	0	0	0	504	77	83	0	16	0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Initial Bse:	0	0	0	0	504	77	83	0	16	0	0	0	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	0	0	0	504	77	83	0	16	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
PHF Volume:	0	0	0	0	548	84	90	0	17	0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	0	0	0	548	84	90	0	17	0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	0	0	0	0	548	84	90	0	17	0	0	0	
Saturation F	low Mo	odule	:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	1.00	0.95	1.00	1.00	0.89	0.89	0.89	0.95	0.89	1.00	1.00	1.00	
Lanes:	1.00	2.00	0.00	1.00	2.60	0.40	1.00	0.00	1.00	0.00	0.00	0.00	
Final Sat.:	1900	3610	0	1900	4410	674	1691	0	1691	0	0	0	
						I							
Capacity Ana													
Vol/Sat:	0.00	0.00	0.00	0.00	0.12	0.12		0.00	0.01	0.00	0.00	0.00	
Crit Moves:					****		****						
Green/Cycle:			0.00		0.60	0.60		0.00	0.26	0.00		0.00	
Volume/Cap:			0.00		0.21	0.21		0.00	0.04	0.00		0.00	
Delay/Veh:			0.0	0.0	8.3	8.3	26.4	0.0	25.1	0.0	0.0	0.0	
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
AdjDel/Veh:			0.0	0.0	8.3	8.3	26.4	0.0	25.1	0.0	0.0	0.0	
LOS by Move:				A			С	A		A	A	A	
HCM2kAvgQ:		0	0	0	-	3	2	0	0	0	0	0	

Note: Queue reported is the number of cars per lane.

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-----34th America's Cup Races

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Transportation Impact Analysis

		Level Of	Service	Computat	cion Rep	port	
2000	HCM	Operations	Method	(Future	Volume	Alternativ	7e)
*****	****	*****	*****	*****	*****	*******	:*****

******	****	*****	*****	*****	*****	*****	*****	****	*****	****	****	*****
Intersection	#13 I	Embaro	cadero/	Lomba	ard St	. / Bat	tery	St			++++	
Cycle (sec):	,	5	90			Critic	cai vo.	L./Ca	p.(X):		0.	156
Loss Time (so Optimal Cycle	ec):	1	. 1			Averag	ge Dela	ay (se	ec/veh)	:	1	7.6
Optimal Cycl	e:		73			Level	Of Se	rvice	:			В

Street Name:			Embaro	cadero			Lomba	rd St	(EB) /	Batte	ry S	t (WB)
Approach:	No	rth Bo	ound	Soi	ith Bo	ound	Εa	ast Bo	ound	We	st B	ound
Movement:									- R			
Control: Rights:	PI	roteci	.ea	P	roteci	_ea	Sp.	LIL PI	lase	Spi	IL PI	nase
		Inclu	ide		Incli	ıde		Incli	ıde		Incli	ude .
Min. Green:									21			
Y+R:									4.0			
Lanes:	1 () 1	1 0	1 () 2	0 1	0 :	1 0	0 1	0 1	0	0 0
Volume Module Base Vol:					222	100						
									130		_	-
Growth Adj:									1.00			1.00
Initial Bse:						189			130	9	4	-
Added Vol: PasserByVol:	0	0	0	0	0	0	0	0	0	0	-	0
				0						0	-	0
Initial Fut:	0	0	0	0	332	189	0	4	130	9	4	0
User Adj:									1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	0	0	0	0	361	205	0	4	141	10	4	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	0	361	205	0	4	141	10	4	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	0	0	0	361	205	0	4	141	10	4	0
Saturation F.	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.95	1.00	0.95	0.85	1.00	1.00	0.85	0.97	0.97	1.00
Lanes:												
Final Sat.:	1900	3610	0	1900	3610	1615	0	1900	1615	1272	565	0
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.00	0.00	0.00	0.00	0.10	0.13	0.00	0.00	0.09	0.01	0.01	0.00
Crit Moves:						****		****		****		
Green/Cycle:	0.00	0.00	0.00	0.00	0.39	0.39	0.00	0.56	0.56	0.07	0.07	0.00
Volume/Cap:	0.00	0.00	0.00	0.00	0.26	0.33	0.00	0.00	0.16	0.12	0.12	0.00
Delay/Veh:							0.0	8.7	9.6	39.9	39.9	0.0
User DelAdj:							1.00					1.00
AdiDel/Veh:												
LOS by Move:												
HCM2kAvqQ:				0							0	0
******												0

Note: Queue reported is the number of cars per lane.

Intersection #14 Embarcadero / Green St / Davis St

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.127
Loss Time (sec): 14 Average Delay (sec/veh): 9.3
Optimal Cycle: 79 Level Of Service: A Street Name: Embarcadero-Davis St Green St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 8 44 0 7 41 0 24 0 24 24 24 0 1 0 2 0 0 1 0 1 1 0 0 0 0 0 1 0 1 0 0 0 -----| Base Vol: 0 0 0 0 331 15 0 0 7 0 0 Initial Bse: 0 0 0 0 331 15 0 0 7 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 Ω Ω 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 331 0 7 0 15 0 PHF Volume: 0 0 0 0 352 16 0 0 7 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 352 16 0 0 7 0 0 FinalVolume: 0 0 0 0 352 16 0 0 7 0 0 -----| Saturation Flow Module:

Crit Moves: ****

Capacity Analysis Module:

Delay/Veh: 0.0 0.0 0.0 0.0 9.0 9.0 0.0 0.0 24.3 0.0 0.0 0.0 AdjDel/Veh: 0.0 0.0 0.0 0.0 9.0 9.0 0.0 0.0 24.3 0.0 0.0 0.0

Adjustment: 1.00 0.95 1.00 1.00 0.94 0.94 1.00 1.00 0.87 1.00 1.00 1.00

Lanes: 1.00 2.00 0.00 1.00 1.91 0.09 0.00 0.00 1.00 0.00 1.00 0.00

_____|__|__|

LOS by Move: A A A A A A A A A A A HCM2kAvgO: 0 0 0 0 2 2 0 0 0 0 0 ******************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************** Intersection #15 Embarcadero / Broadway St / Drumm St

******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.302
Loss Time (sec): 17 Average Delay (sec/veh): 19.4
Optimal Cycle: 74 Level Of Service: B

Street Name: Embarcadero-Drumm St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 16 37 0 7 28 28 29 0 29 0 0 0 2 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 Volume Module: Base Vol: 0 0 0 0 303 30 0 0 245 0 0

Initial Bse: 0 0 0 0 303 30 0 0 245 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 303 0 0 0 0 0 0 0 0 0 0 0 0 245 30 0 0 PHF Volume: 0 0 0 0 303 30 0 0 245 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 303 30 0 0 245

Saturation Flow Module: Adjustment: 0.97 0.95 1.00 1.00 0.94 0.94 1.00 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 1.00 1.82 0.18 1.00 0.00 1.00 0.00 0.00 0.00 _____|__|__|

FinalVolume: 0 0 0 0 303 30 0 0 245 0 0

Capacity Analysis Module: Vol/Sat: 0.00 0.00 0.00 0.00 0.09 0.09 0.00 0.15 0.00 0.00 0.00

Crit Moves: **** Delay/Veh: 0.0 0.0 0.0 0.0 23.7 23.7 0.0 0.0 13.5 0.0 0.0 0.0 AdjDel/Veh: 0.0 0.0 0.0 0.0 23.7 23.7 0.0 0.0 13.5 0.0 0.0 0.0 LOS by Move: A A A A C C A A B A A A

HCM2kAvgO: 0 0 0 0 4 4 0 0 4 0 0

Note: Queue reported is the number of cars per lane.

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #16 Embarcadero / Washington St ****************** Loss Time (sec): 17 Average Delay (sec/veh):
Optimal Cycle: 78 Level Of Service: 16.4 Level Of Service: ************************** Street Name: Embarcadero Washington St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 12 30 0 10 28 0 33 0 33 0 0 2 0 3 0 0 1 0 2 1 0 1 0 0 0 1 0 0 0 0 -----| Base Vol: 0 0 0 0 439 108 0 0 125 0 0 Initial Bse: 0 0 0 0 439 108 0 0 125 0 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 Ω Ω 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 439 108 0 0 125 0 PHF Volume: 0 0 0 0 439 108 0 0 125 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 439 108 0 0 125 FinalVolume: 0 0 0 0 439 108 0 0 125 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 0.97 0.91 1.00 1.00 0.88 0.88 1.00 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 3.00 0.00 1.00 2.41 0.59 1.00 0.00 1.00 0.00 0.00 0.00 _____|__|__| Capacity Analysis Module: Crit Moves: **** Green/Cycle: 0.00 0.00 0.00 0.00 0.44 0.44 0.00 0.00 0.37 0.00 0.00 0.00 Delay/Veh: 0.0 0.0 0.0 0.0 15.6 15.6 0.0 0.0 19.7 0.0 0.0 0.0 AdjDel/Veh: 0.0 0.0 0.0 0.0 15.6 15.6 0.0 0.0 19.7 0.0 0.0 0.0 LOS by Move: A A A A B B A A B A A HCM2kAvgO: 0 0 0 0 3 3 0 0 2 0 0

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #17 Embarcadero / Mission St

************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.182
Loss Time (sec): 10 Average Delay (sec/veh): 0.7
Optimal Cycle: 62 Level Of Service: A

Approach: North Bound South Bound East Bound West Bound

Street Name: Embarcadero MIssion St

Movement: L - T - R L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Split Phase Rights: Include Include Include Include Min. Green: 0 52 0 52 52 52 28 0 28 0 0 0 0 0 3 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 -----| Volume Module:

Base Vol: 0 0 0 0 376 188 0 0 0 0 0 Initial Bse: 0 0 0 0 376 188 0 0 0 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 0 376 188 0 0 0 0 0 Ω 0 0 0 0

PHF Volume: 0 0 0 0 404 202 0 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 0 0 0 404 202 0 0 0 0 0 FinalVolume: 0 0 0 0 404 202 0 0 0 0 0

Saturation Flow Module: Adjustment: 1.00 0.62 1.00 1.00 0.59 0.86 1.00 1.00 1.00 1.00 1.00 1.00 Lanes: 0.00 3.00 0.00 0.00 2.24 0.76 0.00 1.00 0.00 0.00 0.00 0.00

Final Sat.: 0 3527 0 0 2501 1250 0 1900 0 0 0 _____|__|

Capacity Analysis Module: *** Crit Moves:

LOS by Move: A A A A A A A A A A HCM2kAvgO: 0 0 0 0 1 1 0 0 0 0 0

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #18 Embarcadero / Harrison St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.594
Loss Time (sec): 10 Average Delay (sec/veh): 15.0
Optimal Cycle: 100 Level Of Service: B ************************** Street Name: Embarcadero Harrison St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Split Phase Split Phase Include Include Include Include Min. Green: 0 63 0 0 63 63 27 27 27 0 0 0 0 0 2 0 0 0 0 1 1 0 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 0 354 0 0 581 383 259 0 74 0 0 Initial Bse: 0 354 0 0 581 383 259 0 74 0 0 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 Ω 0 0 0 0 0 0 0 Ω 0 0 0 Initial Fut: 0 354 0 581 383 259 0 74 0 PHF Volume: 0 381 0 0 625 412 278 0 80 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 381 0 0 625 412 278 0 80 FinalVolume: 0 381 0 0 625 412 278 0 80 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 1.00 0.67 1.00 1.00 0.63 0.89 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 0.00 2.00 0.00 0.00 1.36 0.64 1.00 0.00 1.00 0.00 0.00 0.00 Final Sat.: 0 2559 0 0 1641 1082 1805 0 1615 0 0 _____|__| Capacity Analysis Module: Vol/Sat: 0.00 0.15 0.00 0.00 0.38 0.38 0.15 0.00 0.05 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.00 0.24 0.00 0.00 0.60 0.60 0.57 0.00 0.18 0.00 0.00 0.00 Delay/Veh: 0.0 8.1 0.0 0.0 11.7 11.7 33.1 0.0 28.2 0.0 0.0 0.0 AdjDel/Veh: 0.0 8.1 0.0 0.0 11.7 11.7 33.1 0.0 28.2 0.0 0.0 0.0 LOS by Move: A A A A B B C A C A A A HCM2kAvgO: 0 3 0 0 9 12 8 0 2 0 0 *******************

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Embarcadero / Bryant St

******************* Cycle (sec): 100 Critical Vol./Cap.(X): 0.507
Loss Time (sec): 10 Average Delay (sec/veh): 27.9
Optimal Cycle: 95 Level Of Service: C *************************

Street Name: Embarcadero Bryant St
Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted Rights: Include Include Include Include Min. Green: 21 41 41 16 36 36 28 28 28 28 28 28 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0

-----| Volume Module: Base Vol: 335 241 14 31 545 76 107 5 85 4 11 5 Initial Bse: 335 241 14 31 545 76 107 5 85 4 11 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 Ο 0 0 0 Initial Fut: 335 241 14 31 545 76 107 5

PHF Volume: 364 262 15 34 592 83 116 5 92 4 12 5 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 364 262 15 34 592 83 116 5 92 4 12 5 FinalVolume: 364 262 15 34 592 83 116 5 92 4 12 5

Saturation Flow Module: Adjustment: 0.95 0.94 0.94 0.95 0.95 0.85 0.71 0.71 0.85 0.93 0.93 Lanes: 1.00 1.89 0.11 1.00 2.00 1.00 0.96 0.04 1.00 0.20 0.55 0.25 Final Sat.: 1805 3385 197 1805 3610 1615 1285 60 1615 354 973 442

_____|__| Capacity Analysis Module:

Vol/Sat: 0.20 0.08 0.08 0.02 0.16 0.05 0.09 0.09 0.06 0.01 0.01 0.01 Crit Moves: **** **** Green/Cycle: 0.26 0.45 0.45 0.17 0.36 0.36 0.28 0.28 0.28 0.28 0.28 0.28 Volume/Cap: 0.78 0.17 0.17 0.11 0.46 0.14 0.32 0.32 0.20 0.04 0.04 0.04

Delay/Veh: 42.3 16.7 16.7 34.9 24.8 21.7 29.0 29.0 27.7 26.3 26.3 26.3 AdjDel/Veh: 42.3 16.7 16.7 34.9 24.8 21.7 29.0 29.0 27.7 26.3 26.3 26.3 LOS by Move: D B B C C C C C C C HCM2kAvgO: 11 3 3 1 7 2 3 3 2 0 0 0 **************

Note: Queue reported is the number of cars per lane.

Intersection #20 Embarcadero / Brannan St

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.423
Loss Time (sec): 11 Average Delay (sec/veh): 34.0
Optimal Cycle: 90 Level Of Service: C ************************** Street Name: Brannan St Embarcadero Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Split Phase Split Phase Include Include Include Include Min. Green: 10 37 0 14 37 37 28 28 28 28 28 28 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 -----| Volume Module: Base Vol: 273 498 0 2 514 116 93 0 43 0 0 Initial Bse: 273 498 0 2 514 116 93 0 43 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 Ω 0 0 0 0 0 0 0 0 0 2 514 116 Initial Fut: 273 498 93 0 43 0 PHF Volume: 294 535 0 2 553 125 100 0 46 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 294 535 0 2 553 125 100 0 46 0 0 FinalVolume: 294 535 0 2 553 125 100 0 46 0 0 -----|

Capacity Analysis Module:

Saturation Flow Module:

Vol/Sat: 0.16 0.15 0.00 0.00 0.15 0.08 0.06 0.00 0.03 0.00 0.00 0.00 Crit Moves: **** ****

Adjustment: 0.95 0.95 1.00 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00

_____|__|

Green/Cycle: 0.16 0.41 0.00 0.16 0.41 0.41 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 1.05 0.36 0.00 0.01 0.37 0.19 0.18 0.00 0.09 0.00 0.00 0.00 Delay/Veh: 104.1 18.5 0.0 32.1 18.6 17.0 22.8 0.0 22.1 0.0 0.0 0.0 AdjDel/Veh: 104.1 18.5 0.0 32.1 18.6 17.0 22.8 0.0 22.1 0.0 0.0 0.0 LOS by Move: F B A C B B C A C A A A HCM2kAvgO: 11 5 0 0 5 2 2 0 1 0 0

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************** Intersection #21 Folsom St/Fremont St

****************** Cycle (sec): 75 Critical Vol./Cap.(X): 0.966
Loss Time (sec): 16 Average Delay (sec/veh): 230.8
Optimal Cycle: 121 Level Of Service: F

************************* Street Name: Fremont St (I-80 WB Off Ramp) Folsom St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Rights: Include Include Include Include Min. Green: 19 19 19 19 19 19 21 21 0 21 21 0 1 0 1 0 1 1 0 1! 0 0 0 1 1 1 0 0 0 0 1 0 -----| Volume Module: Base Vol: 0 108 28 752 38 0 75 379 9 0 15 269 Initial Bse: 0 108 28 752 38 0 75 379 9 0 15 Added Vol: 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω Initial Fut: 0 108 28 752 38 75 379 9 0 PHF Volume: 0 111 29 775 39 0 77 391 9 0 15 277 0 0 0 0 0 0 0 0 Reduct Vol: 0 0 0 Reduced Vol: 0 111 29 775 39 0 77 391 9 0 15 277 FinalVolume: 0 111 29 775 39 0 77 391 9 0 15 277 Saturation Flow Module: Adjustment: 0.95 0.92 0.92 0.44 0.63 1.00 0.90 0.90 0.90 1.00 0.87 0.87 Lanes: 0.00 1.59 0.41 1.93 0.07 0.00 0.49 2.45 0.06 0.00 0.05 0.95 Final Sat.: 0 2778 720 1621 79 0 831 4199 100 0 88 1569 _____|__| Capacity Analysis Module: Vol/Sat: 0.00 0.04 0.04 0.48 0.50 0.00 0.09 0.09 0.09 0.00 0.18 0.18 Crit Moves: **** **** **** Green/Cycle: 0.00 0.25 0.25 0.25 0.00 0.27 0.27 0.27 0.00 0.27 0.27

Note: Queue reported is the number of cars per lane.

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Volume/Cap: 0.00 0.16 0.16 1.94 2.01 0.00 0.34 0.34 0.34 0.00 0.65 0.65

Delay/Veh: 0.0 22.8 22.8 460.0 491 0.0 22.6 22.6 22.6 0.0 28.0 28.0

AdjDel/Veh: 0.0 22.8 22.8 460.0 491 0.0 22.6 22.6 22.6 0.0 28.0 28.0

LOS by Move: A C C F F A C C C A C C

HCM2kAvgO: 0 1 1 33 51 0 4 4 4 0 7 7

34th America's Cup Races

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #22 King St/3rd St ************************************												
Cycle (sec):		10	0.0			Critic	al Vo	l./Cap	o.(X):		0.0	644
Loss Time (se	ec):		10			Averag	re Dela	av (se	ec/veh)	:	3	9.6
Optimal Cycle			9.5			Level	Of Se	rvice				D
*****											****	*****
Street Name:			3rd	St					King	St		
Approach:	Noi	rth Bo	ound	Soi	ıth Bo	ound	Ea	ast Bo	_	We	est B	ound
Movement:			- R						- R			- R
Control:									ed			
Rights:	- 1	Ovl		- 1	Incl	ıde		Incl	ıde		Incl	
Min. Green:	26	2.6	26	0		0	20		46	13		39
Y+R:	4.0		4.0	-	4.0	-			4.0	4.0		4.0
Lanes:			1 1			0 0			1 0) 1	
Volume Module			'	'		'	'		'	'		'
Base Vol:	50	822	204	0	0	0	1273	621	29	287	356	56
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		822	204	0	0	0	1273	621	29	287	356	56
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		822	204	0	0	0	1273		29	287	356	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:			0.96		0.96	0.96		0.96	0.96		0.96	0.96
PHF Volume:	52	856	213	0	0	0	1326	647	30	299	371	58
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	856	213	0	0	0	1326	647	30	299	371	58
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		856	213	0	0	0	1326		30	299		58
Saturation Fi									'	'		'
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.88	0.88	1.00	1.00	1.00	0.92	0.94	0.94	0.92	0.56	0.93
Lanes:	0.23	3.77	1.00	0.00	0.00	0.00	3.00	1.91	0.09	2.00	1.83	0.17
Final Sat.:	383	6293	1669	0	0	0	5253	3425	160	3502	1940	305
				1			1			1		
Capacity Anal	lvsis	Modu:	le:									
Vol/Sat:	0.14	0.14	0.13	0.00	0.00	0.00	0.25	0.19	0.19	0.09	0.19	0.19
Crit Moves:		****					****				****	
Green/Cycle:	0.26	0.26	0.40	0.00	0.00	0.00	0.25	0.50	0.50	0.14	0.39	0.39
Volume/Cap:			0.32		0.00	0.00		0.38	0.38		0.49	0.49
Delay/Veh:			20.6	0.0	0.0	0.0		15.6	15.6		23.4	23.4
User DelAdi:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:			20.6	0.0	0.0	0.0		15.6	15.6		23.4	23.4
LOS by Move:		C	20.0 C	0.0 A		Α.	01.0 E	В	В	D D	23.1 C	23.1 C
HCM2kAvqQ:		6	5	0		0	20	7	7	4	5	8
*******				-	-	-				-	-	_

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

******			peratio								****	*****
Intersection	#23 H	King :	St/4th	St								
Cycle (sec):			00			Critic	cal Vo.	I./Cap	o.(X):		0.5	
Loss Time (se	,		13 25			Averag	ge Del	ay (se	ec/veh)	:	7	5.0
Optimal Cycle		1:	25			Level						E
*****		****			****	*****	****	****			****	*****
Street Name:			King							St		
Approach:			ound							W		
Movement:			- R									
Control:			ted						ted	Ρ.	rotect	
Rights:		Incl			Incl			Incl			Incl	
Min. Green:		28							42			45
Y+R:		4.0							4.0			
			0 1									1 0
77-1 M-d-1												
Volume Module		2.5	2.2	C 1	102	1.01	0.1	1026	0	4.1	200	E.C.
Base Vol:	24		23					1836		41		
Growth Adj:												
Initial Bse:						161						
Added Vol:	0			0			0	0		0		
PasserByVol:			0	0	0					0		0
Initial Fut:						161						
User Adj:					1.00			1.00			1.00	
PHF Adj:						0.96					0.96	0.96
PHF Volume:		36		67		168		1913		43		58
Reduct Vol:					0			0			0	
Reduced Vol:				67				1913		43		58
PCE Adj:									1.00			
MLF Adj:		1.00				1.00				1.00		
${\tt FinalVolume:}$												
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:												
Adjustment:												
Lanes:												0.31
Final Sat.:						2295			0			
Capacity Ana				0 0 4	0 0 0		0 05				0 11	0 11
Vol/Sat:		0.03	0.01	0.04			0.05				0.11	0.11
Crit Moves:					****			****		****		
Green/Cycle:												
Volume/Cap:								1.10		0.21		
Delay/Veh:						40.8						
User DelAdj:									1.00			
AdjDel/Veh:									0.0			
LOS by Move:												
HCM2kAvgQ:				2			_			_	-	
*****	****	* * * * *	*****	****	****	*****	****	****	* * * * * * *	****	****	*****

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

			perat10 *****								****	*****
Intersection	**************************************											
Cycle (sec):	,	11	10			Critic	ai vo.	ı./Cap).(X):		0	3 /8
Loss Time (s	ec):		10			Averag	le DeTa	ay (se	ec/veh)	:	Τ;	9.0
Optimal Cycle	e:	11	00			Level	Of Sei	rvice:				В
Street Name:				St					16th			
Approach:					uth Bo	ound	Εa	ast Bo			est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:												
Rights:												
Min. Green:						31						34
Y+R:	4.0	4.0	4.0			1 0						
Lanes:												
Volume Modul												
Base Vol:		809	0	4	283	52	120	0	105	0	0	0
Growth Adj:					1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:			0	4		52	120	0	105	0	0	0
Added Vol:	0		0	0	0	0	0	0	0	0	0	0
PasserByVol:			0	0		0	0	-	0	0	0	0
Initial Fut:			0	4		52	120	0	105	0	0	0
User Adi:		1.00	1.00	-	1.00	1.00		1.00	1.00	-	1.00	1.00
	0.90		0.90		0.90	0.90		0.90	0.90	0.90		0.90
PHF Volume:			0	4		58	133	0	117	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	114	899	0	4	314	58	133	0	117	0	0	0
PCE Adj:			1.00	1.00	1.00			1.00		1.00	1.00	1.00
MLF Adj:			1.00		1.00			1.00		1.00	1.00	1.00
FinalVolume:			0	4	314	58	133	0	117		0	0
							1			1		
Saturation F	low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.95	0.95	0.21	0.93	0.93	0.77	0.95	0.81	0.95	0.95	0.95
Lanes:	2.00	2.00	0.00	1.00	1.69	0.31	1.00	1.00	1.00	0.00	0.00	2.00
Final Sat.:	3502	3610	0	393	2980	547	1461	1805	1534	0	0	3610
Capacity Ana												
Vol/Sat:			0.00	0.01	0.11	0.11		0.00	0.08	0.00	0.00	0.00
Crit Moves:							****					
Green/Cycle:			0.00			0.31		0.00	0.34		0.00	
Volume/Cap:			0.00		0.34			0.00	0.22	0.00		0.00
Delay/Veh:			0.0		26.8			0.0	23.8	0.0	0.0	0.0
User DelAdj:			1.00		1.00			1.00	1.00	1.00		1.00
AdjDel/Veh:					26.8		24.3		23.8	0.0	0.0	0.0
LOS by Move:					C					A		A
HCM2kAvgQ:		8		0	_	4	3		3	0	0	0
*****	****	****	*****	****	****	*****	****	*****	*****	*****	****	*****

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Existing + AC Event 2013 WeTue Jun 28, 2011 08:53:28

Transportation Impact Analysis

Level Of Service Computation Report

******	******	********	*****
Cycle (sec):	100	Critical Vol./Cap.(X):	1.193
Loss Time (sec):	12	Average Delay (sec/veh):	23.1
Optimal Cycle:	97	Level Of Service:	C
*****	* * * * * * * * * * * * * * * * * * *	********	*****

Optimal Cycle	e:	. + + + +	97 ******	++++		Level	Of Se	rvice	:	+++++		C
Street Name:												
Approach:												
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L ·	- T	- R
Control:	Pei	rmit+E	rot	Pei	rmıt+ı	rot		ermi	ttea		Permi	ttea
Rights: Min. Green:		Inci	ıae		Incli	ıae	_	Incli	lae		Incli	uae
Min. Green:	15	35	35	10	30	30	5	40	40	30	30	30
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 () 1	1 0	1 () 1	1 0	1 (0 1	1 0	0 :	1 0	1 0
Volume Module										1		
Base Vol:	133	717	8	2	270	75	159	128	130	10	126	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	133	717	8	2	270	75	159	128	130	10	126	8
Initial Bse: Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133	717	8	2	270	75	159	128	130	10	126	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adi:	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
PHF Volume:	146	788	9	2	297	82	175	141	143	11	138	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PHF Volume: Reduct Vol: Reduced Vol:	146	788	9	2	297	82	175	141	143	11	138	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:												
FinalVolume:												
Saturation F												
Sat/Lane:												
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Ana. Vol/Sat:				0 01	0 11	0 11	0 14	0 00	0 00	0 05	0 05	0.05
Voi/Sat: Crit Moves:							0.14	0.08	****	0.05	0.05	0.05
Green/Cycle:							0 40	0 40		0 40	0 40	0.40
Volume/Cap:												
Volume/Cap: Delay/Veh:												
ретау/ven:	10.3	25.3	25.3	23.8	∠6.I	∠6.1	∠⊥.4	19./	19.8	18.9	18.9	18.9

Note: Queue reported is the number of cars per lane.

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3 11 11 0 4 4 4 3 3 2 2 2

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

******************* Intersection #26 Cesar Chavez St/Illinois St ************************* Loss Time (sec): 9 Average Delay (sec/veh): 12.3
Optimal Cycle: 100 Level Of Service: B ************************* Street Name: Illinois St Cesar Chavez St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Rights: Include Include Include Include Include Min. Green: 20 20 20 20 20 20 71 71 71 71 71 71 1 0 0 1 0 1 0 0 1 0 0 1 0 1 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 29 27 3 9 17 11 27 67 45 3 105 7 Initial Bse: 29 27 3 9 17 11 27 67 45 3 105 7 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Ω Initial Fut: 29 27 3 9 17 11 45 3 105 27 67 PHF Volume: 37 35 4 12 22 14 35 86 58 4 135 9 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 37 35 4 12 22 14 35 86 58 4 135 9 FinalVolume: 37 35 4 12 22 14 35 86 58 4 135 9 -----| Saturation Flow Module: Adjustment: 0.74 0.99 0.99 0.74 0.94 0.94 0.80 0.80 0.80 0.99 0.99 0.99 Lanes: 1.00 0.90 0.10 1.00 0.61 0.39 0.39 0.96 0.65 0.03 0.91 0.06 Final Sat.: 1404 1684 187 1400 1086 702 592 1468 986 49 1712 114 _____| Capacity Analysis Module: Vol/Sat: 0.03 0.02 0.02 0.01 0.02 0.02 0.06 0.06 0.06 0.08 0.08 0.08 Crit Moves: **** Green/Cycle: 0.20 0.20 0.20 0.20 0.20 0.20 0.71 0.71 0.71 0.71 0.71 0.71 Delay/Veh: 33.1 32.8 32.8 32.3 32.8 32.8 4.5 4.5 4.6 4.6 4.6 AdjDel/Veh: 33.1 32.8 32.8 32.8 32.8 4.5 4.5 4.6 4.6 4.6 LOS by Move: C C C C C A A A A A HCM2kAvgO: 1 1 1 0 1 1 1 1 1 1 1 1 *******************

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Note: Queue reported is the number of cars per lane.

Existing + AC Event 2013 WeTue Jun 28, 2011 08:53:28

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

*****	****	***	*****	****	****	*****	****	****	*****	****	****	*****
Intersection	#27 L	inco	ln Blvd	/25th	St/E	l Camin	o del	Mar				
Cycle (sec): Loss Time (sec) Optimal Cycle	e:		1 0 0	****		Critic Averag Level	ge Dela Of Sei	ay (se	ec/veh)).4 F
Street Name: Approach: Movement:	Nor L -	th Bo	25th ound - R	St Sou L	uth Bo	ound - R	El Car Ea L -	mino d ast Bo - T	del Mar ound - R	(eb) We	/ Lir est Bo - T	ncoln ound - R
Control: Rights: Min. Green: Lanes:	0 0 0 0	op Si Inclu 0 1!	ign ude 0	0 0	top Si Inclu 0 1!	ign ude 0 0 0	. St 0 0 (iop Si Inclu 0 1!	ign ude 0	0 1 0	op Si Inclu 0	ign ide 0 1 0
Volume Module												
Base Vol: Growth Adj: Initial Bse: Added Vol:		22 1.00 22 0	1.00	25 1.00 25 0	1.00		1 1.00 1 0	239 1.00 239 0		368 1.00 368 0	166 1.00 166 0	13 1.00 13 0
PasserByVol: Initial Fut: User Adj:	20 1.00		0 728 1.00	0 25 1.00	0 16 1.00	0 2 1.00	0 1 1.00	0 239 1.00	0 27 1.00	0 368 1.00	0 166 1.00	0 13 1.00
PHF Adj: PHF Volume: Reduct Vol: Reduced Vol:		22 0	0.98 743 0 743	0.98 26 0 26	0.98 16 0	2	1	0	28	0.98 376 0 376	0.98 169 0	0.98 13 0
PCE Adj: MLF Adj: FinalVolume:	1.00 1.00 20	1.00 1.00 22	1.00 1.00 743	1.00 1.00 26	1.00 1.00 16	1.00 1.00 2	1.00 1.00	1.00 1.00 244	1.00 1.00 28	1.00 1.00 376	1.00 1.00 169	1.00 1.00 13
						I						
Adjustment: Lanes: Final Sat.:	1.00 0.03 16	1.00 0.03 18	1.00 0.94 595	0.58 247	0.37 158	0.05	0.01	0.89 459	0.10 52	1.00	0.93 475	0.07 37
Capacity Ana. Vol/Sat:	lysis 1.25	Modu:	le:			0.10		0.53		0.79		0.36
Crit Moves: Delay/Veh: Delay Adj: AdjDel/Veh:	144.3	144		11.7 1.00	11.7 1.00 11.7	1.00	1.00	17.4 1.00 17.4	1.00	33.1 1.00 33.1	1.00	13.5 1.00 13.5
LOS by Move: ApproachDel: Delay Adj: ApprAdjDel:	F 1	F 44.3 1.00 44.3	F			В		C 17.4 1.00 17.4	С		13.5 B 26.7 1.00 26.7	13.5 B
LOS by Appr: AllWayAvgQ: *******	23.7		23.7		0.1	0.1		C 1.1 ****	1.1		0.5	0.5

Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

*****	****	****	*****	*****	****	:****	****	****	*****	****	****	*****
Intersection ********					****	*****	****	****	*****	****	****	*****
Cvcle (sec):		10	0.0			Critic	al Vol	L./Car	o.(X):		0.	823
Loss Time (se	٠ ()		0						ec/veh)			0.6
Optimal Cycle			0			Level				•	2.	C C
*******		****		*****	*****					*****	****	
Street Name:			14th						Lake			
Approach:	Mor	rth Bo		Sou	ı+h Do	nund	Εa	at D		We	oct D	ound
Movement:			– R						– R		- Т	
Control:												
	31	op ع. Inclı	ign	51	.op 51	1 -	51	.op 5. Inclı	LGII	51	.op م Incl	-d-
Rights:					Inclu							
Min. Green:	0		0	0	-	0	0	-	0	0	-	0
Lanes:	0 (0 0		1!		0 1		
 Volume Module												
Base Vol:	2	457	10	3	0	0	16	175	6	68	151	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	457	10	3	0	0	16	175	6	68	151	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	457	10	3	0	0	16	175	6	68	151	14
	1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Adi:	0.86		0.86	0.86		0.86		0.86	0.86	0.86		0.86
PHF Volume:	2	531	12	3	0	0.00	19	203	7	79	176	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	, ,	0	0
Reduced Vol:	2	531	12	3	0	0	19	203	7	79	176	16
PCE Adi:		1.00	1.00	1.00	-	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:	2		1.00	3	0.00	0	1.00	203	7	79	176	1.00
								203		19	1/0	I
Saturation Fl												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.01	0.97	0.02	1.00	0.00	0.00	0.08	0.89	0.03	0.31	0.69	1.00
Final Sat.:	3	645	14	486	0	0	46	501	17	163	362	599
Capacity Anal	-			0 01			0 41	0 41	0 41	0 40	0 40	0 02
Vol/Sat:	0.82	0.82	0.82	0.UI	XXXX	XXXX	0.41	0.41	0.41	0.49	0.49	0.03
Crit Moves:	07.0		07.0		0 0	0 0	10 7		10 7	14 7		0 5
Delay/Veh:	27.0		27.0	9.6	0.0	0.0		12.7	12.7		14.7	8.5
	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		27.0	27.0	9.6	0.0	0.0		12.7	12.7		14.7	8.5
LOS by Move:	D	D	D	A		*	В	В	В	В	В	A
ApproachDel:		27.0			9.6			12.7			14.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		27.0			9.6			12.7			14.4	
LOS by Appr:		D			A			В			В	
AllWayAvgQ:				0.0		0.0		0.6	0.6		0.8	0.0
******	****	****	*****	*****	*****	*****	*****	****	*****	*****	****	*****

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Level Of Service Computation Report

Transportation Impact Analysis

2000 HCM 4-Way Stop Method (Future Volume Alternative) ************************* Intersection #29 Lake St/15th Ave *************************

 Cycle (sec):
 100
 Critical Vol./Cap.(X):
 0.255

 Loss Time (sec):
 0
 Average Delay (sec/veh):
 9.0

 Optimal Cycle:
 0
 Level Of Service:
 A

 Street Name: 15th Ave Lake St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 3 3 15 19 132 11 1 160 2 10 134 6 Initial Bse: 3 3 15 19 132 11 1 160 2 10 134 6 Added Vol: 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 Initial Fut: 3 3 15 19 132 0 0 0 0 0 0 0 0 0 11 1 160 0 0 0 2 10 134 PHF Volume: 3 3 17 22 150 13 1 182 2 11 152 7 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 3 3 17 22 150 13 1 182 2 11 152 7 FinalVolume: 3 3 17 22 150 13 1 182 2 11 152 7 -----| Saturation Flow Module: Lanes: 0.14 0.14 0.72 0.12 0.81 0.07 0.01 0.98 0.01 0.07 0.89 0.04 Final Sat.: 104 104 519 85 589 49 5 741 9 50 672 30 -----| Capacity Analysis Module: Vol/Sat: 0.03 0.03 0.03 0.25 0.25 0.25 0.25 0.25 0.25 0.25 0.23 0.23 Crit Moves: **** **** Delay/Veh: 7.7 7.7 7.7 9.2 9.2 9.2 9.0 9.0 9.0 8.9 8.9 8.9 AdjDel/Veh: 7.7 7.7 7.7 9.2 9.2 9.2 9.0 9.0 9.0 8.9 8.9 8.9 LOS by Move: A A A A A A A A A A 9.0 ApproachDel: 7.7 9.2 9.0
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 7.7 9.2 9.0
LOS by Appr: A A A A 8.9 1.00 8.9 A

Note: Queue reported is the number of cars per lane.

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Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

**************** Intersection #30 Jackson St/Arguello Blvd ************************ Loss Time (sec): 0 Average Delay (sec/veh):
Optimal Cycle: 0 Level Of Service: 71.9 ************************* Street Name: Arguello Blvd Jackson St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Stop Sign Stop Sign Stop Sign Stop Sign Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 1! 0 0 -----| Volume Module: Base Vol: 0 795 27 30 475 0 0 0 39 0 49 Initial Bse: 0 795 27 30 475 Added Vol: 0 0 0 0 0 0 0 0 0 39 0 Added Vol: 0 0 0 0 PasserByVol: 0 0 0 0 Initial Fut: 0 795 27 0 0 0 0 0 0 0 0 Ω 0 Ω 0 0 30 475 0 0 0 0 39 PHF Volume: 0 846 29 32 505 0 0 0 0 41 0 52 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 846 29 32 505 0 0 0 0 41 0 52 FinalVolume: 0 846 29 32 505 0 0 0 0 41 0 52 _____|__| Saturation Flow Module: Lanes: 0.00 0.97 0.03 0.06 0.94 0.00 0.00 0.00 0.00 0.44 0.00 0.56 Final Sat.: 0 723 25 42 669 0 0 0 245 0 308 ------| Capacity Analysis Module: Vol/Sat: xxxx 1.17 1.17 0.76 0.76 xxxx xxxx xxxx xxxx xxxx 0.17 xxxx 0.17 Crit Moves: **** **** **** Delay/Veh: 0.0 109 109.2 21.8 21.8 0.0 0.0 0.0 0.0 10.5 0.0 10.5 AdjDel/Veh: 0.0 109 109.2 21.8 21.8 0.0 0.0 0.0 10.5 0.0 10.5 LOS by Move: * F F C C * * * * B * B ApproachDel: 109.2 21.8 10.5 XXXXXX 1.00 Delay Adj: 1.00 XXXXX 1.00 ApprAdjDel: 109.2 LOS by Appr: F 21.8 xxxxxx C * 10.5 AllWayAvgo: 21.1 21.1 21.1 2.7 2.7 2.7 0.0 0.0 0.0 0.2 0.2 0.2 **********************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

**************** Intersection #31 Pacific Ave/Presidio Blvd ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 1.074
Loss Time (sec): 0 Average Delay (sec/veh): 51.1
Optimal Cycle: 0 Level Of Service: F Street Name: Presidio Blvd Pacific Ave
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Volume Module: Base Vol: 3 801 11 14 468 18 10 1 1 15 11 31 Initial Bse: 3 801 11 14 468 18 10 1 1 15 11 0 0 0 0 0 0 0 0 0 0 10 18 1 1 PHF Volume: 3 809 11 14 473 18 10 1 1 15 11 31 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 3 809 11 14 473 18 10 1 1 15 11 31 FinalVolume: 3 809 11 14 473 18 10 1 1 15 11 31 _____| Saturation Flow Module: Lanes: 0.01 0.98 0.01 0.03 0.93 0.04 0.84 0.08 0.08 0.26 0.19 0.55 Final Sat.: 3 754 10 20 680 26 411 41 41 143 105 296 Capacity Analysis Module: Vol/Sat: 1.07 1.07 1.07 0.70 0.70 0.70 0.02 0.02 0.02 0.11 0.11 0.11 Crit Moves: *** *** *** AdjDel/Veh: 74.7 74.7 74.7 18.3 18.3 18.3 10.0 10.0 10.0 10.0 10.0 10.0 LOS by Move: F F F C C C A A A A A ApproachDel: 74.7 18.3
Delay Adj: 1.00 1.00
ApprAdjDel: 74.7 18.3
LOS by Appr: F C 10.0 10.0 1.00 1.00 1.00 18.3 10.0 A 10.0 A AllWayAvgO: 14.3 14.3 14.3 2.1 2.1 0.0 0.0 0.0 0.1 0.1 0.1 ****************************

Note: Queue reported is the number of cars per lane.

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection	#32 Lombard	l St/Lyon	St
******	*****	*****	******

Critical Vol./Cap.(X): 3.182 Cvcle (sec): Loss Time (sec): 0 Average Delay (sec/veh): 672.9 Optimal Cycle: 0 Level Of Service: F **************************

Street Name: Lyon St Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Stop Sign Stop Sign Stop Sign Stop Sign Include Include Rights: Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0

Volume Module	∋:											
Base Vol:	88	29	21	27	34	159	186	591	91	8	1771	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	88	29	21	27	34	159	186	591	91	8	1771	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	29	21	27	34	159	186	591	91	8	1771	18
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	89	29	21	27	34	161	188	597	92	8	1789	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	89	29	21	27	34	161	188	597	92	8	1789	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	89	29	21	27	34	161	188	597	92	8	1789	18

r riidr voramo.	0.5			_ ,	9 2		100	0,5		0	-,00		
Saturation F	low Mo	odule:											
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Lanes:	0.64	0.21	0.15	0.12	0.15	0.73	0.21	0.69	0.10	0.01	0.98	0.01	
Final Sat.:	283	93	68	61	77	359	123	389	60	3	562	6	
	I		1	1		1	1		1	1		I	

										1	
Capacity A	nalysis	Modul	e:								
Vol/Sat:	0.31	0.31	0.31	0.45	0.45	0.45	1.53	1.53	1.53	3.18 3.18	3.18
Crit Moves	:	****		***				****		****	

Crit Moves:	***	**	* *		***		****	
Delay/Veh:	14.3 14.3	14.3 15	.6 15.6	15.6 2	266.2 266	266.2	1000 1000	1000
Delay Adj:	1.00 1.00	1.00 1.0	00 1.00	1.00	1.00 1.00	1.00	1.00 1.00	1.00
AdjDel/Veh:	14.3 14.3	14.3 15	.6 15.6	15.6 2	266.2 266	266.2	1000 1000	1000
LOS by Move:	в в	В	C C	С	F F	F	F F	F
ApproachDel:	14.3		15.6		266.2		1000.4	
Delay Adj:	1.00		1.00		1.00		1.00	
ApprAdjDel:	14.3		15.6		266.2		1000.4	
LOS by Appr:	В		C		F		F	
AllWayAvgQ:	0.4 0.4	0.4 0	.8 0.8	0.8	40.8 40.8	40.8	157 157	157.0

Note: Queue reported is the number of cars per lane.

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Existing + AC Event 2013 WeTue Jun 28, 2011 08:53:29

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

Street Name: Divisadero St Lombard St

2000 HCM Operations Method (Future Volume Alternative) **************************

Intersection #33 Lombard St/Divisadero St

************************* Loss Time (sec): 9 Average Delay (sec/veh):
Optimal Cycle: 180 Level Of Service: 608.6 *************************

Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Permitted Permitted Permitted Rights: Include Include Include Include Min. Green: 27 27 27 27 27 54 54 54 54 54 54

1 0 0 1 0 1 0 0 1 0 0 1 1 1 0 0 1 1 1 0 -----| Volume Module: Base Vol: 186 638 39 177 252 74 161 3072 177 22 3674 478

Initial Bse: 186 638 39 177 252 74 161 3072 177 22 3674 478 Added Vol: 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 186 638 39 177 252 74 161 3072 177 22 3674 478 PHF Volume: 190 651 40 181 257 76 164 3135 181 22 3749 488 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 190 651 40 181 257 76 164 3135 181 22 3749 488

FinalVolume: 190 651 40 181 257 76 164 3135 181 22 3749 488 Saturation Flow Module:

Adjustment: 0.35 0.99 0.99 0.15 0.97 0.97 0.57 0.40 0.57 0.69 0.48 0.69 Lanes: 1.00 0.94 0.06 1.00 0.77 0.23 0.10 2.79 0.11 0.01 2.74 0.25 Final Sat.: 673 1774 108 281 1419 417 111 2117 122 15 2499 325 _____|__|

Capacity Analysis Module: Vol/Sat: 0.28 0.37 0.37 0.64 0.18 0.18 1.48 1.48 1.48 1.50 1.50 1.50 *** Crit Moves:

Volume/Cap: 0.94 1.22 1.22 2.14 0.60 0.60 2.47 2.47 2.47 2.50 2.50 2.50 Delay/Veh: 77.3 147 147.0 582.3 28.8 28.8 680.7 681 680.7 694.7 695 694.7 AdjDel/Veh: 77.3 147 147.0 582.3 28.8 28.8 680.7 681 680.7 694.7 695 694.7 LOS by Move: E F F F C C F F F F F HCM2kAvqQ: 9 37 37 18 9 9 177 125 177 215 150 215 *******************

Note: Queue reported is the number of cars per lane.

Intersection #34 Lombard St/Fillmore St

Saturation Flow Module:

East Bound West Bound

....

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Cycle (sec):									ol./Cap.(X): 2.127			
Loss Time (se	ec):		9			Averag	e Dela	ay (se	ec/veh)	:	60	4.9
Optimal Cycle	e:	18	30			Level	Of Se	rvice	:			F
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Fillmo	re St					Lomba	rd St		
Approach:	No	rth Bo	ound	Soi	ith Bo	ound	Εĕ	ast Bo	ound	We	est B	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	I	Permit	ted	I	Permit	tted]	Permi†	tted	I	ermi [†]	tted
Rights:		Inclu	ıde		Incl	ıde		Incl	ıde		Incl	ude
Min. Green:	27	27	27	27	27	27	54	54	54	54	54	54
Y+R:									4.0		4.0	4.0
Lanes:			1 0			1 0			1 0			1 0
Volume Module												
Base Vol:							157					454
Growth Adj:				1.00		1.00		1.00			1.00	
Initial Bse:			25	129		296	157				3695	
Added Vol:				0		0	0	-	-	-	-	-
PasserByVol:				0		0	-	-	-	0	-	-
Initial Fut:				129			157					454
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	
PHF Adj:			0.95		0.95	0.95		0.95	0.95		0.95	
PHF Volume:				136		312	165				3889	478
Reduct Vol:			-	0	-	0	0	0		0	0	-
Reduced Vol:			26			312	165					478
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

FinalVolume: 64 639 26 136 301 312 165 3136 59 13 3889 478

-----|

Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Laguna St

North Bound South Bound

Approach:

******	*****	***********	*****
Cycle (sec):	90	Critical Vol./Cap.(X):	1.425
Loss Time (sec):	10	Average Delay (sec/veh):	184.1
Optimal Cycle:	180	Level Of Service:	F
******	*****	**********	*****

Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
Control:	P:	rotect	ed	Pi	rotect	ted	1	Permi	tted	1	Permi	tted
Rights:		Inclu	ıde		Incl	ıde		Incl	ude		Ovl	
Min. Green:	18	18	18	34	34	34	28	28	28	28	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0	0 1!	0 0	1 (1!	0 0	0	2	0 1	0	1 0	0 2
Volume Module	e:											
Base Vol:	649	0	522	0	0	0	0	250	229	230	607	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	649	0	522	0	0	0	0	250	229	230	607	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	649	0	522	0	0	0	0	250	229	230	607	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	676	0	544	0	0	0	0	260	239	240	632	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	676	0	544	0	0	0	0	260	239	240	632	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

FinalVolume: 676 0 544 0 0 0 0 260 239 240 632 0

-----|

Capacity Analysis Module:

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

T												
The control of the												
Cycle (sec):			90			Critic	al Vo	l./Car	o.(X):		1.3	214
Loss Time (se	ec):		10			Averag	re Dela	av (se	ec/veh)	:	23	5.4
Optimal Cvcle	e:	1	80			Level	Of Set	rvice	:			F
******	~ • * * * * * * :	****	*****	****	****	*****	****	* * * * *	• * * * * * * *	*****	****	*****
Street Name:			Van Ne	ss Ave	=				Bay	St		
Approach:	No	rth B	ound	Soi	ıth Bo	ound	Εa	ast Bo	ound	W∈	est B	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:		Permi	tted		Permit	ted	. 1	Permit	tted	E	ermi	tted
Rights:		Incl	ude		Incl	ıde		Incl	ıde		Incl	ude
Rights: Min. Green:	23	23	23	23	23	23	57	57	57	57	57	57
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Y+R: Lanes:	1 (0 2	1 0	0 :	1 1	1 0	0	1 1	0 1	0 1	. 0	1 0
				1			1					
Volume Module												
Base Vol:	343	0	837	0	0	0	0	764	77	322	267	0
Growth Adj:					1.00			1.00				
Initial Bse:			837	0	0	0		764		322	267	
Added Vol:			0	0	0	0	0	0		0	0	0
PasserBvVol:	0	0	0	0	0	0	0	0			0	0
Initial Fut:	343	0	837	0	0		0	764			267	0
User Adj:						1.00		1.00			1.00	1.00
PHF Adj:					0.92			0.92		0.92		0.92
PHF Volume:				0	0				84			0
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
Reduced Vol:					0				84			0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:						1.00		1.00				
FinalVolume:									84			0
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.77	0.91	0.77	0.91	0.91	0.91	0.48	0.48	0.43	0.50	0.50	0.95
Lanes:												
Final Sat.:				1			1		1			
Capacity Ana												
Vol/Sat:				0.00	0.00	0.00	0.00	0.46	0.10	0.37	0.30	0.00
Crit Moves:								***				
Green/Cycle:				0.00	0.00	0.00	0.00	0.63	0.63	0.63	0.63	0.00
Volume/Cap:				0.00					0.16		0.48	
Delay/Veh:				0.0					6.9		8.9	
User DelAdj:				1.00					1.00	1.00		
AdiDel/Veh:										10.3		
LOS by Move: HCM2kAvgQ:	16	0	100	0	0	0	0	9	A 1	6		
******	****	****	*****	****								

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Existing + AC Event 2013 WeTue Jun 28, 2011 08:53:29

Level Of Service Computation Report

*****						(Future					*****	*****
Intersection	#37 I	Bay St	/Hyde	St								
Cycle (sec):	,	3	, 0			Critic Averag Level	ai vo.	ı./ca).(X):		0.3	
Loss Time (se	ec):		/			Averag	e Dela	ay (se	ec/veh)	:		0.8
Optimal Cycle	e:	9	90			Level	Of Sei	rvice	:			A
*****	****	*****			****	*****	****	****	*****	****	*****	*****
Street Name:			Hyde	St					Bay	st		
Approach:	Noi	rth Bo	und	Soi	ath Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:												
Control:												
COULTOI:	1	- I	. tea		- TIMIL	ted ide	1	rermir.	, tea	1	ermin	tea
		16	16			16			67			67
Y+R:		4.0				4.0				4.0		
Lanes:	0 (1!	0 0	0 (1!	0 0	0 (0 1	1 0	0 (2	1 0
Volume Module												
Base Vol:		0	63	0	0	0	0	1478	27	0	586	0
					1.00	1.00		1.00			1.00	1.00
Growth Adj:								1478				
Initial Bse:			63	0	0	0			27	0	586	0
Added Vol:		0	0	0	0	0	-	0	0	0	0	0
PasserByVol:			0	0	0	0	0		0	0	0	0
Initial Fut:	7	0	63	0	0	0	0	1478	27	0	586	0
User Adj:				1.00	1.00	1.00		1.00			1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	7	0	66	0	0	0	0	1540	28	0	610	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	7	0	66	0	0	0	0	1540	28	0	610	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				0		0	0		28		610	0
Saturation F												
Sat/Lane:						1900			1900		1900	
Adjustment:	0.86	1.00	0.86	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.91	0.91
Lanes:	0.10	0.00							0.04		3.00	0.00
Final Sat.:				0		0						0
Capacity Ana												
Vol/Sat:		0.00	0.04	0.00	0.00	0.00	0.00	0.44	0.44	0.00	0.12	0.00
Crit Moves:								***				
Green/Cycle:	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.74	0.74	0.00	0.74	0.00
Volume/Cap:	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.59	0.59	0.00	0.16	0.00
Delay/Veh:	32.3	0.0	32.3	0.0	0.0	0.0	0.0	5.5	5.5	0.0	3.4	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.3	0.0	32.3	0.0	0.0	0.0	0.0	5.5	5.5	0.0	3.4	0.0
LOS by Move:			С	A	A	A	A	A	A	A	А	A
HCM2kAvqQ:	2		2	0		0	0		10	0	2	0
*****						-				-	_	-

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized Method (Future Volume Alternative)

************************* Intersection #38 Alexander Ave/Bunker Rd *************************** Average Delay (sec/veh): 12.0 Worst Case Level Of Service: D[34.9] ******************* Street Name: Bunker Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R L - T - R Movement: -----| Uncontrolled Uncontrolled Stop Sign Control: Stop Sign Include Include Include Rights: Include 1 0 1 0 0 0 0 0 1 0 1 0 0 0 1 0 0 0 0 Lanes: Volume Module: Base Vol: 246 520 0 0 249 57 108 0 362 0 0 0 Initial Bse: 246 520 0 0 249 57 108 0 362 0 0 0 Ω Ω Added Vol: 0 0 Ω 0 0 0 Ω Ω Ω Ω 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 Initial Fut: 246 520 0 0 249 57 108 0 362 0 0 PHF Volume: 262 553 0 0 265 61 115 0 385 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 265 61 115 0 385 FinalVolume: 262 553 0 0 -----| Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 xxxx 6.2 xxxxx xxxx xxxxx _____| Capacity Module: Cnflict Vol: 326 xxxx xxxxx xxxx xxxx xxxx 1372 xxxx 295 xxxx xxxx xxxxx Potent Cap.: 1246 xxxx xxxxx xxxx xxxx xxxx 163 xxxx 749 xxxx xxxx xxxxx Move Cap.: 1246 xxxx xxxxx xxxx xxxx xxxx 136 xxxx 749 xxxx xxxx xxxxx Volume/Cap: 0.21 xxxx xxxx xxxx xxxx xxxx 0.84 xxxx 0.51 xxxx xxxx xxxx Level Of Service Module: 2Way95thQ: 0.8 xxxx xxxxx xxxx xxxx xxxx 5.4 xxxx 3.0 xxxx xxxx xxxxx Control Del: 8.7 xxxx xxxxx xxxxx xxxx xxxxx 102.3 xxxx 14.8 xxxxx xxxx xxxxx LOS by Move: A * * * * F * B * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT ApproachLOS: * xxxxx xxxx 34.9
ApproachLOS: * D XXXXXX ____ Note: Queue reported is the number of cars per lane.

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34th America's Cup Races

Existing + AC Event 2013 WeWed Jun 29, 2011 08:59:52

Level Of Service Computation Report

2000 HCM Unsignalized Method (Future Volume Alternative)

Transportation Impact Analysis

************************ Intersection #39 Alexander Ave/Ft.Baker (East) Rd ************************** Average Delay (sec/veh): 3.6 Worst Case Level Of Service: C[23.6] ******************* Street Name: Ft.Baker (East) Rd Alexander Ave Approach: North Bound South Bound East Bound West Bound $L \ - \ T \ - \ R \quad L \ - \ T \ - \ R \quad L \ - \ T \ - \ R$ Movement: Uncontrolled Uncontrolled Stop Sign Control: Stop Sign Include Include Include Rights: Include $\begin{smallmatrix} 0 & 0 & 1! & 0 & 0 & 0 & 1! & 0 & 0 & 0 & 0 & 0 & 1 & 0 & 0 & 1! & 0 & 0 \\ \end{smallmatrix}$ Lanes: Volume Module: Base Vol: 2 326 298 14 241 151 0 0 13 51 0 122 Initial Bse: 2 326 298 14 241 151 0 0 13 51 0 122 Added Vol: 0 Ω Ο 0 0 0 0 0 Ω Ω Ω 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 2 326 298 14 241 151 0 0 13 51 PHF Volume: 2 375 343 16 277 174 0 0 15 59 0 140 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 2 375 343 16 277 174 0 0 15 59 0 140 -----| Critical Gap Module: _____| Capacity Module: Cnflict Vol: 451 xxxx xxxxx 717 xxxx xxxxx xxxx xxxx 364 954 1033 546 Potent Cap.: 1121 xxxx xxxxx 893 xxxx xxxxx xxxx 686 240 234 541 Move Cap.: 1121 xxxx xxxxx 893 xxxx xxxxx xxxx 686 232 230 541 Level Of Service Module: Control Del: 8.2 xxxx xxxxx 9.1 xxxx xxxxx xxxx xxxx 10.4 xxxxx xxxx xxxx LOS by Move: A * * A * * * B * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: * * * * * * * * * * * C * ApproachDel: xxxxx xxxxx xxxxx ApproachLOS: * * 10.4 23.6 В C ___ Note: Queue reported is the number of cars per lane.

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************** Intersection #40 Bush St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.779
Loss Time (sec): 8 Average Delay (sec/veh): 145.6
Optimal Cycle: 180 Level Of Service: F ************************** Street Name: Van Ness Ave Bush St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Prot+Permit Permitted Permitted Include Include Include Include Min. Green: 0 34 34 10 48 0 34 34 0 0 0 0 0 2 1 0 1 0 3 0 0 0 1 1 1 0 0 0 0 0 -----| Volume Module: Base Vol: 0 2958 117 382 2376 0 65 773 88 0 0 Initial Bse: 0 2958 117 382 2376 0 65 773 88 0 0 0 0 0 0 0 0 0 0 Ω 0 0 0 65 773 88 0 PHF Volume: 0 3049 121 394 2449 0 67 797 91 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 0 3049 121 394 2449 0 67 797 91 0 0 FinalVolume: 0 3049 121 394 2449 0 67 797 91 0 0 -----|----|-----| Saturation Flow Module: Adjustment: 1.00 0.90 0.90 0.24 0.91 1.00 0.89 0.89 0.89 1.00 1.00 1.00 Lanes: 0.00 2.89 0.11 1.00 3.00 0.00 0.21 2.50 0.29 0.00 0.00 0.00 Final Sat.: 0 4960 196 463 5187 0 355 4227 481 0 0 _____|__| Capacity Analysis Module: Vol/Sat: 0.00 0.61 0.61 0.85 0.47 0.00 0.19 0.19 0.19 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.00 0.39 0.39 0.58 0.53 0.00 0.38 0.38 0.38 0.00 0.00 0.00 Volume/Cap: 0.00 1.56 1.56 1.16 0.89 0.00 0.50 0.50 0.50 0.00 0.00 0.00 Delay/Veh: 0.0 283 282.6 110.3 22.4 0.0 21.7 21.7 21.7 0.0 0.0 0.0 AdjDel/Veh: 0.0 283 282.6 110.3 22.4 0.0 21.7 21.7 21.7 0.0 0.0 0.0 LOS by Move: A F F F C A C C A A A HCM2kAvgO: 0 84 84 17 20 0 8 8 8 0 0 0 ******************* Note: Queue reported is the number of cars per lane.

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34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************** Intersection #41 Pine St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.621
Loss Time (sec): 8 Average Delay (sec/veh): 111.9
Optimal Cycle: 90 Level Of Service: F ************************* Street Name: Van Ness Ave Pine St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Prot+Permit Protected Permitted Permitted Rights: Include Include Include Include Min. Green: 10 48 0 0 34 34 0 0 0 34 34 34 1 0 3 0 0 0 0 2 1 0 0 0 0 0 0 1 2 1 0 -----| Volume Module: Base Vol: 96 2951 0 0 2621 146 0 0 0 86 689 289 Initial Bse: 96 2951 0 0 2621 146 0 0 0 86 689 289 Added Vol: 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 Initial Fut: 96 2951 0 0 2621 146 0 Ω 0 0 0 0 0 0 0 0 0 PHF Volume: 101 3106 0 0 2759 154 0 0 0 91 725 304 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 101 3106 0 0 2759 154 0 0 0 91 725 304 Saturation Flow Module: Lanes: 1.00 3.00 0.00 0.00 2.84 0.16 0.00 0.00 0.00 0.33 2.67 1.00 Final Sat.: 1805 5187 0 0 4874 272 0 0 0 545 4369 1638 _____|__| Capacity Analysis Module: Vol/Sat: 0.06 0.60 0.00 0.00 0.57 0.57 0.00 0.00 0.00 0.17 0.17 0.19 Crit Moves: **** Green/Cycle: 0.56 0.53 0.00 0.00 0.42 0.42 0.00 0.00 0.00 0.38 0.38 0.38 Volume/Cap: 0.36 1.12 0.00 0.00 1.34 1.34 0.00 0.00 0.00 0.44 0.44 0.49 Delay/Veh: 9.9 81.7 0.0 0.0 182 182.5 0.0 0.0 0.0 21.0 21.0 21.6

Note: Queue reported is the number of cars per lane.

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HCM2kAvgO: 1 45 0 0 63 63 0 0 6 6

AdjDel/Veh: 9.9 81.7 0.0 0.0 182 182.5 0.0 0.0 0.0 21.0 21.0 21.6

LOS by Move: A F A A F F A A A C C C

34th America's Cup Races

Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

************************* Intersection #42 Lombard St/Van Ness Ave ************************* Cycle (sec): 90 Critical Vol./Cap.(X): 1.837
Loss Time (sec): 7 Average Delay (sec/veh): 310.1
Optimal Cycle: 180 Level Of Service: F ************************** Street Name: Van Ness Ave Lombard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R ------| Control: Protected Protected Permitted Permitted Include Ovl Include Include Min. Green: 56 56 56 0 27 27 27 27 56 27 27 27 3 0 0 1 0 0 0 2 0 1 0 1 0 0 2 0 0 0 1 0 -----| Volume Module: Base Vol: 2147 758 41 0 233 236 395 126 2391 0 79 5 Initial Bse: 2147 758 41 0 233 236 395 126 2391 0 79 5 0 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 2147 758 41 0 233 236 395 126 2391 0 79 5 PHF Volume: 2213 781 42 0 240 243 407 130 2465 0 81 5 Reduct Vol: 0 0 0 0 0 0 0 0 0 Reduced Vol: 2213 781 42 0 240 243 407 130 2465 FinalVolume: 2213 781 42 0 240 243 407 130 2465 0 81 5 -----|----|-----| Saturation Flow Module: Adjustment: 0.92 0.99 0.99 1.00 0.95 0.85 0.39 0.39 0.41 1.00 0.99 0.99 Lanes: 3.00 0.95 0.05 0.00 2.00 1.00 0.76 0.24 2.00 0.00 0.94 0.06 Final Sat.: 5253 1788 97 0 3610 1615 566 181 1563 0 1773 112 _____|__| Capacity Analysis Module: Vol/Sat: 0.42 0.44 0.44 0.00 0.07 0.15 0.72 0.72 1.58 0.00 0.05 0.05 Crit Moves: **** **** Green/Cycle: 0.48 0.71 0.71 0.00 0.23 0.23 0.23 0.23 0.71 0.00 0.23 0.23 Volume/Cap: 0.88 0.62 0.62 0.00 0.29 0.65 3.12 3.12 2.22 0.00 0.20 0.20 Delay/Veh: 31.5 9.6 9.6 0.0 37.3 44.9 1012 1012 570.1 0.0 36.5 36.5 AdjDel/Veh: 31.5 9.6 9.6 0.0 37.3 44.9 1012 1012 570.1 0.0 36.5 36.5 LOS by Move: C A A A D D F F F A D D HCM2kAvgO: 23 14 14 0 4 9 63 63 142 0 3 3 *******************

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Note: Queue reported is the number of cars per lane.

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Intersection #43 Embarcadero / Howard St ************************* Cycle (sec): 100 Critical Vol./Cap.(X): 1.162
Loss Time (sec): 10 Average Delay (sec/veh): 307.7
Optimal Cycle: 180 Level Of Service: F

************************* Street Name: Embarcadero Howard St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Rights: Include Include Include Include Min. Green: 15 45 0 10 40 40 30 0 30 0 0 1 0 3 0 0 1 0 2 0 1 1 0 1! 0 0 0 0 0 0 -----| Volume Module: Base Vol: 665 0 0 0 197 177 0 0 467 0 0 Initial Bse: 665 0 0 0 197 177 0 0 467 0 0 Added Vol: 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 Ω Initial Fut: 665 0 0 0 197 177 0 0 467 PHF Volume: 715 0 0 0 212 190 0 0 502 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 Reduced Vol: 715 0 0 0 212 190 0 0 502 FinalVolume: 715 0 0 0 212 190 0 0 502 0 0 -----| Saturation Flow Module: Adjustment: 0.88 0.56 1.00 0.93 0.88 0.43 0.89 1.00 0.69 1.00 1.00 1.00 _____|__| Capacity Analysis Module: Vol/Sat: 0.43 0.00 0.00 0.00 0.06 0.24 0.00 0.00 0.38 0.00 0.00 0.00 Crit Moves: **** **** Volume/Cap: 2.13 0.00 0.00 0.00 0.16 0.59 0.00 0.00 1.28 0.00 0.00 0.00 Delay/Veh: 558.3 0.0 0.0 0.0 19.3 26.4 0.0 0.0 179.1 0.0 0.0 0.0 AdjDel/Veh: 558.3 0.0 0.0 19.3 26.4 0.0 0.0 179.1 0.0 0.0 0.0 LOS by Move: F A A A B C A A F A A A HCM2kAvgO: 68 0 0 0 2 5 0 0 31 0 0 ******************

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) *****************

Intersection							****	****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle ************************************	ec):		10			Average	e Dela	av (se	ec/veh)	:	126	5.7
Optimal Cycle	e:		90			Level	Of Se	rvice:				F
*****	****	****	*****	****	*****	*****	****	****	*****	****	****	*****
Street Name: Approach:			Embarc	adero					Folso	m St		
Approach:	No	rth Bo	ound	Sou	ıth Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control: Rights: Min. Green:	Pi	rotect	ted	Pı	rotect	ted	Sp.	lit Ph	nase	Sp.	Lit Pl	nase
Rights:		Incl	ıde		Inclu	ıde		Incl	ıde		Incl	ıde
Min. Green:	12	49	49	32	32	32	31	31	31	0	0	0
Y+R:												
Lanes:												
Volume Module												
Base Vol:			0	Ω	656	20	330	Ω	291	0	0	0
Growth Adj:												
Initial Bse:												
Added Vol:			0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	429	337	0	0	656	20	330	0	291	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:												
PHF Volume:	461	362	0	0	705	22	355	0	313	0	0	0
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj:												
MLF Adj:												
FinalVolume:	461	362	0	. 0	705	22	355	0	313	. 0	0	0
Saturation Fl												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes:	1.00	2.00	0.00	0.00	1.93	0.07	2.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1679	2671	0.00	0	3548	108	3152	0	1114	0	0	0
Capacity Anal									'			
Vol/Sat:	0.27	0.14	0.00						0.28	0.00	0.00	0.00
Crit Moves:												
<pre>Green/Cycle:</pre>												
/												

Note: Queue reported is the number of cars per lane.

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Volume/Cap: 2.06 0.28 0.00 0.00 0.56 0.56 0.26 0.00 0.66 0.00 0.00 0.00 Delay/Veh: 531.6 13.7 0.0 0.0 23.9 23.9 16.8 0.0 24.0 0.0 0.0 0.0 AdjDel/Veh: 531.6 13.7 0.0 0.0 23.9 23.9 16.8 0.0 24.0 0.0 0.0 0.0 LOS by Move: F B A A C C B A C A A A HCM2kAvgQ: 42 3 0 0 8 8 3 0 7 0 0 0 *********************************

Scenario Report

Scenario: Existing + AC Event 2013 Weekend MID

Command:

Volume:
Existing + AC Event 2013 Weekend MID
Geometry:
Existing Weekday PM
Impact Fee:
Default Impact Fee
Trip Generation:
Default Trip Distribution
Default Path
Default Path

Paths: Default Path Routes: Default Route

Configuration: Default Configuration

Existing + AC Event 2013 WeMon Jun 6, 2011 09:15:56

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34th America's Cup Races Transportation Impact Analysis

	Signal Warrant	Summary Report	
Intersection		Base Met	Future Met
		[Del / Vol]	[Del / Vol]
# 27 Lincoln	Blvd/25th St/El Camino del	???	Yes
# 30 Jackson	St/Arguello Blvd	???	No
# 31 Pacific	Ave/Presidio Blvd	???	No
# 32 Lombard	St/Lyon St	???	Yes

Peak Hour Volume Signal Warrant Report [Urban] ******************* Intersection #27 Lincoln Blvd/25th St/El Camino del Mar *********************** Future Volume Alternative: Peak Hour Warrant Met -----|----|-----|------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____|__| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 1 0 0 1 0 Lanes: Initial Vol: 20 22 728 25 16 2 1 239 27 368 166 13 Minor Approach Volume: 814
Minor Approach Volume: 770

SIGNAL WARRANT DISCLAIMER

Minor Approach Volume Threshold: 356

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing + AC Event 2013 WeMon Jun 6, 2011 09:15:56

34th America's Cup Races Transportation Impact Analysis

Peak Hour Volume Signal Warrant Report [Urban] ********************* Intersection #30 Jackson St/Arguello Blvd ******************* Future Volume Alternative: Peak Hour Warrant NOT Met -----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 0 1 0 0 1 0 0 0 0 0 0 0 0 0 0 1! 0 0 Lanes: Initial Vol: 0 795 27 30 475 0 0 0 39 0 49 1327 Major Street Volume: Minor Approach Volume: Minor Approach Volume Threshold: 144

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Peak Hour Volume Signal Warrant Report [Urban] *******************

Intersection #31 Pacific Ave/Presidio Blvd

Future Volume Alternative: Peak Hour Warrant NOT Met

-----|----|-----|------| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____|__| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Lanes: Initial Vol: 3 801 11 14 468 18 10 1 1 15 11 31 _____|

Minor Approach Volume: 1315
Minor Approach Volume: 57
Minor Approach Minor Approach Volume Threshold: 146

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing + AC Event 2013 WeMon Jun 6, 2011 09:15:56

34th America's Cup Races Transportation Impact Analysis

Peak Hour Volume Signal Warrant Report [Urban] *****

Intersection #32 Lombard St/Lyon St **********************

Future Volume Alternative: Peak Hour Warrant Met

-----| Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----|----| Control: Stop Sign Stop Sign Stop Sign Stop Sign 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 0 0 1! 0 0 Lanes: Initial Vol: 88 29 21 27 34 159 186 591 91 8 1771 18

Minor Approach Volume: 2665
Minor Approach Volume: 220

Minor Approach Volume Threshold: -42 [less than minimum of 100]

SIGNAL WARRANT DISCLAIMER

This peak hour signal warrant analysis should be considered solely as an "indicator" of the likelihood of an unsignalized intersection warranting a traffic signal in the future. Intersections that exceed this warrant are probably more likely to meet one or more of the other volume based signal warrant (such as the 4-hour or 8-hour warrants).

The peak hour warrant analysis in this report is not intended to replace a rigorous and complete traffic signal warrant analysis by the responsible jurisdiction. Consideration of the other signal warrants, which is beyond the scope of this software, may yield different results.

Existing plus Cruise Terminal Project

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Existing plus Cruise Terminal Project Conditions

Weekday AM Peak Hour

Level Of Service Computation Report 2000 HCM Unsignalized Method (Future Volume Alternative)												
						*****	*****	****	******	*****	****	*****
Intersection												

Average Delay												
Street Name:			Columb	ous Ave	€				Bead	ch St		
Approach:	Noi	cth Bo	ound	Sot	ath Bo	ound	Εá	ast Bo	ound	W€	est Bo	ound
Movement:			- R			- R			- R		- T	
Control:	St	op S	ign	St	op S	ign ıde	Und	contr	olled	Un	contro	olled
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Lanes:	0 (1!	0 0	0 (0 0	0 0	0 () 1	1 0	0 :	1 0	0 0
Volume Module	∋:											
Base Vol:	30	0	4	0	0	0	0	127	36	6	65	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	0	4	0	0	0	0	127	36	6	65	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserBvVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	0	4	0	0	0	0	127	36	6	65	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	31	0	4	0	0	0	0	132	38	6	68	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	31	0	4	0	0	0	0	132	38	6	68	0
	l											
Critical Gap												'
Critical Gp:			6.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:		4.0							xxxxx			XXXXX
Capacity Modu	ıle:											
Cnflict Vol:		231	85	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	170	xxxx	xxxxx
Potent Cap.:	761	672	980			xxxxx		xxxx	xxxxx	1420	xxxx	xxxxx
Move Cap.:	759	669	980	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	1420	xxxx	xxxxx
Volume/Cap:	0.04	0.00	0.00			xxxx		xxxx	xxxx	0.00	xxxx	xxxx
Level Of Serv	vice N	Module	e:									
2Wav95thQ:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Control Del:>	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	7.5	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	779	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:							xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:						xxxxx						XXXXX
Shared LOS:	*	A			*			*		A		*
ApproachDel:		9.8		x:	xxxx		x	xxxx		×	xxxxx	
ApproachLOS:		A			*			*			*	
*****	****		*****	*****	****	*****	*****	****	*****	****	****	*****
Note: Queue 1	report	ed is	s the r	number	of ca	ars per	r lane					

Existing+Cruise Terminal WeTue May 31, 2011 09:26:33

	0000	Level (,		
********	2000 HCM C									****	*****
Intersection						*****	****	*****	****	****	*****
Cycle (sec):		90			Critic	cal Vo	1./Ca	o.(X):		0.2	233
Loss Time (s		9						ec/veh)	:	1:	2.9
Optimal Cycl		90			Level						В
******					******	*****					*****
Street Name: Approach:		Columb			nund	F		North P			nund
Movement:								- R			
Control:		tted						tted		Permit	
Rights:		.ude			ude		Incl			Incl	
Min. Green: Y+R:	28 28 4.0 4.0			28	28		53	53 4.0	53		53
Lanes:	1 0 0							0 0			1 0
Volume Modul											
Base Vol:	24 66		13	50		20		36	32		35
Growth Adj: Initial Bse:			1.00	1.00	1.00	1.00	1.00	1.00	32	1.00	1.00
Added Vol:	0 0		13	0	13	20		0	0		0
PasserByVol:			0	0	0	0		0	0		0
Initial Fut:	24 66	10	13	50	15	20	208	36	32	118	35
User Adj:	1.00 1.00			1.00			1.00	1.00		1.00	1.00
PHF Adj:	0.89 0.89			0.89	0.89		0.89	0.89		0.89	0.89
PHF Volume: Reduct Vol:	27 74 0 0		15 0	56 0	17 0	22		40 0	36 0	133	39 0
Reduced Vol:			15	56	17	22		40	36	133	39
PCE Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00 1.00			1.00			1.00	1.00		1.00	1.00
FinalVolume:			15		17		234	40		133	39
Saturation F											
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.70 0.98	0.98	0.85	0.85	0.85	0.95	0.95	0.95	0.80	0.80	0.80
Lanes:	1.00 0.87			1.29			0.79			1.27	0.38
Final Sat.:				2060			1427	247		1945	577
Capacity Ana											
Vol/Sat:			0.03	0.03	0.03	0.16	0.16	0.16	0.07	0.07	0.07
Crit Moves:	***						****				
Green/Cycle:				0.31	0.31		0.59	0.59		0.59	0.59
Volume/Cap:				0.09			0.28	0.28		0.12	0.12
Uniform Del: IncremntDel:			0.2	22.0	22.0	0.6	9.1	9.1	8.2		8.2
InitQueuDel:			0.0	0.0	0.0	0.0		0.0	0.0		0.0
Delay Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:				22.1	22.1	9.7		9.7	8.3		8.3
User DelAdj:				1.00			1.00	1.00		1.00	1.00
AdjDel/Veh: LOS by Move:				22.1 C	22.1 C	9.7 A	9.7 A	9.7 A	8.3 A		8.3 A
HCM2kAvqQ:	1 2		1			A 4		A 4	1		1
	-	_	_	-	_	-	-	-	-	_	-

2	2000 I					Computat (Future				ve)		
*******											*****	*****
Intersection *********				-,			****	*****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	∋:	9	90 8 90 *****	****		Critica Average Level (e Dela Of Sei	ay (se	ec/veh)		0.2 12	2.2 B
Street Name:			Stockt						orth Po			
Approach: Movement:	L -		ound - R	Sou L -	- T	ound - R	L -	ast Bo - T	und – R	We	est Bo - T	- R
Control:	I	Permit		E	Permit		I	Permit		I	Permit	
Rights:	0.5	Incl		0.5	Incl			Inclu			Inclu	
Min. Green:	25		25	25		25	57		57	57		57
Y+R:	4.0		4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0
Lanes:			0 0			0 0		1!		0 :		1 0
Volume Module Base Vol:	30	34	33	5	25	13	23	220	64	6	98	8
Growth Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:	30	34	33	5	25	13	23	220	64	6	98	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	34	33	5	25	13	23	220	64	6	98	8
User Adj:	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
PHF Adi:	0.90		0.90	0.90		0.90		0.90	0.90		0.90	0.90
PHF Volume:	33	38	37	6	28	14	26	244	71	7	109	9
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	38	37	6	28	14	26	244	71	7	109	9
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	38	37	6	28	14	26	244	71	7	109	9
Saturation Fl												
Sat/Lane:	1900		1900	1900		1900		1900	1900	1900		1900
Adjustment:		0.87	0.87	0.94		0.94		0.95	0.95	0.88		0.88
Lanes:		0.35	0.34	0.12		0.30		0.72	0.21	0.11		0.14
Final Sat.:	511		562		1035	538		1290	375		2940	240
Capacity Anal												
Vol/Sat:	-	0.07	0.07	0 03	0.03	0.03	0 19	0.19	0.19	0 04	0.04	0.04
Crit Moves:	0.07	****	0.07	0.05	0.05	0.05	0.13	****	0.13	0.01	0.01	0.01
Green/Cycle:	0.28	0.28	0.28	0.28	0.28	0.28	0.63	0.63	0.63	0.63	0.63	0.63
Volume/Cap:	0.23		0.23	0.10		0.10	0.30		0.30		0.06	0.06
Uniform Del:			25.1	24.1		24.1	7.5	7.5	7.5	6.3	6.3	6.3
IncremntDel:	1.2	1.2	1.2	0.4	0.4	0.4	0.7	0.7	0.7	0.1	0.1	0.1
			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	26.3	26.3	26.3	24.5	24.5	24.5	8.1	8.1	8.1	6.3	6.3	6.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	26.3	26.3	26.3	24.5	24.5	24.5	8.1	8.1	8.1	6.3	6.3	6.3
LOS by Move:			C	С	С	C	A		A	A	A	A
HCM2kAvgQ:	2	2	2	1	1	1	4	4	4	1	1	1

Existing+Cruise Terminal WeTue May 31, 2011 09:26:34

******	2000 1	HCM O	peratio	ons Met	thod	Computa (Future	e Volu	me Al	ternati	.ve)	****	****
Intersection	#4 Ba	ay St.	/Columb	ous Ave	e							
Cycle (sec):		!	90			Critic	cal Vo	1./Ca	p.(X):		0.	597
Loss Time (s			9						ec/veh)	:	3	0.1
Optimal Cycl			09			Level						С
		****	Columb			*****	*****	****		***** 7 St	* * * * *	*****
Street Name: Approach:		rth B				ound	F	ast B	ьау ound		est B	nund
Movement:			– R			- R			- R			- R
Control:	P	rotect	ted	P	rotec	ted		Permi	tted		Permi	tted
Rights:		Incl			Incl			Incl			Incl	
Min. Green:			31			19			47		50	50
Y+R:						4.0		4.0				4.0
Lanes:						1 0			0 1			1 0
Volume Modul												
	112	73	65	1	109	6	6	1373	375	25	327	21
Growth Adj:					1.00			1.00	1.00	1.00	1.00	1.00
Initial Bse:	112	73	65	1	109	6	6	1373	375	25	327	21
Added Vol:	0	0	0	0	0		0		0	0	0	0
PasserByVol:		0	0	0	0		0	-	0	0	0	0
Initial Fut:								1373		25	327	21
User Adj:		1.00	1.00		1.00			1.00			1.00	1.00
PHF Adj: PHF Volume:	115	75	67	0.97	112			1415	387	26	337	22
Reduct Vol:		0	0	0	0		0		0	0	0	0
Reduced Vol:		75	67	1	112			1415	387	26	337	22
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:					112			1415	387	26	337	22
Saturation F. Sat/Lane:			1900	1000	1000	1900	1000	1900	1900	1000	1900	1900
Adjustment:			0.74			0.94					0.67	
Lanes:		0.53				0.10		1.99			1.76	0.11
Final Sat.:							15			172	2248	144
Capacity Ana												
Vol/Sat:		0.10	0.10	0.03	0.03	0.03	0.41	0.41	0.24	0.15	0.15	0.15
Crit Moves: Green/Cycle:			0.28		0.32	0.32	0.46	0.46	0.46	0 46	0.46	0.46
Volume/Cap:					0.32			0.40			0.46	0.46
Uniform Del:					25.9			27.2	21.0		18.8	18.8
IncremntDel:			0.5	0.2		0.0		7.5	0.7	0.2		0.2
InitQueuDel:				0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:					1.00			1.00	1.00		1.00	1.00
Delay/Veh:					25.9			34.7	21.7		18.9	
User DelAdj: AdjDel/Veh:			1.00		1.00			1.00	1.00		1.00	1.00 18.9
LOS by Move:					25.9 C		34.7 C		21.7 C	18.9 B		
HCM2kAvgQ:	2		4	2	1		27			4	4	4

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
*****											*****	*****
Intersection					*****	*****	****	*****	*****	****	****	*****
Cycle (sec):		9	90			Critic	al Vo	l./Cap	o.(X):		0.6	808
Loss Time (se	ec):		7			Averag	e Dela	ay (se	ec/veh)	:	10).9
Optimal Cycle			90			Level						В
******	****	****	*****	****	*****	*****	****	*****	*****	****	*****	*****
Street Name:			Stockt						Bay			
Approach:		rth Bo				und			ound		est Bo	
Movement:			- R			- R		- T			- T	
Control:		Permit		ŀ	Permit				ted	ŀ	Permit	
Rights:	20	Inclu 20	1ae 20	20	Inclu 20	1ae 20	63	Inclu 63		63	Inclu	
Min. Green: Y+R:	4.0		4.0		4.0	4.0		4.0	63 4.0	63	63 4.0	63 4.0
Lanes:			0 0			0 0			1 0	0 :		
Volume Module			1	1		'	1		1	1		1
Base Vol:	35	20	101	33	16	48	32	1311	18	26	439	51
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	35	20	101	33	16	48		1311	18	26	439	51
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	35	20	101	33	16	48	32	1311	18	26	439	51
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	39	22	112	37	18	53	36	1457	20	29	488	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	39	22	112	37	18	53		1457	20	29	488	57
PCE Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:	. 39		112	. 37	18	53		1457	20	. 29	488	57
Catanatian B												
Saturation F: Sat/Lane:		1900	: 1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
	0.84		0.84		0.82	0.82		0.88	0.88		0.78	0.78
Lanes:		0.13	0.65		0.16	0.50		1.93	0.02		1.70	0.70
Final Sat.:	356		1028	527		767		3224	44		2532	294
Capacity Anal	lvsis	Modu.	le:						'			'
Vol/Sat:	-		0.11	0.07	0.07	0.07	0.45	0.45	0.45	0.19	0.19	0.19
Crit Moves:		****						****				
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.70	0.70	0.70	0.70	0.70	0.70
Volume/Cap:	0.49	0.49	0.49	0.31	0.31	0.31	0.65	0.65	0.65	0.28	0.28	0.28
Uniform Del:	30.6	30.6	30.6	29.3	29.3	29.3	7.4	7.4	7.4	5.0	5.0	5.0
IncremntDel:	4.8	4.8	4.8	2.4	2.4	2.4	1.4	1.4	1.4	0.3	0.3	0.3
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
Delay/Veh:	35.4		35.4	31.6		31.6	8.8	8.8	8.8	5.3	5.3	5.3
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:		35.4 D	35.4 D	31.6 C	31.6 C	31.6 C	8.8 A	8.8 A	8.8 A	5.3 A	5.3 A	5.3 A
LOS by Move: HCM2kAvgO:	D 5	D 5	D 5	2	2	2	1.2	1.2	1.2	A 3	A 3	A 3
HUMZKAVYV:	0	2	S	2	2	2	12	12	12	3	3	٥

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
*****					*****	*****	****	****	*****	****	****	*****
Intersection					*****	*****	****	****	*****	****	****	*****
Cvcle (sec):		(9.0			Critic	al Vo	l./Car	o.(X):		0.5	531
Cycle (sec): Loss Time (se Optimal Cycle	ec).		9			Averag	e Del	av (se	ec/veh)			
Optimal Cycle	e:	(90			Level	Of Se	rvice	:	•	,	A
******	****	*****	 * * * * * * *	****	*****	*****	****	****	- *****	****	****	
Street Name:			Kearr	v St					Bay	St		
Approach:	No	rth Bo	ound	Soi	uth Bo	ound	E	ast Bo			est Bo	ound
Movement:												
	I			1			1			1		
Control: Rights:		Incli	ıde		Incli	ıde		Incl	ıde		Incl	ıde
Min. Green:	20	20	20	20	20	20	61	61	61	61	61	61
Min. Green: Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
									1 0			
Volume Module	e:											
Base Vol:	37	2	12	1	12	14	9	1265	176	39	460	28
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	37	2	12	1	12	14	9	1265	176	39	460	28
Added Vol:			0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	37	2	12	1	12	14	9	1265	176	39	460	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	38	2	12	1	12	14	9	1304		40	474	29
Reduct Vol:				0		0		0		0		0
Reduced Vol:	38	2	12	1	12	14	9	1304	181	40	474	29
PCE Adj:							1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:						1.00			1.00		1.00	
FinalVolume:	38	2	12	1	12	14	9	1304	181	40	474	29
Saturation F.												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes:												
Final Sat.:												
Capacity Ana						'				•		
Vol/Sat:			0.04	0.02	0.02	0.02				0.20	0.20	0.20
Crit Moves:								****				
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.68	0.68	0.68	0.68	0.68	0.68
Volume/Cap:				0.07	0.07	0.07	0.65	0.65	0.65	0.29	0.29	0.29
Uniform Del:	28.2	28.2	28.2	27.7	27.7	27.7	8.4	8.4	8.4	5.8	5.8	5.8
IncremntDel:				0.4		0.4		1.5		0.4	0.4	0.4
InitQueuDel:			0.0	0.0		0.0		0.0	0.0	0.0		0.0
Dolass Add.	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00

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1 1

HCM2kAvgQ:

1 1 1

AdjDel/Veh: 29.2 29.2 29.2 28.0 28.0 9.8 9.8 9.8 6.2 6.2 6.2 Los by Move: C C C C C A A A A A

1 13 13 13

3 3

A

Saturation Flow Module:

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)														
******	2000 I	HCM O	peratio	ns Met	hod (Future	Volu	me Al	ternati	ve)				
						. * * * * * *	****	****	*****	****	*****	*****		
Intersection	****	****	*****	*****	****									
Cycle (sec):			30			Critic	al Vo	1./Caj	p.(X):		0.7	700		
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):		9			Averag	re Del	ay (s	ec/veh)	:	20	0.2		
Optimal Cycle	e:		80			Level	Of Se	rvice	:			C		
******	****	****	*****	****	*****	*****	****	****	*****	****	*****	*****		
Street Name:			Sanso	me St					Broadw	ay St				
Approach:	: Sansome St Broadway St North Bound South Bound East Bound West Bound L - T - R L - T - R L - T - R													
Control:	Split Phase Split Phase Permitted Permitted Include Include Include Include													
Rights:		Include Include Include Include 27 27 27 0 0 0 44 44 0 0 44 44												
Min. Green:	27	27	27	0	0	0	44	44	0	0	44	44		
Y+R:														
Lanes:														
Volume Module														
Base Vol:									0		404			
Growth Adj:									1.00					
Initial Bse:						0								
Added Vol:														
PasserByVol:														
Initial Fut:										0	404			
User Adj:			1.00			1.00		1.00			1.00	1.00		
PHF Adj:						0.98		0.98			0.98	0.98		
PHF Volume:						0								
Reduct Vol:									0					
Reduced Vol:				0	-	-			0	-		134		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		

FinalVolume: 117 242 58 0 0 0 233 1057 0 0 412 134

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Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #8 Broadway St/Battery St

Street Name: Battery St Broadway St Street Name: Battery St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____| Control: Split Phase Split Phase Permitted Permitted
 Rights:
 Include
 Include
 Include
 Include
 Include

 Min. Green:
 0
 0
 44
 44
 44
 0
 17
 17
 17
 17
 17
 17

 Y+R:
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 0 0 0 0 0 0 1 0 1 0 0 0 1 1 0 0 1 1 0 0 -----|----|-----||-------| Volume Module: Base Vol: 0 0 0 59 611 83 0 629 464 22 450 Initial Bse: 0 0 0 59 611 83 0 629 464 22 450 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 0 0 59 611 83 0 629 464 0 0 0 22 450 PHF Volume: 0 0 0 60 623 85 0 642 473 22 459 Ω FinalVolume: 0 0 0 60 623 85 0 642 473 22 459 0 Saturation Flow Module: Adjustment: 1.00 1.00 1.00 0.92 0.92 0.92 1.00 0.89 0.89 0.71 0.71 1.00 Lanes: 0.00 0.00 0.00 0.16 1.62 0.22 0.00 1.15 0.85 0.09 1.91 0.00 Final Sat.: 0 0 0 275 2848 387 0 1945 1434 126 2571 0 ______||___| Capacity Analysis Module: Crit Moves: **** **** Green/Cycle: 0.00 0.00 0.00 0.55 0.55 0.55 0.00 0.34 0.34 0.34 0.00 Volume/Cap: 0.00 0.00 0.00 0.40 0.40 0.40 0.00 0.98 0.98 0.53 0.53 0.00 Uniform Del: 0.0 0.0 0.0 10.4 10.4 10.4 0.0 26.2 26.2 21.4 21.4 0.0

HCM2kAvgQ: 0 0 0 6 6 6 0 15 15 5 5

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #9 Embarcadero/ Beach St / Grant St ******************* Cycle (sec): 75 Critical Vol./Cap.(X): 0.262 Loss Time (sec): 13 Average Delay (sec/veh):
Optimal Cycle: 101 Level Of Service: 35.7 *********************** Street Name: Embarcadero Beach St (EB)/Grant St (WB) North Bound South Bound East Bound West Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Split Phase Split Phase Split Phase Split Phase
 Rights:
 Include
 Include
 Include
 Include
 Include

 Min. Green:
 17
 17
 17
 0
 26
 0
 0
 26
 26
 19
 19
 19

 Y+R:
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 0 1 0 1 0 0 0 1 0 0 0 0 0 0 1 0 0 1! 0 0 Lanes: Volume Module: Base Vol: 135 87 22 0 16 0 0 156 Initial Bse: 135 87 22 0 16 0 0 0 156 6 8 16 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 135 87 22 0 16 0 0 0 156 PHF Volume: 155 100 25 0 18 0 0 0 179 7 9 18 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 155 100 25 0 18 0 0 0 179 FinalVolume: 155 100 25 0 18 0 0 0 179 7 9 18 Saturation Flow Module: Adjustment: 0.91 0.91 0.91 1.00 1.00 1.00 1.00 0.87 0.92 0.92 0.92 Final Sat.: 1733 1384 350 0 1900 0 0 1644 349 465 931 _____| Capacity Analysis Module: Green/Cycle: 0.17 0.17 0.17 0.00 0.26 0.00 0.00 0.00 0.26 0.19 0.19 0.19 Volume/Cap: 0.53 0.43 0.43 0.00 0.04 0.00 0.00 0.00 0.42 0.11 0.11 0.11 Uniform Del: 38.4 37.7 37.7 0.0 28.1 0.0 0.0 0.0 31.3 34.0 34.0 34.0 IncremntDel: 1.0 0.5 0.5 0.0 0.0 0.0 0.0 0.0 0.7 0.1 0.1 0.1 Delay Adj: 1.00 1.00 1.00 0.00 1.00 0.00 0.00 1.00 1.00 1.00 1.00 Delay/Veh: 39.4 38.1 38.1 0.0 28.2 0.0 0.0 31.9 34.1 34.1 34.1 AdjDel/Veh: 39.4 38.1 38.1 0.0 28.2 0.0 0.0 31.9 34.1 34.1 34.1 LOS by Move: D D D A C A A A C C C

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4 0 0 0 0 0 5 1 1

HCM2kAvqQ: 5 4

Existing+Cruise Terminal WeTue May 31, 2011 09:26:34

Level Of Service Computation Report												
2000 HCM Operations Method (Future Volume Alternative)												
Intersection										*****	*****	
******									*****	*****	****	*****
Cycle (sec):		9	0			Critic	al Vo	l./Cap	(X):		0.2	270
Loss Time (s			4			Averag				:		3.2
Optimal Cycl			0	ale ale ale ale ale ale		Level				ate ate ate ate ate at		C
Street Name:	*****		Embarc		****				St (E			
Approach:	Nort				ith Bo	und					est Bo	
Movement:			- R			- R		- T			- T	
Control:		otect		I		ted	Sp			Sp]	lit Ph	
Rights:		Inclu			Inclu	Include Include						
Min. Green: Y+R:	15 4.0		0 4.0		17 4.0	17 4.0	20 20 20 20 20 20 20 4.0 4.0 4.0 4.0 4.0 4.0					20
Lanes:	1 0		0 0			1 0		0 1!		0 1		
			1			1			1			
Volume Module	e:											
Base Vol:	143	236	0	0	161	19	2	233	29	27	5	17
Growth Adj:	1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00
Initial Bse:		236	0	0	161	19	2	233	29	27	5	17
Added Vol: PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		236	0	0	161	19	2	233	29	27	5	17
User Adi:	1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.95 (0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	151	248	0	0	169	20	2	245	31	28	5	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol: PCE Adi:	151 1.00 1	248	1.00	1.00	169	20 1.00	1 00	245	31 1.00	28 1.00	1 00	18 1.00
MLF Adj:	1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:	151		0	0	169	20	2	245	31	28	5	18
Saturation F	low Mod	dule:										
Sat/Lane:	1900		1900		1900	1900		1900	1900	1900		1900
Adjustment:	0.95 (1.00	1.00		0.93		0.98	0.98	0.96		0.85
Lanes: Final Sat.:	1.00 2		0.00		1.79	0.21 375		0.93 1746	1.06 1978	0.84 1539		1.00 1615
						1				1		
Capacity Ana	lvsis N	4odul	e: '									'
Vol/Sat:			0.00	0.00	0.05	0.05		0.14	0.02		0.02	0.01
Crit Moves:		***					****			****		
Green/Cycle:			0.00		0.19	0.19		0.22	0.22	0.22		0.22
Volume/Cap: Uniform Del:			0.00		0.28	0.28		0.63	0.07	0.08		0.05 27.5
IncremntDel:		0.1	0.0	0.0	0.2	0.2	3.0	3.0	0.0	0.1	0.1	0.1
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00		0.00		1.00	1.00		1.00	1.00	1.00		1.00
Delay/Veh:	31.2	17.5	0.0	0.0	31.5	31.5		34.7	27.7	27.8		27.6
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			0.0		31.5	31.5		34.7	27.7	27.8		27.6
LOS by Move: HCM2kAvqQ:	C 3	B 2	A 0	A 0	C 2	C 2	C 7	C 7	C 1	C 1	C 1	C 0
ncmzkavyQ:	٥	2	U	U	2	2	/	/	1	1	Τ	U

rage 10 1

Level Of Service Computation Report													
	2000 HCM Operations Method (Future Volume Alternative)												
							^^^^			^^^^			
Intersection						++++++	+++++			+++++			
Cvcle (sec):			90			Critic					0.3		
4			7							_			
Loss Time (se			81			Average				•	Τć	5.5 B	
Optimal Cycle				++++						+++++			
Street Name:			Embarc						Bav				
Approach:	Mos	th B			1+h D	ound	₽.	ast Bo	_		est Bo	und	
Movement:			– R			– R			– R		- Т		
Movement:													
Control:		otec				ted			nase		lit Ph		
Rights:	FI	Incl		FI	Incl		sp.	Ovl	lase	sp.	Incli		
Min. Green:	42	53	0	0	25	25	7	0	42	0		0	
Y+R:	4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0	
	2 (0 0			1 0		0 0		0 (0 0	
Lanes:) 0	0 0	
Volume Module													
Base Vol:	529	355	0	0	419	26	21	0	1259	0	0	0	
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:		355	0	1.00	419	26	21	1.00	1259	1.00	1.00	1.00	
Added Vol:	0	0	0	0	419	0	0	0	1239	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol: Initial Fut:			0	0	419	26	21	0	1259	0	0	0	
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:	0.92		0.92		0.92	0.92		0.92	0.92		0.92	0.92	
PHF Volume:	575	386	0.92	0.92	455	28	23	0.92	1368	0.92	0.92	0.92	
Reduct Vol:	0	0	0	0	433	0	0	0	1300	0	0	0	
Reduced Vol:	575	386	0	0	455	28	23	0	1368	0	0	0	
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:	575		0	0	455	28	23	0	1368	0.00	1.00	0	
rinaivolume:										-	U	0	
Saturation Fl													
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.92	0.87	1.00	1.00	0.87	0.87	0.95	1.00	0.69	1.00	1.00	1.00	
Lanes:	2.00	2.00	0.00	0.00	1.88	0.12	1.00	0.00	2.00	0.00	0.00	0.00	
Final Sat.:	3502	3321	0	0	3099	192	1805	0	2615	0	0	0	
Capacity Anal	lysis	Modu	le:										
Vol/Sat:	0.16	0.12	0.00	0.00	0.15	0.15	0.01	0.00	0.52	0.00	0.00	0.00	
Crit Moves:	****				****		****						
Green/Cycle:	0.47	0.76	0.00	0.00	0.29	0.29	0.16	0.00	0.63	0.00	0.00	0.00	
Volume/Cap:	0.35	0.15	0.00	0.00	0.50	0.50	0.08	0.00	0.83	0.00	0.00	0.00	
Uniform Del:	15.3	2.9	0.0	0.0	26.3	26.3	32.1	0.0	13.1	0.0	0.0	0.0	
<pre>IncremntDel:</pre>	0.1	0.0	0.0	0.0	0.4	0.4	0.1	0.0	3.8	0.0	0.0	0.0	
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	
Delay/Veh:	15.4	2.9	0.0	0.0	26.7	26.7	32.2	0.0	16.9	0.0	0.0	0.0	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	15.4	2.9	0.0	0.0	26.7	26.7	32.2	0.0	16.9	0.0	0.0	0.0	
LOS by Move:	В	А	A	A	С	С	С	A	В	A	A	A	
HCM2kAvgQ:	5	2	0	0	6	6	1	0	17	0	0	0	

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Existing+Cruise Terminal WeTue May 31, 2011 09:26:34

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
************ Intersection *********	#12 1	Embar	cadero,	/ Ches	tnut	St / Sa	ansome	St					
Cycle (sec): Loss Time (sec): Optimal Cycle											0.	593	
*******	****	****	*****	*****	****	*****	*****	****	*****	****			
Street Name: Approach: Movement:	No:	rth B	ound - R	So:	uth B	ound – R	L E	ast Bo - T	- R	L -	est B	ound - R	
Control:	D-	rotec	t ad	D.	rotec	+ ed	I	1i+ P		Sn.	lit Pl	hase	
Rights:		Incl	ude		Incl	ude	Op.	Incli	ide	Up.	Incl	ude	
Min. Green:	10	40	0	10	40	0	16	16	16	7	7	7	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Control: Rights: Min. Green: Y+R: Lanes:	1 (0 2	0 0	1	0 2	1 0	0	1 0	1 0	0 (0 0	0 0	
Volume Modul													
Base Vol:						13		111		1 00			
Growth Adj:									1.00	1.00	1.00		
Initial Bse: Added Vol:	104	//4	0	0	1000	13	132			0	0	0	
PasserByVol:					0					0	-		
Initial Fut:	104	774	0			13		111		0	-	-	
User Adj:									1.00				
PHF Adj:	0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92		0.92		
PHF Volume:	113	841	0	0	1811	14	143	121	39	0	0	0	
Reduct Vol:	0	0	0	0	0							-	
Reduced Vol:						14					0		
PCE Adj:			1.00						1.00		1.00		
MLF Adj: FinalVolume:									1.00	1.00	1.00		
rinalvolume:													
Saturation F				1 1									
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.95	1.00	1.00	0.91	0.91	0.87	0.87	0.87	1.00	1.00	1.00	
Lanes:	1.00	2.00	0.00	1.00	2.98	0.02	0.95	0.79	0.26	0.00	0.00	0.00	
Final Sat.:	1805	3610	0	1900					425				
Capacity Ana				0 00	0 25	0.25	0 00	0 00	0 00	0 00	0 00	0 00	
Vol/Sat: Crit Moves:		0.23	0.00	0.00	****		****	0.09	0.09	0.00	0.00	0.00	
Green/Cycle:		0 68	0 00	0 00		0.57		0 18	0 18	0 00	0.00	0.00	
Volume/Cap:					0.62			0.52			0.00	0.00	
Uniform Del:					13.0		33.5	33.5	33.5	0.0	0.0	0.0	
IncremntDel:	3.7	0.1	0.0	0.0	0.4	0.4	0.8	0.8	0.8	0.0	0.0	0.0	
InitQueuDel:				0.0	0.0		0.0			0.0		0.0	
Delay Adj:					1.00			1.00			0.00	0.00	
Delay/Veh:								34.3			0.0	0.0	
User DelAdj:					1.00		1.00				1.00	1.00	
AdjDel/Veh:	41.6	6.2	0.0	0.0	13.5	13.5	34.3 C			0.0 A			
LOS by Move: HCM2kAvgQ:	3 D	A 5	Α ∩	Α ∩	12	12			5				
HOLLENAVYV.	J	J	U	U	12	12	J	J	J	0	U	0	

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #13 Embarcadero / Lombard St / Battery St ******************* Loss Time (sec): 11 Average Delay (sec/veh):
Optimal Cycle: 76 Level Of Service: 17 3 ************************* Street Name: Embarcadero Lombard St (EB) / Battery (WB)
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Include Include Include Rights: 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 Lanes: -----|----|-----||-------| Volume Module: Base Vol: 66 852 0 25 1107 583 15 0 175 Initial Bse: 66 852 0 25 1107 583 15 0 175 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 72 926 0 27 1203 634 16 0 190 0 0 0 0 0 Ω Ω FinalVolume: 72 926 0 27 1203 634 16 0 190 0 0 Saturation Flow Module: Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 1.00 2.00 1.00 1.00 0.00 1.00 0.00 1.00 0.00 Final Sat.: 1805 3610 0 1805 3610 1615 1809 0 1615 0 1900 0 _____| Capacity Analysis Module: Vol/Sat: 0.04 0.26 0.00 0.02 0.33 0.39 0.01 0.00 0.12 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.10 0.51 0.00 0.13 0.54 0.54 0.23 0.00 0.23 0.00 0.00 0.00 Volume/Cap: 0.40 0.50 0.00 0.11 0.61 0.72 0.04 0.00 0.50 0.00 0.00 0.00 Uniform Del: 38.0 14.4 0.0 34.5 14.1 15.4 26.6 0.0 29.9 0.0 0.0 0.0 IncremntDel: 1.4 0.2 0.0 0.2 0.6 3.0 0.0 0.0 1.1 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 39.4 14.6 0.0 34.7 14.7 18.4 26.7 0.0 31.0 0.0 0.0 0.0 AdjDel/Veh: 39.4 14.6 0.0 34.7 14.7 18.4 26.7 0.0 31.0 0.0 0.0 0.0 LOS by Move: D B A C B B C A C A A A

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0 1 12 13 0 0 5

HCM2kAvqQ: 2 9

Existing+Cruise Terminal WeTue May 31, 2011 09:26:34 _____

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
******								*****	*****	****	*****	*****
Intersection												
******	****			*****	****					****		
Cycle (sec):			90			Critic					0.3	
Loss Time (s			14			Averag				:	20	0.0
Optimal Cycl			89			Level						С
******						*****	****	*****			*****	*****
Street Name:			arcader							en St		
Approach:		rth B				ound		ast Bo			est Bo	
Movement:		- T				- R		- T			- T	
Control:	P.	rotect		P:	rotect		Sp	lit Ph		Sp.	lit Ph	
Rights:		Incl			Incl			Inclu	ıde 24		Inclu	
Min. Green:	8		0	7		0	24		0 0 0			
Y+R:	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Lanes:			0 0			1 0	. 0			. 0	1 0	0 0
Volume Modul				_								
Base Vol:	109	907	0		1052	62	12	0	21	0	0	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		907	0		1052	62	12		21	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol: Initial Fut:			0		1052	62	12		21	0	0	0
		1.00			1.00			1.00	1.00			
User Adj: PHF Adj:		0.90	1.00		0.90	1.00		0.90	0.90		1.00	1.00
PHF Volume:		1008	0.90		1169	69	13	0.90	23	0.90	0.90	0.90
Reduct Vol:	121	1000	0	0	1109	0	13	0	23	0	0	0
Reduced Vol:		1008	0		1169	69	13	0	23	0	0	0
PCE Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		1008	0		1169	69	13	0	23	1.00	0	0.00
rinarvorume.									رے ۱ ـــــا	-		
Saturation F												
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.95	1.00		0.94	0.94		1.00	0.90		1.00	1.00
Lanes:		2.00	0.00		1.89	0.11		0.00	0.64		1.00	0.00
Final Sat.:		3610	0.00		3382	199	620		1085		1900	0.00
						1						1
Capacity Ana	lvsis	Modu	ا او•	1		'			'	'		'
Vol/Sat:			0.00	0 00	0.35	0.35	0 02	0.00	0.02	0 00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0 09	0.50	0.00	0.08	0.48	0.48	0 27	0.00	0.27	0 00	0.00	0.00
Volume/Cap:			0.00		0.71	0.71		0.00	0.08		0.00	0.00
Uniform Del:			0.0		18.3	18.3	24.7		24.7	0.0	0.0	0.0
IncremntDel:			0.0	0.2	1.4	1.4	0.1		0.1	0.0	0.0	0.0
InitQueuDel:			0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:		16.0	0.0		19.8	19.8	24.8	0.0	24.8	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		19.8	19.8	24.8		24.8	0.0	0.0	0.0
LOS by Move:			A	D	В	В	C		C	A		A
HCM2kAvgQ:	3		0	0	14	14	1		1	0	0	0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
Intersection	#15 H	Embar	cadero	/ Broa	adway	St						
**************************************	ec):	-	90 17 90			Critica Average Level (al Vol e Dela Of Ser	l./Cap ay (se cvice:	o.(X): ec/veh):	•	0.6	608 6.3 D
Street Name: Approach: Movement:	No:	rth Bo	Embarcound - R	adero Sou L -	uth Bo	ound – R	Eá L -	ast Bo	Broadwa ound - R	ay St We L	est Bo	ound - R
Control: Rights: Min. Green:	Include Include Include n: 16 37 0 7 28 28 29 0 29										Lit Ph Ovl 0	
Y+R: Lanes:	4.0	2	4.0	1 (1 0	1 (4.0		0 (0 0	
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Volume: Reduct Vol: Reduct Vol: PCE Adj: MLF Adj: FinalVolume: Saturation FS Sat/Lane: Adjustment:	549 1.00 549 0 0 549 1.00 1.00 549 1.00 1.00 549	951 1.00 951 0 951 1.00 1.00 951 1.00 951	1.00 0 0 0 0 1.00 1.00 1.00 0 0 0 1.00	1.00 2 0 0 2 1.00 1.00 2 1.00 2 1.00 2	1037 1.00 1037 0 0 1037 1.00 1.037 0 1037 1.00 1.00 1.00 1.00	38 1.00 38 0 0 38 1.00 1.00 38 1.00 1.00 1.00 38 1.00 1.00	67 1.00 67 0 67 1.00 1.00 67 1.00 1.00 67	0 1.00 0 0 0 1.00 1.00 0 0 1.00 1.00	417 1.00 417 0 0 417 1.00 1.00 417 0 0 417 1.00 1.00 417 1.00 1.00	0 1.00 0 0 0 1.00 1.00 0 0 1.00 1.00	0 1.00 0 0 0 1.00 1.00 0 0 1.00 1.00	0 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Lanes: Final Sat.:	2.00 3502	2.00 3610	0.00	1.00	1.93 3465	0.07		0.00	1.00	0.00	0.00	0.00
Capacity Anal Vol/Sat: Crit Moves:		Modu: 0.26	le: 0.00	0.00	0.30	0.30	0.04	0.00	0.26	0.00	0.00	0.00
Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	0.88 36.1 13.9 0.0 1.00 50.0 1.00 50.0	0.64 21.2 1.0 0.0 1.00 22.1 1.00	0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.0 1.00 0.0 A	0.08 0.01 38.3 0.0 0.0 1.00 38.4 1.00 38.4 D	0.96 30.5 18.4 0.0 1.00 48.9 1.00	0.31 0.96 30.5 18.4 0.0 1.00 48.9 1.00 48.9 D	0.42 0.09 15.5 0.0 0.0 1.00 15.5 1.00 15.5 B	0.00 0.0 0.0 0.0 0.0	0.42 0.61 20.1 1.6 0.0 1.00 21.7 1.00 21.7 C	0.00 0.0 0.0 0.0	0.00 0.00 0.0 0.0 0.0 0.00 0.0 1.00 0.0 A	0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.0 1.00 0.0 A

Existing+Cruise Terminal WeTue May 31, 2011 09:26:34

		HCM O	Level O peratio	ns Me	thod	(Future	e Volum	me Alt	ernati			
************ Intersection	#16	Embar	cadero	/ Was	hingt	on St						
*********** Cycle (sec): Loss Time (s Optimal Cycl *********	ec): e:		90 17 90			Critic Average Level	cal Vol ge Dela Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.5	525 5.9 D
Street Name: Approach: Movement:	No:	rth B	Embarc ound - R	adero So L	uth Bo	ound - R	E:	ast Bo	Washing ound - R	rton St We L	t est Bo - T	ound - R
Control: Rights: Min. Green:	P:	rotec Incl 30	ted ude 0	P:	rotect Incl 28	ted ude 0	Sp:	lit Ph Inclu 0	nase ide 33	Sp:	lit Ph Inclu 0	nase ide 0
Y+R: Lanes:	2		0 0		0 2	1 0		0 0	0 1	0 (4.0	
Volume Modul Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume: Saturation F Sat/Lane: Adjustment:	384 1.00 384 0 0 384 1.00 384 1.00 384 1.00 384 1.00 384 1.00	1447 1.00 1447 0 0 1447 1.00 1447 1.00 1447 1.00 1447	1.00 0 0 0 0 1.00 0 0 1.00 0 1.00 0 1.00 0	6 1.00 6 0 0 6 1.00 6 1.00 6 1.00 6 1.00	1408 1.00 1408 0 0 1408 1.00 1408 1.00 1408 1.00 1408	68 1.00 68 0 0 68 1.00 68 0 68 1.00 68 1.00 68	53 1.00 53 0 0 53 1.00 1.00 53 1.00 1.00 53 1.00 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00 1.0	149 1.00 149 0 0 149 1.00 149 0 149 1.00 149	1.00 0 0 0 0 1.00 1.00 0 0 1.00 1.00 0 1.00 0 1.00 0	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 1.00 1.00
Lanes: Final Sat.: Capacity Ana	3502		0 	1805	2.86 4913	237	1805	0.00	1.00 1615 	0	0.00	0.00
Vol/Sat: Crit Moves:			0.00	0.00	0.29	0.29	0.03	0.00	0.09	0.00	0.00	0.00
Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	0.82 38.0 11.2 0.0 1.00 49.2 1.00 49.2	0.84 27.7 3.8 0.0 1.00 31.5 1.00 31.5 C	0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0	0.03 35.7 0.1 0.0 1.00 35.7 1.00	0.31 0.92 29.9 9.1 0.0 1.00 39.1 1.00 39.1 D	0.31 0.92 29.9 9.1 0.0 1.00 39.1 1.00 39.1 D	0.08 18.6 0.1 0.0 1.00 18.6	A	0.37 0.25 19.9 0.2 0.0 1.00 20.1 1.00 20.1 C	0.00 0.0 0.0 0.0 0.0		0.00 0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0 A

._____

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #17 Embarcadero / Mission St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.766 Critical Vol./Aap.(A).

Loss Time (sec): 10 Average Delay (sec/veh):

Optimal Cycle: 90 Level Of Service: 28.9 *********************** Street Name: Embarcadero MIssion St East Bound West Bound North Bound South Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Split Phase 0 0 3 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 Lanes: Volume Module: Base Vol: 0 1736 0 0 1412 148 97 0 80 Initial Bse: 0 1736 0 0 1412 148 97 0 80 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 0 1867 0 0 1518 159 104 0 86 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1867 0 0 1518 159 104 0 86 0 0 0 86 Ω Ω FinalVolume: 0 1867 0 0 1518 159 104 0 86 0 0 Saturation Flow Module: Adjustment: 1.00 0.57 1.00 1.00 0.57 0.90 0.91 1.00 0.91 1.00 1.00 1.00 Lanes: 0.00 3.00 0.00 0.00 2.81 0.19 0.55 0.00 0.45 0.00 0.00 0.00 Final Sat.: 0 3268 0 0 3022 317 951 0 785 0 0 ______||___| Capacity Analysis Module: Crit Moves: **** Green/Cycle: 0.00 0.58 0.00 0.00 0.58 0.58 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.00 0.99 0.00 0.00 0.87 0.87 0.35 0.00 0.35 0.00 0.00 0.00 Uniform Del: 0.0 18.7 0.0 0.0 16.1 16.1 24.0 0.0 24.0 0.0 0.0 0.0 IncremntDel: 0.0 18.0 0.0 0.0 4.6 4.6 0.4 0.0 0.4 0.0 0.0 0.0 Delay Adj: 0.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00 Delay/Veh: 0.0 36.7 0.0 0.0 20.7 20.7 24.4 0.0 24.4 0.0 0.0 0.0 AdjDel/Veh: 0.0 36.7 0.0 0.0 20.7 20.7 24.4 0.0 24.4 0.0 0.0 0.0 LOS by Move: A D A A C C C A C A A A

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0 0 13 21 4 0 4 0 0

HCM2kAvqQ: 0 18

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******		HCM O		ons Me	thod	(Future	e Volu	me Al	ternati			
Intersection	#18	Embar	cadero	/ Har	rison	St						
Cycle (sec): Loss Time (s Optimal Cycl	ec): e:	1	00 10 00			Critic Average Level	cal Vo ge Del Of Se	l./Cap ay (se rvice	p.(X): ec/veh) :	:	0.	792 6.7 C
Street Name: Approach: Movement:	No:	rth B	Embaro ound - R	cadero So L	uth B	ound - R	E L	ast Bo	Harris ound - R	on St W	est B	ound - R
Control: Rights:	İ		tted ude		Permi Incl	tted ude	Sp	lit Pl Incl	nase ude	Sp	lit Pl Incl	hase ude
Min. Green: Y+R: Lanes:	4.0	4.0 0 2	4.0	4.0	4.0 0 1	1 0	4.0	4.0 0 0	27 4.0 0 1	4.0	4.0	0 0
Volume Modul Base Vol:	e: 0	1352	0	0	1153	279	205	0	155	0	0	0
Growth Adj: Initial Bse: Added Vol:	0	1.00 1352 0		0	1.00 1153 0	279	1.00 205 0		1.00 155 0	1.00	1.00	1.00
PasserByVol: Initial Fut: User Adi:	0			0	0 1153 1 00			0		0 0 1 00	0 0 1.00	0 0 1.00
PHF Adj: PHF Volume: Reduct Vol:	0.93	0.93		0.93	0.93 1240	0.93	0.93	0.93	0.93 167 0		0.93	0.93
Reduced Vol: PCE Adj: MLF Adj:	1.00	1454	1.00	1.00	1240	300	220 1.00	0	167	1.00	0 1.00 1.00	1.00
FinalVolume:	0	1454	0	0	1240	300	220	0	167 	0	0	0
	1900 1.00	1900 0.66	1900 1.00	1.00	0.65	1900 0.92	0.95		0.68	1.00	1900	1.00
Lanes: Final Sat.:	0	2527		0	2098	0.29 508	1805	0	1292	0	0.00	0.00
Capacity Ana Vol/Sat: Crit Moves:				0.00	0.59		0.12	0.00	0.13	0.00	0.00	0.00
Green/Cycle: Volume/Cap: Uniform Del:	0.00	0.91	0.00	0.00	0.63 0.94 16.7	0.94		0.00	0.27 0.48 30.6		0.00	0.00
IncremntDel: InitQueuDel: Delay Adj:	0.0	8.4	0.0	0.0	10.8	10.8	0.7		1.0 0.0 1.00	0.0	0.0	0.0
Delay/Veh: User DelAdj: AdjDel/Veh:	0.0	24.5	0.0	0.0	27.5 1.00	27.5 1.00	31.0	0.0 1.00 0.0	31.6 1.00	0.0	0.0	0.0 1.00 0.0
LOS by Move: HCM2kAvgQ:	A 0						C 6		C 5	A 0		A 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ***************** Intersection #19 Embarcadero / Bryant St ***************** Cycle (sec): 100 Critical Vol./Cap.(X): 0.611
Loss Time (sec): 10 Average Delay (sec/veh): 30.1
Optimal Cycle: 95 Level Of Service: C *********************** Street Name: Embarcadero Bryant St
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted Rights: Include Include Include Include 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 -----|----|-----|------| Volume Module: Base Vol: 156 1227 84 48 1205 54 121 43 174 Initial Bse: 156 1227 84 48 1205 54 121 43 174 3 8 4 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 161 1265 87 49 1242 56 125 44 179 3 8 4 FinalVolume: 161 1265 87 49 1242 56 125 44 179 3 8 4 -----||-----||------| Saturation Flow Module: Adjustment: 0.95 0.94 0.94 0.95 0.95 0.85 0.76 0.76 0.85 0.93 0.93 0.93 Lanes: 1.00 1.87 0.13 1.00 2.00 1.00 0.74 0.26 1.00 0.20 0.53 0.27 Final Sat.: 1805 3345 229 1805 3610 1615 1068 380 1615 353 943 471 _____| Capacity Analysis Module: Vol/Sat: 0.09 0.38 0.38 0.03 0.34 0.03 0.12 0.12 0.11 0.01 0.01 0.01 Crit Moves: **** **** Green/Cycle: 0.21 0.45 0.45 0.17 0.41 0.41 0.28 0.28 0.28 0.28 0.28 0.28 Volume/Cap: 0.42 0.85 0.85 0.16 0.84 0.08 0.42 0.42 0.40 0.03 0.03 0.03 Uniform Del: 34.3 24.7 24.7 35.1 26.5 18.0 29.3 29.3 29.2 26.1 26.1 26.1 IncremntDel: 0.8 4.5 4.5 0.2 4.4 0.1 0.7 0.7 0.6 0.0 0.0 0.0 Delay/Veh: 35.0 29.2 29.2 35.3 31.0 18.1 30.0 30.0 29.7 26.2 26.2 26.2 AdjDel/Veh: 35.0 29.2 29.2 35.3 31.0 18.1 30.0 30.0 29.7 26.2 26.2 26.2 LOS by Move: D C C D C B C C C C

HCM2kAvgQ: 4 19 19 1 17 1 5 5 5 0 0

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ****************** Intersection #20 Embarcadero / Brannan St ***************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.532 Loss Time (sec): 11 Average Delay (sec/veh): 27.2 Optimal Cycle: 90 Level Of Service: C ******************* Street Name: Embarcadero Brannan St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R -----| Control: Protected Protected Split Phase Split Phase Include Include Include Include Rights: 1 0 2 0 0 1 0 2 0 1 1 0 0 0 1 0 0 0 0 -----|----|-----|------| Volume Module: Base Vol: 7 1300 0 1 1205 174 167 0 36 Initial Bse: 7 1300 0 1 1205 174 167 0 36 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 7 1340 0 1 1242 179 172 0 37 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 7 1340 0 1 1242 179 172 0 37 0 0 FinalVolume: 7 1340 0 1 1242 179 172 0 37 0 0 _____|___|___| Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00 ______||___| Capacity Analysis Module: Vol/Sat: 0.00 0.37 0.00 0.00 0.34 0.11 0.10 0.00 0.02 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.12 0.41 0.00 0.16 0.45 0.45 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.03 0.90 0.00 0.00 0.77 0.25 0.31 0.00 0.07 0.00 0.00 0.00 Uniform Del: 34.9 24.8 0.0 32.1 21.0 15.5 23.6 0.0 21.9 0.0 0.0 0.0 IncremntDel: 0.1 8.1 0.0 0.0 2.4 0.2 0.3 0.0 0.1 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00 Delay/Veh: 35.0 32.9 0.0 32.1 23.4 15.7 23.9 0.0 21.9 0.0 0.0 0.0 AdjDel/Veh: 35.0 32.9 0.0 32.1 23.4 15.7 23.9 0.0 21.9 0.0 0.0 0.0 LOS by Move: D C A C C B C A A A HCM2kAvqQ: 0 22 0 0 15 3 4 0 1 0 0 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #43 Embarcadero / Howard St ***************** Cycle (sec): 100 Critical Vol./Cap.(X): 0.644
Loss Time (sec): 10 Average Delay (sec/veh): 43.7
Optimal Cycle: 95 Level Of Service: D *********************** Street Name: Embarcadero Howard St East Bound West Bound North Bound South Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Include Include Include Rights: 1 0 3 0 0 1 0 2 0 1 1 0 1! 0 0 0 0 0 0 Lanes: -----||-----||-----| Volume Module: Base Vol: 228 1599 0 2 1269 217 136 0 99 Initial Bse: 228 1599 0 2 1269 217 136 0 99 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 235 1648 0 2 1308 224 140 0 102 0 0 FinalVolume: 235 1648 0 2 1308 224 140 0 102 0 0 Saturation Flow Module: Adjustment: 0.88 0.56 1.00 0.88 0.88 0.43 0.81 1.00 0.74 1.00 1.00 1.00 Lanes: 1.00 3.00 0.00 1.00 2.00 1.00 1.38 0.00 0.62 0.00 0.00 0.00 ______||___| Capacity Analysis Module: Vol/Sat: 0.14 0.51 0.00 0.00 0.39 0.28 0.07 0.00 0.12 0.00 0.00 0.00 Crit Moves: **** **** Volume/Cap: 0.86 1.03 0.00 0.01 0.89 0.63 0.22 0.00 0.39 0.00 0.00 0.00 Uniform Del: 40.7 25.0 0.0 40.5 26.0 22.0 26.2 0.0 27.8 0.0 0.0 0.0 IncremntDel: 22.3 29.1 0.0 0.0 7.4 3.8 0.1 0.0 0.4 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 62.9 54.1 0.0 40.6 33.4 25.8 26.3 0.0 28.2 0.0 0.0 0.0 AdjDel/Veh: 62.9 54.1 0.0 40.6 33.4 25.8 26.3 0.0 28.2 0.0 0.0 0.0 LOS by Move: E D A D C C C A C A A A

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0 0 19 5 2 0 4 0 0

HCM2kAvqQ: 7 20

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************************************												
Intersection	#44 1	Embaro	cadero	/ Fol:	som St	:						
Cycle (sec): Loss Time (sec) Optimal Cycle	e:	1	0 0 0 0 0	****		Critic Averag Level	e Dela Of Se	ay (se rvice:	ec/veh)	:		7.8 D
Street Name: Approach:			Embarc	adero		ound			Folso	m St		
Movement:		- T					L ·				- T	
Control: Rights:	P	rotect Incl	ed ide	Pi	rotect Incl	ed ide	Sp.	lit Ph Inclu	nase nde	Sp	lit Ph Inclu	nase ide
Min. Green: Y+R: Lanes:	4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0									4.0 0		
Volume Module Base Vol: Growth Adj: Initial Bse:	96 1.00	1463 1.00 1463	0 1.00 0	1.00	1321 1.00 1321	49 1.00 49	366 1.00 366	1.00	116 1.00 116	1.00	1.00	0 1.00 0
Added Vol: PasserByVol:	0	0	0 0	0	0 0 1321	0 0 49	0	0 0	0 0 116	0 0	0	0 0
Initial Fut: User Adj: PHF Adj:	1.00	1463 1.00 0.95	1.00	1.00	1.00 0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00
PHF Volume: Reduct Vol: Reduced Vol:	0	1540 0 1540	0 0 0	0	1391 0 1391	52 0 52	385 0 385	0 0 0	122 0 122	0 0 0	0 0 0	0 0 0
PCE Adj: MLF Adj: FinalVolume:	1.00	1.00 1.00 1540	1.00 1.00 0	1.00	1.00 1.00 1391	1.00 1.00 52		1.00 1.00 0	1.00 1.00 122	1.00 1.00 0	1.00 1.00 0	1.00 1.00 0
Saturation F												
Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 0.88 1.00	1900 0.70 2.00 2671		1.00	1900 0.96 1.92 3519	1900 0.87 0.08 131	0.83	1900 1.00 0.00 0	1900 0.59 1.00 1114	1.00	1900 1.00 0.00 0	1900 1.00 0.00 0
Capacity Ana Vol/Sat:	lysis	Modul 0.58		0.00	0.40	0.40	0.12	0.00	0.11		0.00	
Crit Moves: Green/Cycle: Volume/Cap:			0.00		0.41	0.41		0.00	0.34		0.00	0.00
Uniform Del: IncremntDel: InitQueuDel:	35.6 1.3	20.5	0.0	0.0	26.2 16.8 0.0	26.2 16.8 0.0	22.0 0.2 0.0	0.0	21.7 0.5 0.0	0.0	0.0	0.0
Delay Adj: Delay/Veh: User DelAdj:	1.00 37.0	1.00 61.4	0.00 0.0 1.00	0.00	1.00 43.0 1.00	1.00 43.0 1.00	1.00	0.00 0.0 1.00	1.00 22.2 1.00	0.00 0.0 1.00	0.00	0.00 0.0 1.00
AdjDel/Veh: LOS by Move: HCM2kAvgQ:	37.0 D	61.4 E	0.0 A 0		43.0 D	43.0 D 20	22.2 C 4	0.0 A	22.2 C 3	0.0 A 0	0.0 A 0	0.0 A 0

Existing plus Cruise Terminal Project Conditions

Weekday PM Peak Hour

Level Of Service Computation Report												
									lternat			
*****						*****	*****	****	*****	*****	****	*****
Intersection												
Average Delay	(sec	c/veh):	0.9		Worst	Case 1	Level	Of Ser	rvice:	B[10	0.0]
Street Name:			Columb			*****	*****	****		h St	****	*****
	Noi					ound	F:	ast B			est Bo	nund
Movement:			- R	T	- Т	- R	т	дос D. - Т	- R		- T	
									olled			
Rights:			ıde		Incl			Incl			Incl	
Lanes:			0 0						1 0	0 -		
Volume Module							' '					'
Base Vol:		0	8	0	0	0	0	157	92	9	76	0
Growth Adj:					1.00			1.00		1.00		1.00
Initial Bse:		0	8	0	0	0	0	157	92	9	76	0
Added Vol:	0	0	0	0	0	0	0	0	0	Ő	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		0	8	0	0	0	0	157	92	9	-	0
User Adi:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adi:		0.94	0.94		0.94	0.94		0.94	0.94	0.94		0.94
PHF Volume:	18	0.51	9	0.51	0.51	0.51	0.51	167	98	10	81	0.51
Reduct Vol:	0	-	0	-	0	0	0	0	0	.0	0	0
FinalVolume:	-	0	9	-	0	0	0		98	10	81	0
			-	-								
Critical Gap				1 1			1 1					1
Critical Gp:			6.2	vvvvv	vvvv	vvvvv	vvvvv	vvvv	xxxxx	4 1	vvvv	xxxxx
FollowUpTim:									XXXXX			XXXXX
Capacity Modu	ıle:											
Cnflict Vol:	316	316	132	XXXX	XXXX	xxxxx	XXXX	XXXX	XXXXX	265	xxxx	XXXXX
Potent Cap.:	681	603	922	XXXX	XXXX	xxxxx	XXXX	XXXX	XXXXX	1311	xxxx	XXXXX
Move Cap.:	677	599	922	XXXX	XXXX	xxxxx	XXXX	XXXX	XXXXX	1311	xxxx	XXXXX
Volume/Cap:						XXXX					xxxx	
Level Of Serv												
2Way95thQ:												XXXXX
Control Del:>												XXXXX
LOS by Move:						*	*			A		
			- RT			- RT			- RT		- LTR	
Shared Cap.:												XXXXX
SharedQueue:												XXXXX
Shrd ConDel:												XXXXX
Shared LOS:		В	*			*	*	*	*	A	*	*
ApproachDel:		10.0			xxxxx		X	xxxxx		X	xxxx	
ApproachLOS:		В			*			*			*	
******									*****	*****	****	*****
Note: Queue 1	eport	ted i:	s the r	number	of ca	ars per	r lane					

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	2000 HCM Op	eratio	ns Met	thod		e Volu	me Alt	ernati			
************** Intersection ************************************	#2 North E	oint S	st/Col	umbus	Ave						
Cycle (sec): Loss Time (s Optimal Cycl	ec): e: 9	9 9			Critic Average Level	cal Vo ge Del Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.1	210 3.8 B
Street Name: Approach: Movement:	North Bo	Columb ound - R	ous Ave Son L	e uth Bo - T	ound - R	E.	ast Bo	North P ound - R	oint W	St est B - T	ound - R
Control: Rights: Min. Green: Y+R: Lanes:	Permit Inclu 28 28 4.0 4.0 1 0 0	28 4.0	28 4.0	Permit Inclu 28 4.0 1 0	28 4.0	53 4.0	Permit Inclu 53 4.0 0 1!	ted ide 53 4.0 0 0	53 4.0 0	Perminos Includes 53 4.0 1 0	tted ude 53 4.0 1 0
Volume Modul Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	62 38 1.00 1.00 62 38 0 0 0 0 0 0 62 38 1.00 1.00 0.87 0.87 71 44 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1.00	22 1.00 22 0 0 22 1.00 0.87 25 0 25 1.00 1.00 25	22 1.00 22 0 0 22 1.00 0.87 25 0 25 1.00 1.00 25	76 1.00 76 0 0 76 1.00 0.87 87 1.00 1.00	58 1.00 58 0 0 58 1.00 0.87 67 1.00 1.00	21 1.00 21 0 0 21 1.00 0.87 24 1.00 24 1.00 24	132 1.00 132 0 0 132 1.00 0.87 152 0 152 1.00 1.00	44 1.00 44 0 0 44 1.00 0.87 51 0 51 1.00 1.00	28 1.00 28 0 0 28 1.00 0.87 32 0.32 1.00 1.00	294 1.00 294 0 0 294 1.00 0.87 338 0 338 1.00 1.00	29 1.00 29 0 0 29 1.00 0.87 33 0 33
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 1900 0.64 0.95 1.00 0.63 1212 1137	1900 0.95 0.37 658	0.82 0.28 440	1900 0.82 0.98 1519	0.82 0.74 1159	0.91 0.11 185	1900 0.91 0.67 1162	0.91 0.22 387	0.86 0.16 261	1900 0.86 1.67 2743	0.86 0.17 271
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	lysis Modul 0.06 0.04 **** 0.31 0.31 0.19 0.12 22.7 22.2 1.1 0.5 0.0 0.0 1.00 1.00 23.8 22.7 1.00 1.00 23.8 22.7	.e:	0.06 0.31 0.18 22.7 0.4 0.0 1.00 23.1 1.00 23.1	0.06 0.31 0.18 22.7 0.4 0.0 1.00 23.1 1.00 23.1 C	0.06 0.31 0.18 22.7 0.4 0.0 1.00 23.1 1.00 23.1 C	0.13 0.59 0.22 8.7 0.5 0.0 1.00 9.2	0.13 **** 0.59 0.22 8.7 0.5 0.0 1.00 9.2 1.00 9.2 A	0.13 0.59 0.22 8.7 0.5 0.0 1.00 9.2 1.00 9.2	0.12 0.59 0.21 8.7 0.2 0.0	0.12 0.59 0.21 8.7 0.2 0.0 1.00 8.9 1.00 8.9 A	0.12 0.59 0.21 8.7 0.2 0.0 1.00 8.9 1.00 8.9

Level Of Service Computation Report

		HCM Or	peratio	ns Met	hod	Computa (Future	Volum	ne Alt	ernati				
******							*****	****	*****	****	****	*****	
Intersection *******							****	****	*****	****	****	*****	
Cvcle (sec):		9	90			Critic	al Vol	l./Car	o.(X):		0.2	267	
Loss Time (se	ec):		90 8 90			Averag	e Dela	av (s	ec/veh)	:	11.8		
Optimal Cycle		9	90			Level						В	
******	*****					*****	*****	****	*****	****	****	*****	
Street Name:			Stockt	on St				1	North P	oint S	St		
Approach:	Noi	rth Bo	ound	Sou	ıth B	ound	Εá	ast B	ound	We	est Bo	ound	
Movement:													
						tted			ted	I	Permit		
Rights:			ude			ude			ide 57		Incl		
Min. Green:		25	25			25						57	
Y+R: Lanes:						4.0							
Lanes:													
Volume Module													
Base Vol:	23	20	32	14	37	22	17	236	57	7	154	5	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	23	20	32	14	37	22	17	236	57	7	154	5	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	23	20	32	14	37	22	17	236	57	7	154	5	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.89		0.89		0.89			0.89	0.89		0.89	0.89	
PHF Volume:	26	22	36	16	42	25	19	265	64	8	173	6	
Reduct Vol:	0		0	0	0		0	0	0	0	0	0	
Reduced Vol:			36	16		25	19				173	6	
PCE Adj:					1.00			1.00			1.00		
	1.00					1.00		1.00			1.00	1.00	
FinalVolume:			36		42			265	64		173	6	
Saturation Fl													
			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:						0.91			0.96	0.89	0.89	0.89	
Lanes:	0.31	0.26	0.43	0.19	0.51	0.30	0.05	0.77	0.18	0.08	1.86	0.06	
Final Sat.:	501	435	696	332	877	522	100	1383	334	143	3142	102	
Capacity Anal													
Vol/Sat:			0.05	0.05	0.05	0.05	0.19	0.19	0.19	0.06	0.06	0.06	
Crit Moves:		****						****					
Green/Cycle:					0.28		0.63		0.63		0.63	0.63	
Volume/Cap:					0.17	0.17	0.30		0.30		0.09	0.09	
Uniform Del:			24.7		24.6	24.6	7.5	7.5	7.5		6.4	6.4	
IncremntDel:			0.9	0.8	0.8	0.8	0.7	0.7	0.7	0.1	0.1	0.1	
InitQueuDel:			0.0	1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj: Delay/Veh:			25.7		25.4	25.4	8.2	8.2	8.2	6.5	6.5	6.5	
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00	
AdjDel/Veh:			25.7		25.4			8.2			6.5	6.5	
LOS by Move:						C				Α		Α	
HCM2kAvgQ:										1		1	

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Existing+Cruise Terminal WeTue May 31, 2011 10:33:56

******	2000 :	HCM Or	peratio	ons Me	thod	Computa (Future	e Volu	me Al	ternati	.ve)	****	*****
Intersection	#4 B	ay St,	/Columb	ous Av	е							
Cycle (sec):		9	90			Critic	cal Vo	1./Ca	p.(X):		0.	491
Loss Time (s	ec):		90 9 90 *****			Averag	ge Del	ay (s	ec/veh)	:	2	1.2
Optimal Cycl		9	90			Level						С
******	****	****				*****	*****	****			****	*****
Street Name:			Columb							, St		
Approach:						ound			ound		est B	
Movement:			- R			- R		– T	- R	. ь.		- R
Control:		rotect			rotec				 tted		Permi	
Rights:		Incl			Incl				ude		Incl	
Min. Green:			31			19			47	50	50	
Y+R:			4.0					4.0				4.0
Lanes:						1 0			0 1			1 0
Volume Modul	e:											
	341				145			571			1015	
Growth Adj:					1.00			1.00			1.00	
Initial Bse:		86	66				1		187		1015	34
Added Vol:	0	0	0	0	0		0		0	0	0	0
PasserByVol:		0	0	0	0		0		107	0	0	
Initial Fut: User Adj:			66 1.00		145		1.00				1015	
PHF Adj:		0.94			0.94			0.94	0.94		0.94	
PHF Volume:	363		70	0.51	154		1		199		1080	36
Reduct Vol:			0	0	0		0		0	0	0	0
Reduced Vol:		91	70	0	154		1	607	199	7	1080	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			70		154			607			1080	36
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane: Adjustment:			1900			1900		1900			1900	
Lanes:			0.75		1.95			1.99			0.90	
Final Sat.:			617				6			23		
Capacity Ana									'	'		
Vol/Sat:			0.11	0.00	0.04	0.04	0.18	0.18	0.12	0.33	0.33	0.33
Crit Moves:		****		****							****	
Green/Cycle:					0.23			0.56	0.56		0.56	0.56
Volume/Cap:						0.19		0.32	0.22		0.59	
Uniform Del:					27.8			10.8	10.1		13.2	
IncremntDel:				0.0	0.1			0.1	0.1			0.5
InitQueuDel: Delav Adj:				0.0	0.0		0.0	0.0	0.0		0.0	
Delay Adj: Delay/Veh:					27.9			10.9	10.3		13.7	
User DelAdi:								1.00	1.00		1.00	1.00
AdjDel/Veh:					27.9			10.9	10.3		13.7	
LOS by Move:					C		В			В		
HCM2kAvgQ:	8			0	2		5	5	3	11	11	11

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)														
********											****	*****		
Intersection	#5 Ba	y St/	'Stockt	on St										
Cvcle (sec):			0			Critic					0.4			
Loss Time (s			7						ec/veh)	:	9.3			
Optimal Cycl			0			Level						A		
*******		****			*****	*****	*****	****			****	*****		
Street Name: Approach:		th Bo	Stockt ound	Bay ound										
Movement:			– R								L - T - R			
Control:			ted			ted		Permit		1	Permit			
Rights:		Inclu			Incl			Incl			Incl			
Min. Green: Y+R:		20	20 4.0		20	20 4.0		63	63 4.0		63 4.0	63 4.0		
Lanes:			0 0			0 0			1 0		1 0			
Volume Modul	e:													
Base Vol:	21	25	58	40	33	31	22		20		1070	30		
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00		
Initial Bse: Added Vol:	21	25 0	58 0	40	33	31	22		20	23	1070	30 0		
PasserByVol:		0	0	0	0	0	C		0	0	0	0		
Initial Fut:		25	58	40	33	31	22		20		1070	30		
User Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00		
PHF Adj:	0.92		0.92		0.92	0.92		0.92	0.92		0.92	0.92		
PHF Volume:		27	63	43	36	34	24		22		1163	33		
Reduct Vol: Reduced Vol:	0 23	0 27	0 63	0 43	0 36	0 34	24		0 22	0	0 1163	0 33		
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00		
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00		
FinalVolume:	23	27	63	43	36	34	24	545	22	25	1163	33		
Saturation F														
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:			0.86	0.83		0.83		0.83	0.83	0.89	0.89	0.89		
Lanes:	0.20		0.56		0.32	0.30			0.07		1.91	0.05		
Final Sat.:			915		500	470		2923	117		3207	90		
Capacity Ana														
			0.07	0.07	0.07	0.07	0.19	0.19	0.19	0.36	0.36	0.36		
Crit Moves:					****						****			
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.70	0.70	0.70	0.70	0.70	0.70		
Volume/Cap:			0.31		0.32	0.32		0.27	0.27		0.52	0.52		
Uniform Del:		29.2	29.2		29.3	29.3	5.0		5.0	6.4	6.4	6.4		
IncremntDel: InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.8	0.0	0.0		
	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00		
Delay/Veh:	31.4	31.4	31.4	31.8	31.8	31.8	5.3	5.3	5.3	7.2	7.2	7.2		
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00		
AdjDel/Veh:			31.4		31.8	31.8	5.3		5.3	7.2		7.2		
LOS by Move:	C 3	C 3	C 3	C 3	C 3	C 3	Z 3		A 3	A 9		A 9		
HCM2kAvgQ:	3	3	3	3	3	3	3	3	3	9	9	9		

Level Of Service Computation Report

Existing+Cruise Terminal WeTue May 31, 2011 10:33:56

	2000 1					Computa (Future				\				
*******											*****	*****		
Intersection	#6 Ba	ay St,	/Kearny	St										
Cycle (sec):			90						o.(X):		0.5			
Loss Time (s	ec).		9						ec/veh)					
Optimal Cycl			90			Level				•	В			
*******				****	****					****	*****	*****		
Street Name:			Kearn	v St					Bay	St				
Approach:	No	rth Bo	ound	Soi	uth Bo	ound	E	ast Bo			est Bo	ound		
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R		
Control:]		ted]]	Permitted			
Rights:		Incl			Incl			Incl			Inclu			
Min. Green:		20	20		20	20			61		61	61		
Y+R:			4.0			4.0		4.0			4.0			
Lanes:			0 0			0 0			1 0		1 0			
Volume Modul														
Base Vol:	124	3	24	2	3	14	10	538	57	33	985	16		
Growth Adj:		1.00			1.00	1.00		1.00	1.00		1.00	1.00		
Initial Bse:		3	24	2	3	14	10	538	57	33		16		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	124	3	24	2	3	14	10	538	57	33	985	16		
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00		
PHF Adj:		0.90	0.90		0.90	0.90		0.90	0.90		0.90	0.90		
PHF Volume:	138	3	27	2		16	11		63		1094	18		
Reduct Vol:			0	0	0	0	0		0	0	0	0		
Reduced Vol: PCE Adi:		1.00	27 1.00	1 00	1.00	16 1.00	1 00	598 1.00	63 1.00		1094	18 1.00		
MLF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00		
FinalVolume:					3	1.00		598	63		1094	1.00		
Saturation F						'						'		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:	0.72	0.72	0.72	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.87		
Lanes:		0.02	0.16		0.16	0.74		1.78	0.19		1.91	0.03		
Final Sat.:		27	218		265	1235		2950	313		3140	51		
Capacity Ana Vol/Sat:				0 01	0 01	0.01	0.20	0.20	0.20	0.25	0.35	0.35		
Crit Moves:		****	0.12	0.01	0.01	0.01	0.20	0.20	0.20	0.33	****	0.33		
Green/Cycle:			0.22	0 22	0.22	0.22	0.68	0.68	0.68	0.68	0.68	0.68		
Volume/Cap:			0.55		0.06	0.06		0.30	0.30		0.51	0.51		
Uniform Del:			31.0		27.6	27.6	5.9	5.9	5.9	7.2	7.2	7.2		
IncremntDel:	7.0	7.0	7.0		0.3	0.3	0.3	0.3	0.3	0.8	0.8	0.8		
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Delay Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00		
Delay/Veh:			38.0		27.9	27.9	6.2	6.2	6.2	8.0	8.0	8.0		
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00		
AdjDel/Veh:			38.0		27.9	27.9	6.2		6.2	8.0		8.0		
LOS by Move:			D 5	C 0	C 0	C 0	A 4		A 4	A 9		A 9		
HCM2kAvgQ:	5	5	5	U	U	U	4	4	4	9	9	9		

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)															
******	2000 1	HCM OF	peratio	ns Mei	inoa	(ruture	VOLUI	me Ali	ernati	ve)		++++++			
							^^^^								
Intersection						*****	****	****	*****	****	****	*****			
Cycle (sec):		8	30			Critic	al Vo	l./Car	o.(X):		0.5	509			
Loss Time (se	ec):		9		Average Delay (sec/veh):										
Optimal Cycle		8	30			Level					В				
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****			
Street Name:			Sanso	me St					Broadw	av St	v St				
Approach:	No	rth Bo	ound	Soı	ıth Bo	ound	E	ast Bo		4	West Bound				
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R			
			1	1		1									
Control:	Sp.	lit Ph	nase	Spi	lit Pl	nase		Permit	ted		ermi	tted			
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ude			
Min. Green:	27	27	27	0	0	0	44	44	0	0	44	44			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0			
Lanes:	0	1 0	1 0	0 (0 0	0 0	0	1 1	0 0	0 () 1	1 0			
Volume Module	≘:														
Base Vol:	274	290	39	0	0	0	76	547	0	0	773	107			
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Initial Bse:	274	290	39	0	0	0	76	547	0	0	773	107			
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0			
Initial Fut:	274	290	39	0	0	0	76	547	0	0	773	107			
User Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00			
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
PHF Volume:	288	305	41	0	0	0	80	576	0	0	814	113			
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0			
Reduced Vol:	288	305	41	0	0	0	80	576	0	0	814	113			
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00			
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00			
FinalVolume:	288	305	41	. 0	0	0	80	576	0 l	0	814	113			
Saturation F				1			1								
Saturation r.		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900			
Adjustment:		0.88	0.88		1.00	1.00		0.70	1.00		0.93	0.93			
Lanes:		0.96	0.13		0.00	0.00		1.76	0.00		1.76	0.24			
Final Sat.:		1602	215	0.00	0.00	0.00		2336	0.00		3114	431			
				-					1						
Capacity Ana				1		'	'		'	'		'			
Vol/Sat:		0.19	0.19	0.00	0.00	0.00	0.25	0.25	0.00	0.00	0.26	0.26			
Crit Moves:	****	3.13	0.17	3.00	3.00	0.00	0.20	3.23	0.00	0.00	****	0.20			
Green/Cycle:		0.34	0.34	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.55	0.55			
Volume/Cap:		0.56	0.56		0.00	0.00		0.45	0.00		0.48	0.48			
Uniform Del:			21.7	0.0	0.0	0.0		10.7	0.0		11.0	11.0			
IncremntDel:	0.7	0.7	0.7	0.0	0.0	0.0	0.2	0.2	0.0	0.0	0.2	0.2			
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Delay Adj:		1.00	1.00		0.00	0.00		1.00	0.00		1.00	1.00			
Delay/Veh:		22.4	22.4	0.0	0.0	0.0	11.0	11.0	0.0	0.0	11.1	11.1			
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
AdjDel/Veh:	22.4	22.4	22.4	0.0	0.0	0.0	11.0	11.0	0.0	0.0	11.1	11.1			
LOS by Move:	С	С	С	A	A	A	В	В	A	A	В	В			
HCM2kAvgQ:	7	7	7	0	0	0	5	5	0	0	7	7			

						Computa				,			
******						(Future					++++		
							^^^^	^ ^ ^ ^ ^ ^					
Intersection						******	****	*****	******	****	*****	******	
						Critic					0.!		
Cycle (sec): Loss Time (se		c	9										
Optimal Cycle		-	70			Level			sec/veh): 18.9				
******			-	****						****	*****	_	
Street Name:			Batte						Broadw				
Approach:	No	rth Bo	und		nth Bo	nind	F.	ast Bo			et B	nund	
Movement:			- R			- R				West Bound L - T - R			
Control:						nase					Permit		
Rights:		Inclu				ıde		Incl		•	Incl		
Min. Green:		0	0		44	44		17		17		17	
Y+R:	4.0		4.0			4.0		4.0		4.0		4.0	
Lanes:			0 0			1 0			1 0		1 1	0 0	
Volume Module	⊖:												
Base Vol:	0	0	0	54	602	155	0	326	257	37	726	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	0	0	54	602	155	0	326	257	37	726	0	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	0	0	54	602	155	0	326	257	37	726	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	
PHF Volume:	0	0	0	55	614	158	0	333	262	38	741	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	-	0	55	614	158	0	333	262	38	741	0	
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:		0	0		614	158	0		262	38		0	
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane:		1900			1900	1900		1900			1900	1900	
2	1.00		1.00		0.91	0.91		0.89			0.86	1.00	
Lanes: Final Sat.:	0.00	0.00	0.00		1.49 2576	0.38		1.12 1885	0.88		1.90	0.00	
rinai sat.:	-	-										-	
Capacity Ana													
Vol/Sat:				0 24	0 24	0.24	0 00	0.18	0.18	0 24	0.24	0.00	
Crit Moves:	0.00	0.00	0.00	****	0.24	0.24	0.00	0.10	0.10	0.24	****	0.00	
Green/Cycle:	0 00	0 00	0.00		0.55	0.55	0 00	0.34	0.34	0 3/	0.34	0.00	
Volume/Cap:			0.00		0.43	0.43		0.52	0.52		0.71	0.00	
Uniform Del:		0.0	0.0		10.6	10.6		21.3	21.3		23.1	0.0	
IncremntDel:	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.4	0.4	2.1	2.1	0.0	
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	0.00		0.00		1.00	1.00		1.00	1.00		1.00	0.00	
Delay/Veh:		0.0	0.0	10.8	10.8	10.8	0.0	21.8	21.8	25.2	25.2	0.0	
User DelAdj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:			0.0	10.8	10.8	10.8	0.0	21.8	21.8	25.2	25.2	0.0	
LOS by Move:	A	A	A	В	В	В	A	С	С	С	С	A	
HCM2kAvgQ:	0	0	0	6	6	6	0	6	6	9	9	0	

Level Of Service Computation Report												
2000 HCM Operations Method (Future Volume Alternative) ************************************												
Intersection	#9 E	mbarca	adero/	Beach	St /	Grant	St					
Cycle (sec): Loss Time (s Optimal Cycl	ec):	1	75 L3)1			Critic Averag Level	al Vol e Dela Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.5 45	561 5.6 D
Street Name:			Embarc						(EB)/			
Approach:		rth Bo		Sou	ıth Bo	nind			ound			
Movement:			- R			- R	L -	- T	- R		- T	
Control:	Sp	lit Ph	nase	Sp.	lit Ph	nase	Sp.	lit Ph	nase	Spl	it Ph	nase
Rights:		Inclu				ıde			ıde		Inclu	ıde
Min. Green:		17			26	0			26	19		19
Y+R:		4.0	4.0		4.0			4.0			4.0	4.0
Lanes:			1 0			0 0			0 1			0 0
Volume Modul												
Base Vol:		335	28	4	141	0	0	0	308	17	73	8
Growth Adi:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		335	28	4		0	0	0	308	17	73	8
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	335	28	4	141	0	0	0	308	17	73	8
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:		0.92	0.92		0.92	0.92		0.92	0.92	0.92		0.92
PHF Volume:			30	4		0	0	0	335	18	79	9
Reduct Vol:	104		0 30	0	0 153	0	0	0	0 335	0 18	0 79	0
Reduced Vol: PCE Adi:		1.00	1.00		1.00	1.00	1 00	1.00	1.00	1.00		1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:			30		153	0	0	0	335	18	79	9
Saturation F	low M	odule:										
Sat/Lane:		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:					1.00	1.00		1.00	0.87	0.98		0.98
Lanes:		1.42	0.12		0.97			0.00	1.00	0.17		0.08
Final Sat.:		2512	210		1846	0	0	0	1644		1387	152
Capacity Ana												
Vol/Sat:				0.08	0.08	0.00	0 00	0.00	0.20	0.06	0 06	0.06
Crit Moves:		****	0.11	0.00	****	0.00	0.00	0.00	****	****	0.00	0.00
Green/Cycle:	0.17	0.17	0.17	0.26	0.26	0.00	0.00	0.00	0.26	0.19	0.19	0.19
Volume/Cap:	0.86	0.86	0.86	0.32	0.32	0.00	0.00	0.00	0.79	0.30	0.30	0.30
Uniform Del:	40.9	40.9	40.9	30.4	30.4	0.0	0.0	0.0	35.0	35.3	35.3	35.3
IncremntDel:			11.3	0.4	0.4	0.0	0.0	0.0	9.8	0.5	0.5	0.5
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	1.00		1.00	0.00		0.00	1.00	1.00		1.00
Delay/Veh:			52.2		30.8	0.0	0.0	0.0	44.7	35.8		35.8
User DelAdj: AdjDel/Veh:			1.00		1.00	1.00	0.0	1.00	1.00	1.00		1.00
LOS by Move:			J2.2 D	30.0 C		0.0 A	0.0 A		D	33.0 D	55.0 D	33.0 D
HCM2kAvqQ:			11	4		0	0		12	3	3	3
5 × •				-	-	,					_	

	2000 1		Level O peratio							****			
********											*****	******	
Intersection													
******									*****	****	****	*****	
Cycle (sec):			96			Critic					0.3		
Loss Time (se	ec):		16							:	31.0		
Optimal Cycle			00		Average Delay (sec/veh): 31.0 Level Of Service:								
*****		****	*****	****	****					****	****	*****	
Street Name:			Embarc	adero			North	Point	St (E	B) / Ke	earny	St (W	
Approach:	No	rth Bo	ound	Sot	ath Bo	ound	E	ast Bo	ound	We	est Bo	ound	
Movement:	L ·	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R	
Control:	P	rotect	ted]	Permi	tted	Sp.	lit Ph	nase	Spi	lit Ph	ıase	
Rights:		Incl	ude		Incl	ude		Incl	ıde		Incl	ıde	
Min. Green:	16		0	0	24	24	20		20	20	20	20	
Y+R:		4.0	4.0		4.0			4.0	4.0		4.0	4.0	
Lanes:		0 2				1 0		0 1!		0 :			
Volume Module			_										
Base Vol:	161	470	0	1	414	54	19	244	13	18	25	10	
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:		470	0	1	414	54	19	244	13	18	25	10	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	1.01	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:		470 1.00	0	1 00	414	54 1.00	19	244	13	18	25 1.00	10	
User Adj: PHF Adj:		0.95	1.00		0.95	0.95		0.95	0.95		0.95	0.95	
PHF Volume:	169	495	0.93	0.93	436	57	20	257	14	19	26	11	
Reduct Vol:	109	493	0	0	430	0	0	237	0	0	0	0	
Reduced Vol:	169	495	0	1	436	57	20	257	14	19	26	11	
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:	169	495	0	1	436	57	20	257	14	19	26	11	
Saturation F	low Mo	odule	:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.95	1.00	0.89	0.89	0.89	0.99	0.99	0.99	0.98	0.98	0.85	
Lanes:		2.00	0.00		1.76	0.23		0.91	1.02		0.58	1.00	
Final Sat.:		3610	0		2992	390		1703	1926		1081	1615	
Capacity Ana				0 15	0 15	0 15	0 15	0 15	0 01	0 00	0 00	0 01	
Vol/Sat:	0.09		0.00	0.15	0.15	0.15	0.15	0.15	0.01	0.02 ****	0.02	0.01	
Crit Moves:	0 17	****	0 00	0 07	0 07	0 07	0 00	****	0 00		0 00	0 00	
Green/Cycle:			0.00		0.27	0.27		0.20	0.20		0.20	0.20	
Volume/Cap:			0.00		0.54	0.54		0.75	0.04		0.12	0.03	
Uniform Del: IncremntDel:		0.1	0.0	0.7	31.4	31.4	8.2	8.2	32.2	0.1	0.1	0.0	
IncremntDel: InitQueuDel:		0.0	0.0	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj:		1.00	0.00	1.00		1.00		1.00	1.00		1.00	1.00	
Delay Adj: Delay/Veh:		18.3	0.00	32.1		32.1		45.9	32.2		32.9	32.3	
User DelAdi:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdiDel/Veh:		18.3	0.0		32.1	32.1		45.9	32.2		32.9	32.3	
LOS by Move:		В	Α.	C	C	C	13.5 D	13.5 D	02.2 C	C	02.5 C	02.5 C	
HCM2kAvqQ:	5	5	0	7	7	7	9	9	0	1	1	0	
2													

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)											
Intersection						*****	****	****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	ec): e:		90 7 81 ******	****	****	Critic Averag Level	e Dela Of Sei	ay (se rvice:	ec/veh)	:		4.9 B
Street Name: Approach: Movement:	Nor L -	th B	- R	Sou L -	- T	- R	L -	- T	- R	We L	est Bo - T	- R
	42 4.0 2 (Incl 53 4.0	ted ude 0 4.0 0 0	0 4.0 0 (Inclu 25 4.0	25 4.0	7 4.0 1	Ovl 0 0 4.0 0	42 4.0 0 2	Sp: 0 4.0 0 0	lit Ph Inclu 0 4.0	nase ude 0 4.0 0 0
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj:	955 1.00 955 0 955 1.00 955 1.00 0.92 1038 1.00 1.00	615 1.00 615 0 615 1.00 0.92 668 1.00 668	0 1.00 0 0 0 0 1.00 0 0 0 1.00 0 0	0 1.00 0 0 0 0 1.00 0.92 0 0 0 1.00 0	661 1.00 661 0 0 661 1.00 0.92 718 0 718 1.00 1.00 718	30 1.00 30 0 0 30 1.00 0.92 33 0 3 3 1.00 1.00	16 1.00 16 0 0 16 1.00 0.92 17 0 17 1.00 1.00	0 1.00 0 0 0 0 1.00 0.92 0 0 0 1.00 1.00	547 1.00 547 0 0 547 1.00 0.92 595 0 595 1.00 1.00 595	0 1.00 0 0 0 1.00 0 0.92 0 0 0 1.00	0 1.00 0 0 0 0 1.00 0.92 0 0 0 1.00 0	0 1.00 0 0 0 0 1.00 0.92 0 0 0 1.00
Saturation Fi Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 0.92 2.00 3502	1900 0.87 2.00 3321	1900 1.00 0.00 0	1.00 0.00 0	1.91 3158	0.87 0.09 143	0.95 1.00 1805	0.00	1900 0.69 2.00 2615	1.00 0.00 0		0.00
Capacity Anal Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: Adjbel/Veh: LOS by Move: HCM2kAvgQ:	0.30 **** 0.48 0.62 17.4 0.7 0.0 1.00 18.2 1.00 18.2 B	0.20 0.84 0.24 1.4 0.0 0.0 1.00 1.4 1.00 1.4	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0	0.00 0.00 0.0 0.0 0.0 0.0	0.0 1.00 24.4 1.00 24.4 C	0.37 0.62 23.4 1.0 0.0 1.00 24.4 1.00 24.4	**** 0.08 0.12 38.6 0.4 0.0 1.00 39.0	0.00 0.00 0.0 0.0 0.0 0.0 0.0 1.00 0.0 A	0.23 0.56 0.41 11.5 0.2 0.0 1.00 11.7 1.00 11.7 B	0.00 0.00 0.0 0.0	0.0 A	0.00 0.00 0.00 0.0 0.0 0.0 0.0 0.0 1.00 0.0 A

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						Computa				,		
******						(Future					****	*****
Intersection	#12	Embaro	cadero/	Ches	tnut S	St / Sa	nsome	St				
Cycle (sec):			90			Critic Average Level	al Vo	1 /Cai) (X) ·		0.0	
Loss Time (se		1	L3			Averag	e Del	av (se	ec/veh)	:		3.4
Optimal Cycle		-	79			Level	Of Se	rvice	:			В
*****		*****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Embaro	adero		ound	Ches	tnut :	St (EB)	/ Sa	ansome	e (WB)
Approach:	No	rth Bo	ound	Son	uth Bo	ound	E	ast B	ound	We	est B	ound
Movement:						- R					- T	
						ed	Sp	lit P				
Rights:		Inclu		1.0		ıde	1.0	Incli	ıde	-	Incl	ıde
Min. Green: Y+R:		40	0			0 4.0	16	16	16	1 7	7	7
Y+R: Lanes:			0 0			1 0					4.0	
Lanes:												
Volume Modul			1	1		1	1		ı	1		ı
		1232	0	18	1183	7	79	316	29	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	41	1232	0	18	1183	7	79	316	29	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	41	1232	0	18	1183	7	79	316	29	0	0	0
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	
		0.90	0.90		0.90	0.90		0.90	0.90		0.90	0.90
PHF Volume:		1369	0		1314	8	88	351	32	0	0	0
Reduct Vol:		0	0	0	0	0	0	-	0	0	0	0
Reduced Vol:			0		1314	8	88			0	0	0
_		1.00				1.00		1.00			1.00	
MLF Adj: FinalVolume:						1.00		1.00			1.00	
rinalvolume:										-	-	-
Saturation F.												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:						0.91					1.00	
_		2.00			2.98			1.49			0.00	
Final Sat.:			0		5151				238		0	
Capacity Ana	lysis	Modul	Le:									
Vol/Sat:			0.00			0.26		0.14	0.14	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:						0.53		0.20			0.00	0.00
Volume/Cap:			0.00		0.48	0.48		0.69			0.00	0.00
Uniform Del:			0.0		13.5	13.5		33.6		0.0		0.0
IncremntDel:			0.0	0.2	0.1	0.1	3.1		3.1	0.0		0.0
InitQueuDel:			0.0	0.0	0.0	0.0		0.0		0.0		0.0
Delay Adj: Delay/Veh:			0.00		1.00	1.00		1.00		0.00	0.00	0.00
User DelAdi:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
USEL DELAGJ:						1.00						

Existing+Cruise Terminal WeTue May 31, 2011 10:33:56

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AdjDel/Veh: 35.2 15.9 0.0 36.2 13.6 13.6 36.7 36.7 36.7 0.0 0.0 0.0 rage 10 1

2	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												

Intersection *********									****	*****	*****	*****	
Cycle (sec): Loss Time (sec) Optimal Cycle	:		90 11 76 *****	****	****	Critica Average Level (e Dela Of Ser	ay (se cvice:	c/veh)		0.4 28	3.9 C	
Street Name: Approach: Movement:	No:	th Bo	Embarc ound - R	adero Sou L -	uth Bo	ound – R	Lomb Ea L -	oard S ast Bo - T	t (EB) und - R	/ Bat We L -	tery est Bo - T	(WB) ound - R	
Control: Rights: Min. Green:	ts: Include Includ Green: 9 35 35 9 35							lit Ph Inclu 21	ase		lit Ph Inclu	nase	
Y+R: Lanes:	4.0	4.0	4.0 1 0	4.0	4.0		0 1	4.0 L 0	4.0 0 1	4.0	4.0	4.0	
Volume Module Base Vol: Growth Adj:	103 1.00	1217	0	8	862 1.00	351 1.00	32 1.00	0	250 1.00	0	0	0	
Initial Bse: Added Vol: PasserByVol: Initial Fut:	0	1217 0 0 1217	0 0 0	8 0 0 8	862 0 0 862	351 0 0 351	32 0 0 32	0 0 0	250 0 0 250	0 0 0	0 0 0	0 0 0	
User Adj: PHF Adj: PHF Volume: Reduct Vol:	1.00 0.92 112 0		1.00 0.92 0	1.00 0.92 9		1.00 0.92 382 0	1.00 0.92 35 0	1.00 0.92 0	1.00 0.92 272	1.00 0.92 0	1.00 0.92 0	1.00 0.92 0	
Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	112 1.00 1.00	1323 1.00	0 1.00 1.00	9 1.00 1.00 9	937 1.00	382 1.00 1.00 382	35 1.00 1.00 35	0	272 1.00 1.00 272	0 1.00 1.00 0	1.00	0 1.00 1.00	
Saturation Fl	ow Mo	odule											
Sat/Lane: Adjustment: Lanes: Final Sat.:	1805	0.95 2.00 3610	1900 0.95 0.00	1900 0.95 1.00 1805	0.95 2.00 3610	1900 0.85 1.00 1615	0.95 1.00 1809	0.00	1900 0.85 1.00 1615		1.00 1.00 1900	1900 1.00 0.00	
Capacity Anal Vol/Sat: Crit Moves:	ysis	Modu:	'	0.00		0.24	•	0.00	0.17	0.00		0.00	
Green/Cycle: Volume/Cap: Uniform Del:	0.61	0.40	0.00 0.00 0.0	0.10 0.05 36.6	0.65	0.40 0.59 21.4	0.38	0.00	0.38 0.44 20.9	0.00 0.00 0.0		0.00 0.00 0.0	
<pre>IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj:</pre>	5.7 0.0 1.00 44.4	35.1	0.0 0.0 0.00 0.0	0.1 0.0 1.00 36.7 1.00	23.2	1.5 0.0 1.00 22.9 1.00	0.0 0.0 1.00 17.8 1.00	0.0	0.5 0.0 1.00 21.4 1.00	0.0 0.0 0.00 0.0 1.00	0.0	0.0 0.0 0.00 0.0	
AdjDel/Veh: LOS by Move: HCM2kAvgQ:	44.4		0.0 A 0	36.7 D		22.9 C 8	17.8 B	0.0 A	21.4 C	0.0 A	0.0 A	0.0 A	

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Existing+Cruise Terminal WeTue May 31, 2011 10:33:56

	0000		Level O							\		
	2000 HCM Operations Method (Future Volume Alternative)											
Intersection												
******								*****	*****	****	*****	*****
Cycle (sec):		9	90			Critic	al Vo	l./Car).(X):		0.5	515
Loss Time (s	ec):		1.4			Averag	re Del	ay (se	ec/veh)	:	19	3.3
Optimal Cycl	e:		39			Level						В
******	****					*****	****	*****			*****	*****
Street Name:			arcader							n St		
Approach:		rth Bo				ound					est Bo	
Movement:			- R		- T			- T			- T	
Control: Rights:	P.	rotect Inclı		P.	Incli	ed	sp.	Inclu	nase	sp.	lit Ph Inclu	
Min. Green:	Q	44	0	7		0	24		24	0	0	0
Y+R:		4.0	4.0			4.0	4.0		4.0		4.0	-
Lanes:			0 0			1 0			0 0			0 0
Volume Module	e:											
Base Vol:	46	1269	0	4	913	11	29	0	64	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		1269	0	4		11	29	0	64	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		1269	0	4	913	11	29	0	64	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.94	0.94		0.94	0.94		0.94	0.94		0.94	0.94
PHF Volume: Reduct Vol:	49	1350	0	4	971 0	12	31	0	68 0	0	0	0
Reduced Vol:		1350	0	4	971	12	31	0	68	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			0	4		12	31		68	0	0	0
Saturation F	low M	odule	:									
Sat/Lane:		1900	1900		1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.95	1.00		0.95	0.95		1.00	0.89		1.00	1.00
	1.00		0.00		1.98	0.02		0.00	0.69		1.00	0.00
Final Sat.:			0		3560	43	529		1168		1900	0
Capacity Ana. Vol/Sat:		Moau. 0.37		0 00	0.27	0.27	0 06	0.00	0.06	0 00	0.00	0.00
Crit Moves:	0.03	****	0.00	****	0.27	0.27	****	0.00	0.06	0.00	0.00	0.00
Green/Cycle:	0 00		0.00		0.48	0.48		0.00	0.27	0 00	0.00	0.00
Volume/Cap:			0.00		0.56	0.56		0.00	0.27		0.00	0.00
Uniform Del:			0.0		16.5	16.5	25.7	0.0	25.7	0.0	0.0	0.0
IncremntDel:			0.0	0.1	0.4	0.4	0.2	0.0	0.2	0.0	0.0	0.0
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:		19.7	0.0		16.9	16.9	25.9	0.0	25.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			0.0		16.9	16.9	25.9	0.0	25.9	0.0	0.0	0.0
LOS by Move:			A	D	В	В	С	A	С	A	A	A
HCM2kAvgQ:	1	15	0	0	10	10	2	0	2	0	0	0

Cycle (sec):			90			Critic	cai vo.	ı./ca	o.(x):		0.:	540
Loss Time (se	90 Cri Ave 17 Ave 1: 90 Lev						ge Dela	ay (se	ec/veh)	:	3:	1.7
Optimal Cycle	∋:	:	90			Level	Of Se	rvice	:			С

Street Name:			Embarc	adero					Broadw	ay St		
Street Name: Approach:	No:	rth B	ound	Sot	ıth Bo	ound	E	ast Bo	ound	We	est B	ound
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
				1			1			1		
Control: Rights: Min. Green: Y+R:	P	cotect	ted	Pi	rotect	ted	Sp.	lit Pl	nase	Spi	lit Pl	hase
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Ovl	
Min. Green:	16	37	0	7	28	28	29	0	29	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	2 (2	0 0	1 () 1	1 0	1 (0 0	0 1	0 (0 0	0 0
				1			I			1		1
Volume Module			'	1		'			'	'		'
Base Vol:			0	6	932	49	73	0	319	0	0	0
Growth Adj:												
Initial Bse:												
Added Vel:	433	1225	0	0	752	U	/ 5	0	212	0	0	
Added Vol: PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	125	1225	0	6	022	40	73	0	210	0	0	
User Adj:												
PHF Adj:	1.00	1.00	1.00	1.00					1.00			
PHF Volume:	435	1225	0	6	932	49	/3	0	319	0	0	0
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	- 0	0	0	0	0	0
PCE Adj: MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:												
Saturation Fl												
Sat/Lane:												
Adjustment:	0.92	0.95	1.00	0.95	0.94	0.94	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	2.00	2.00	0.00	1.00	1.90	0.10	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	3502	3610	0	1805	3406	179	1805	0	1615	0	0	0
Capacity Anal	lysis	Modu.	le:									
Vol/Sat:			0.00	0.00				0.00	0.20	0.00	0.00	0.00
Crit Moves:					****		****					
Green/Cycle:	0.18	0.41	0.00	0.08	0.31	0.31	0.37	0.00	0.37	0.00	0.00	0.00
Volume/Cap:	0.70	0.83	0.00	0.04	0.88	0.88	0.11	0.00	0.54	0.00	0.00	0.00
Uniform Del:	34.7	23.6	0.0	38.4	29.4	29.4	18.9	0.0	22.6	0.0	0.0	0.0
IncremntDel:	3.5	3.9	0.0	0.1	8.3	8.3	0.1	0.0	1.0	0.0	0.0	0.0
InitQueuDel:									0.0			
Delay Adj: Delay/Veh:	38.3	27.6	0.0	38.5	37.7	37.7	19.0	0.0	23.6	0.0	0.0	0.0
User DelAdj:									1.00			
AdjDel/Veh:												
LOS by Move:	D	C	A	D	D	D	B	A	C	A	A	A
LOS by Move: HCM2kAvgQ:	6	15	0	0	15	15	1	0	7	0	0	0
· 5 £ •	0						_		,		Ü	-

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Level Of Service Computation Report

2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #16 Embarcadero / Washington St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.481
Loss Time (sec): 17 Average Delay (sec/veh): 33.0
Optimal Cycle: 90 Level Of Service: C ********************** Street Name: Embarcadero Washington St
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R _____| Control: Protected Protected Split Phase Split Phase 2 0 3 0 0 1 0 2 1 0 1 0 0 0 1 0 0 0 0 -----|----|-----|------| Volume Module: Initial Bse: 302 1545 0 9 1242 55 95 0 183 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 1nitial Fut: 302 1545 0 9 1242 55 95 0 183 0 0 0 0 PHF Volume: 302 1545 0 9 1242 55 95 0 183 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 302 1545 0 9 1242 55 95 0 183 0 Ω 0 0 FinalVolume: 302 1545 0 9 1242 55 95 0 183 0 0 Saturation Flow Module: Adjustment: 0.92 0.91 1.00 0.95 0.90 0.90 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 3.00 0.00 1.00 2.87 0.13 1.00 0.00 1.00 0.00 0.00 0.00 Final Sat.: 3502 5187 0 1805 4937 219 1805 0 1615 0 0 ______||___| Capacity Analysis Module: Vol/Sat: 0.09 0.30 0.00 0.00 0.25 0.25 0.05 0.00 0.11 0.00 0.00 0.00 Crit Moves: *** *** Green/Cycle: 0.13 0.33 0.00 0.11 0.31 0.31 0.37 0.00 0.37 0.00 0.00 0.00 Volume/Cap: 0.65 0.89 0.00 0.04 0.81 0.81 0.14 0.00 0.31 0.00 0.00 0.00 Uniform Del: 37.0 28.5 0.0 35.7 28.5 28.5 19.1 0.0 20.4 0.0 0.0 0.0 IncremntDel: 3.1 6.4 0.0 0.1 3.2 3.2 0.1 0.0 0.3 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 40.1 34.9 0.0 35.8 31.7 31.7 19.2 0.0 20.7 0.0 0.0 0.0 Adipel/Veh: 40.1 34.9 0.0 35.8 31.7 31.7 19.2 0.0 20.7 0.0 0.0 0.0 LOS by Move: D C A D C C B A C A A A HCM2kAvqQ: 4 14 0 0 12 12 2 0 4 0 0 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #17 Embarcadero / Mission St ***************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.842 Cost Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 33.6 ************************ Street Name: Embarcadero MIssion St East Bound West Bound North Bound South Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Split Phase 0 1 2 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 Lanes: Volume Module: Base Vol: 2 1809 0 0 1375 179 162 0 87 Initial Bse: 2 1809 0 0 1375 179 162 0 87 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 2 1945 0 0 1478 192 174 0 94 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 2 1945 0 0 1478 192 174 0 94 0 0 0 0 0 FinalVolume: 2 1945 0 0 1478 192 174 0 94 0 0 Saturation Flow Module: Adjustment: 0.86 0.57 1.00 1.00 0.60 0.89 0.92 1.00 0.92 1.00 1.00 1.00 Lanes: 0.01 2.99 0.00 0.00 2.76 0.24 0.65 0.00 0.35 0.00 0.00 0.00 Final Sat.: 4 3264 0 0 3142 409 1140 0 612 0 0 ______||___| Capacity Analysis Module: Vol/Sat: 0.60 0.60 0.00 0.00 0.47 0.47 0.15 0.00 0.15 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.58 0.58 0.00 0.00 0.58 0.58 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 1.03 1.03 0.00 0.00 0.81 0.81 0.49 0.00 0.49 0.00 0.00 0.00 Uniform Del: 19.0 19.0 0.0 0.0 15.2 15.2 25.2 0.0 25.2 0.0 0.0 0.0 IncremntDel: 29.2 29.2 0.0 0.0 2.6 2.6 0.7 0.0 0.7 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00 Delay/Veh: 48.2 48.2 0.0 0.0 17.8 17.8 25.9 0.0 25.9 0.0 0.0 0.0 AdjDel/Veh: 48.2 48.2 0.0 0.0 17.8 17.8 25.9 0.0 25.9 0.0 0.0 0.0 LOS by Move: D D A A B B C A C A A A

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0 0 13 19 6 0 6

HCM2kAvqQ: 32 22

Existing+Cruise Terminal WeTue May 31, 2011 10:33:57

		HCM O	Level O peratio	ns Met	thod	(Future	e 1	Volum	ne Alt	ernati			
*************** Intersection							* *	****	*****	*****	*****	*****	******
+++++++++++	++++	++++	++++++	+++++	++++	+++++	**	****	*****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle		1	00			Critic	ca.	l Vol	L./Car	(X):		0.	818
Loss Time (se	ec):		10			Averac	αе	Dela	av (se	c/veh)	:	3	3.6
Optimal Cvcle	e:	1	00			Level	0:	f Sei	vice:	-, - ,			С
******	****	****	*****	****	****	*****	* *	****	****	*****	****	****	*****
Street Name:			Embarc	adero						Harris	on St		
Approach:						ound		Εa	ast Bo	und	V	lest B	ound
Movement:			- R			- R				- R		- T	
							11.						
Control:	1	Permi	tted	1	Permi	tted		Sp]	Lit Ph	ase	Sp	olit P	hase
Rights:		Incl	ude			ude			Inclu			Incl	
Min. Green:			0										
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
			0 0										
							-						
Volume Module	e:												
Base Vol:			0			319		182		169	() 0	0
Growth Adj:										1.00		1.00	
Initial Bse:						319		182	0	169		0	-
Added Vol:		0			0			0		0		0	
PasserByVol: Initial Fut:	0	0	0	0	0	0		0	0			0	
										169			
User Adj:												1.00	
PHF Adj:			0.93			0.93			0.93			0.93	
PHF Volume:				0						182		0	
Reduct Vol:	0	0	0		0			0		0	(0
Reduced Vol:						343				182	1 00		
PCE Adj:													
MLF Adj:			1.00							1.00		1.00	
FinalVolume:													
Saturation F							11:						
Sat/Lane:				1900	1900	1900		1900	1900	1900	1900	1900	1900
Adjustment:													
Lanes:			0.00							1.00		0.00	
Final Sat.:	0	2527	0	0	2066	547		1805	0	1292	(0	0
							11-				1		
Capacity Anal	lysis	Modu	le:										
Vol/Sat:	0.00	0.59	0.00	0.00	0.63	0.63	-	0.11	0.00	0.14	0.00	0.00	0.00
Crit Moves:					****			****					
Green/Cycle:	0.00	0.63	0.00	0.00	0.63	0.63	-	0.27	0.00	0.27	0.00	0.00	0.00
Volume/Cap:					1.00				0.00		0.00	0.00	0.00
Uniform Del:					18.4			29.9	0.0	31.0	0.0		0.0
IncremntDel:				0.0				0.5		1.4	0.0		0.0
InitQueuDel:				0.0		0.0		0.0	0.0	0.0	0.0		0.0
Delay Adj:				0.00								0.00	0.00
Delay/Veh:				0.0				30.4		32.4	0.0		0.0
User DelAdj:										1.00		1.00	1.00
AdjDel/Veh:						39.6			0.0			0.0	
LOS by Move:						D		C	A	C	I	. A	A
HCM2kAvgQ:	0	23	0	0	26	37		5	0	5	(0	0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #19 Embarcadero / Bryant St *****************

 Cycle (sec):
 100
 Critical Vol./Cap.(X):
 0.627

 Loss Time (sec):
 10
 Average Delay (sec/veh):
 31.4

 Optimal Cycle:
 95
 Level Of Service:
 C

 *********************** Street Name: Embarcadero Bryant St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted Include Include Include Include Rights: 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 Lanes: -----|----|-----|------| Volume Module: Base Vol: 135 1272 9 43 1294 38 75 6 168 75 62 Initial Bse: 135 1272 9 43 1294 38 75 6 168 75 62 39 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 139 1311 9 44 1334 39 77 6 173 77 64 40 FinalVolume: 139 1311 9 44 1334 39 77 6 173 77 64 40 -----||-----||------| Saturation Flow Module: Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.64 0.64 0.85 0.81 0.81 0.81 Lanes: 1.00 1.99 0.01 1.00 2.00 1.00 0.93 0.07 1.00 0.43 0.35 0.22 Final Sat.: 1805 3581 25 1805 3610 1615 1119 90 1615 658 544 342 ______|__|___| Capacity Analysis Module: Vol/Sat: 0.08 0.37 0.37 0.02 0.37 0.02 0.07 0.07 0.11 0.12 0.12 0.12 Crit Moves: **** Green/Cycle: 0.21 0.45 0.45 0.17 0.41 0.41 0.28 0.28 0.28 0.28 0.28 0.28 Volume/Cap: 0.37 0.82 0.82 0.14 0.90 0.06 0.25 0.25 0.38 0.42 0.42 0.42 Uniform Del: 33.8 24.2 24.2 35.0 27.6 17.8 27.8 27.8 29.0 29.4 29.4 29.4 IncremntDel: 0.6 3.5 3.5 0.2 7.9 0.0 0.4 0.4 0.5 0.7 0.7 0.7 Delay/Veh: 34.4 27.7 27.7 35.2 35.5 17.9 28.2 28.2 29.6 30.0 30.0 30.0 Adjpel/Veh: 34.4 27.7 27.7 35.2 35.5 17.9 28.2 28.2 29.6 30.0 30.0 30.0 LOS by Move: C C C D D B C C C C HCM2kAvq0: 3 18 18 1 19 1 2 2 4 5 5 5

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Level Of Service Computation Report

Existing+Cruise Terminal WeFri Jun 24, 2011 15:09:50

2000 HCM Operations Method (Future Volume Alternative)												
Intersection	Intersection #20 Embarcadero / Brannan St											
Cycle (sec): Loss Time (sec) Optimal Cycle ************************************	ec):	90 11 90			Critic Averag Level	al Vo re Del Of Se	l./Cap ay (se rvice	o.(X): ec/veh)	:	0.5	507 3.2 C	
Street Name:		Embaro	adero					Brann				
Approach:	North	Bound	Sot	uth Bo	ound	E	ast B	ound	W		ound	
Movement:	L -	T - R	L ·	- T	- R	L	- T	- R	L	- T	- R	
Control:	Prot	ected	P:	rotect	ted	Sp.	lit Pl	nase	Sp.	lit Ph	nase	
Rights:	In	clude		Incl	ıde		Incl	ıde		Inclu	ıde	
Min. Green:		37 0			37			28				
Y+R:		.0 4.0										
		2 0 0			0 1			0 1			0 0	
77 - 1 M - d - 1												
Volume Modul Base Vol:	e: 49 12	99 0	2	1262	273	110	0	15	0	0	0	
Growth Adj:				1.00			1.00	1.00		1.00	1.00	
Initial Bse:					273	119			0		0	
Added Vol:	0		0			0		0	0		0	
PasserByVol:				0		0			0		0	
Initial Fut:			3			119			0		0	
		00 1.00						1.00	1.00	1.00	1.00	
PHF Adj:	0.96 0.	96 0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	
PHF Volume:	51 13	53 0	3	1315	284	124	0	16	0	0	0	
Reduct Vol:	0	0 0	0	0	0	0	0	0	0	0	0	
Reduced Vol:				1315		124					0	
PCE Adj:					1.00		1.00				1.00	
MLF Adj:		00 1.00			1.00		1.00	1.00		1.00	1.00	
FinalVolume:			. 3					16		0	0	
Saturation F			1			1			1			
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:								0.85		1.00		
Lanes:							0.00			0.00		
Final Sat.:					1615		0				0	
		I										
Capacity Ana												
Vol/Sat:				0.36	0.18		0.00	0.01	0.00	0.00	0.00	
Crit Moves:			****			****						
Green/Cycle:					0.45	0.31				0.00	0.00	
Volume/Cap: Uniform Del:				21.7	0.39 16.8		0.00	0.03		0.00	0.00	
IncremntDel:			0.0		0.4	0.2		0.0		0.0	0.0	
InitQueuDel:			0.0			0.0		0.0			0.0	
Delay Adj:			1.00				0.00	1.00		0.00	0.00	
Delay/Veh:			32.2		17.1		0.0	21.6	0.0		0.0	
User DelAdj:			1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:	36.4 33	.8 0.0	32.2	25.1	17.1	23.1	0.0	21.6	0.0	0.0	0.0	
LOS by Move: HCM2kAvgQ:	D	C A			В			С	A	A	A	
HCM2kAvgQ:	1	23 0	0	16	5	3	0	0	0	0	0	

					·							
	2000		Level O oeratio							\		
******											*****	*****
Intersection												
*******							****	*****	*****	****	*****	*****
Cycle (sec):			00			Critic					0.7	
Loss Time (sec).	00).		10						ec/veh)		46	
Optimal Cvcl			95			Level				•	-10	, , , D
******				****	****					****	*****	_
Street Name:			Embarc	adero					Howar	d St		
Approach:	No	rth Bo	ound		ith Bo	ound	E.	ast Bo			est Bo	nind
Movement:			- R			- R		- T			- T	
Control:			ted		rotect				nase		lit Ph	
Rights:		Incl			Incl		- 1	Incl		- 1	Inclu	
Min. Green:	15	45	0	10	40	40	30	0	30	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 3	0 0	1 (0 2	0 1	1	0 1!	0 0	0	0 0	0 0
Volume Modul	e:											
Base Vol:	121	1557	0	3	1132	329	252	0	169	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	1557	0	3	1132	329	252	0	169	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	1557	0	3	1132	329	252		169	0	0	0
User Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.93	0.93		0.93	0.93		0.93	0.93		0.93	0.93
PHF Volume:		1674	0		1217	354	271	0	182	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		1674	0		1217	354	271	0	182	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		1674	0		1217	354	271	0	182	0	0	0
Saturation F.				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment: Lanes:		0.56	1.00		0.88	0.43		1.00	0.74		1.00	1.00
Lanes: Final Sat.:		3.00	0.00		2.00	808	2167		837	0.00	0.00	0.00
Final Sat.:												1
Capacity Ana												
Vol/Sat:		0.52	0.00	0 00	0.36	0.44	0 13	0.00	0.22	0 00	0.00	0.00
Crit Moves:	0.00	****	0.00	****	0.50	0.11	****	0.00	0.22	0.00	0.00	0.00
Green/Cycle:	0 15		0.00	0 10	0.45	0.45	0 30	0.00	0.30	0 00	0.00	0.00
Volume/Cap:			0.00		0.43	0.43		0.00	0.72		0.00	0.00
Uniform Del:			0.0		24.1	27.3	27.9	0.0	31.1	0.0	0.0	0.0
IncremntDel:		35.2	0.0	0.0	3.5	42.8	0.3		4.0	0.0	0.0	0.0
InitOueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:		60.3	0.0		27.6	70.1	28.1	0.0	35.2	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		27.6	70.1	28.1		35.2	0.0	0.0	0.0
LOS by Move:			A	D	C	E	C		D	A		A
HCM2kAvqQ:	3	21	0	0	17	12	5		10	0	0	0
2=1												

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	2000 HCN					Computa				ve)		
*****											****	*****
Intersection							****	****	*****	*****	****	*****
Cycle (sec): Loss Time (se Optimal Cycle	ec).	1 (n			Averag	e Dela	av (se	ec/veh)		4.	4 7
Optimal Cycle	۵۰,۰	91	n			Level	Of Set	rvice	•	•	-	D
******	~ • * * * * * * * * *	·***:	~ * * * * * *	****	*****	*****	****	*****	• ******	*****	****	*****
Chanch Mome.			Dan la a sa a						Palas	C+		
Approach:	North	n Boi	and	Sol	ıth Bo	nind	E	ast Bo	nind	We We	est Bo	ound
Movement:	L -	т -	- R	Ι	- Т	- R	Τ	- Т	- R	L -		
Control:	Prot	ecte	-d '	Pı	rotect	ed '	Sn	lit Pl	hase	Sp.	lit Pl	hase
Rights:	Tr	2000	de		Incl	ıde	Op.	Incl	1000	Op.	Incl	nde
Rights: Min. Green:	12	10140	10	3.2	32	32	3.1	31	31	0	111011	n
Y+R:	4.0	1 0	4 0	4 0	4 0	4 0	4 0	4 0	4 0	4 ∩	4 0	4 0
	1 0								0 1			
Lanes:	1	۷ ۱		1	, <u> </u>							
Volume Module			-1	,		-1	_		- 1	-		
Base Vol:		111	0	0	1270	3.4	270	0	256	0	0	0
Growth Adj:						1.00			1.00		1.00	
Initial Bse:									256		0.00	
Added Vol:			0	0	12/0	24					-	-
PasserByVol:			0	0	0	0 0 34	0	0	0			-
Initial Fut:			0	0	1270	2.4	270		256			
												-
User Adj:	0.93 0					0.93			1.00			0.93
PHF Volume:				0	1366	3 /			275 0			
Reduct Vol: Reduced Vol:	0	- 1 7	0	0	1266	0	0		275			
PCE Adj:									1.00			
MLF Adj:						37						
FinalVolume:												
Saturation F												
Sat/Lane:				1000	1000	1000	1000	1000	1000	1000	1900	1900
Adjustment:												
Lanes:											0.00	
Lanes: Final Sat.:												
rinal Sat.:												
Capacity Anal				,			,			,		
Vol/Sat:				0 00	0 38	0.38	0 09	0 00	0 25	0 00	0 00	0.00
Crit Moves:					0.50		****	3.00	0.23	0.00	J.00	0.00
Green/Cycle:						0.40		0 00	0 34	0 00	0.00	0.00
Volume/Cap:												
Uniform Del:									25.7			0.0
IncremntDel:				0.0					6.4			
InitQueuDel:				0.0		0.0			0.0			
Delay Adj:									1.00			
Delay/Veh:						39.2		0.0		0.0		
User DelAdj:												
AdjDel/Veh:												
LOS by Move:	Л	2.0	Α 0	A	21	10	2	A	8			

Existing+Cruise Terminal WeTue May 31, 2011 10:33:57

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4 26 0 0 21 19 3 0 8

HCM2kAvgQ:

Existing plus Cruise Terminal Project Conditions

Weekend Midday Peak Hour

20	000 H		Level (t lternat	-ive)		
******											****	*****
Intersection						*****	*****	****	*****	*****	****	******
Average Delay	(sec	c/veh)):	1.6		Worst	Case 1	Level	Of Ser	rvice:	B[1	1.3]
Street Name:			Columb							ch St		
Approach:	Noi	cth Bo	ound	Sot	ıth Bo	ound	Ea	ast Bo	ound	We	est B	ound
Movement:			- R						- R	L -	- T	- R
				St	op S	ign			olled	Und	contr	olled
Rights:			ude		Incl				ıde		Incl	
Lanes:									1 0			
Volume Module Base Vol:		0	23	0	0	0	0	269	95	14	82	0
Growth Adj:						1.00		1.00			1.00	
Initial Bse:		0		0	0	0	0		95	14	82	0
Added Vol:	0	0	0	0	0	0	0	200	0	0	02	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:		0	23	0	0	0	0			14	82	0
	1.00	-	1.00	-	1.00	1.00	-	1.00			1.00	1.00
_					0.92	0.92					0.92	0.92
_	0.92		0.92					0.92				
PHF Volume:	42	0	25	0	0	0	0	292	103	15	89	0
Reduct Vol:	0		0		0	0		0	0	0	0	0
FinalVolume:			25	0	0	0	0		103	15	89	0
Critical Gap												
Critical Gp:			6 2	vvvvv	vvvv	vvvvv	vvvvv	vvvv	vvvvv	1 1	vvvv	xxxxx
FollowUpTim:									XXXXX			XXXXX
Capacity Modu			'						'			'
Cnflict Vol:	464	464	198	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	396	xxxx	xxxxx
Potent Cap.:	560	499	848	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	1174	xxxx	xxxxx
Move Cap.:	555	492	848	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	1174	xxxx	XXXXX
Volume/Cap:	0.08	0.00	0.03						xxxx		xxxx	xxxx
Level Of Serv												
2Way95thQ:	xxxx	xxxx	XXXXX	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX	0.0	XXXX	XXXXX
Control Del:>										8.1	XXXX	XXXXX
LOS by Move:	*	*	*	*	*	*	*	*	*	A	*	*
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	637	xxxxx	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
SharedQueue:>	xxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx
Shrd ConDel:x	xxxx	11.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx
Shared LOS:	*	В	*	*	*	*	*	*	*	A	*	*
ApproachDel:		11.3		X	xxxxx		X	xxxxx		XX	xxxxx	
ApproachLOS:	to alle alle alle d	В			*		to all all all all all a	*	to at all all all all all a		*	to the state of the state of
									*****	*****	****	*****
Note: Queue r	report	ted is	s the r	number	of ca	ars per	r lane	•				

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Level Of Service Computation Report

Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

Loss Time (sec): 9	omputation Report Future Volume Alternative)	2000 HCM Operations Me	
Cycle (sec): 90 Critical Vol./Cap.(X): Loss Time (sec): 9 Average Delay (sec/veh): Optimal Cycle: 90 Level Of Service: ***********************************	Ave	Intersection #2 North Point St/Col	Intersection #
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Critical Vol./Cap.(X): 0.278 Average Delay (sec/veh): 14.7 Level Of Service: B	Cycle (sec): 90 Loss Time (sec): 9 Optimal Cycle: 90	Cycle (sec): Loss Time (sec Optimal Cycle:
Control: Permitted Permitted Permitted Permitted Permitted Permitted Permitted Permitted Permitted Include Incl	- R L - T - R L - T - R	Approach: North Bound So Movement: $L-T-R$ L	Approach: Movement:
Volume Module: Base Vol: 42 98 33 31 75 50 28 181 50 41	ted Permitted Permitted Include 28 53 53 53 53 53 53 53 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 1 0 0 0 1 0 1 0 1 0	Control: Permitted Rights: Include Min. Green: 28 28 28 28 Y+R: 4.0 4.0 4.0 4.0 Lanes: 1 0 0 1 0 0	Control: Rights: Min. Green: Y+R: Lanes:
Initial Bse: 42 98 33 31 75 50 28 181 50 41 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 42 98 33 31 75 50 28 181 50 41 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	50	Volume Module: Base Vol:	Volume Module: Base Vol: Growth Adj: 1 Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: 1 PHF Adj: 0 PHF Volume: Reduct Vol: Reduct Vol: Reduct Vol: PCE Adj: 1 MLF Adj: 1 FinalVolume:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	0.79 0.92 0.92 0.92 0.81 0.81 0.81 0.64 0.11 0.70 0.19 0.29 1.40 0.31 968 189 1220 337 445 2149 478	Adjustment: 0.64 0.96 0.96 0.79 Lanes: 1.00 0.75 0.25 0.40 Final Sat.: 1214 1367 460 600	Adjustment: C Lanes: 1 Final Sat.: 1
Capacity Analysis Module: Vol/Sat: 0.04 0.08 0.08 0.06 0.06 0.06 0.17 0.17 0.10 0 Crit Moves: **** Green/Cycle: 0.31 0.31 0.31 0.31 0.31 0.59 0.59 0.59 0.59 0.59 0.13 0.26 0.26 0.19 0.19 0.19 0.29 0.29 0.29 0.18 0 Uniform Del: 22.2 23.2 23.2 22.7 22.7 22.7 9.1 9.1 9.1 8.5 IncremntDel: 0.7 1.1 1.1 0.4 0.4 0.4 0.7 0.7 0.7 0.2 InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.06 0.17 0.17 0.17 0.10 0.10 0.10 ***** 0.31 0.59 0.59 0.59 0.59 0.59 0.59 0.19 0.29 0.29 0.29 0.18 0.18 0.18 22.7 9.1 9.1 9.1 8.5 8.5 8.5 0.4 0.7 0.7 0.7 0.2 0.2 0.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.00 1.00	Capacity Analysis Module: Vol/Sat: 0.04 0.08 0.08 0.06 Crit Moves: **** Green/Cycle: 0.31 0.31 0.31 0.31 Volume/Cap: 0.13 0.26 0.26 0.19 Uniform Del: 22.2 23.2 23.2 22.' IncremntDel: 0.7 1.1 1.1 0.4 InitQueuDel: 0.0 0.0 0.0 0.0 Delay Adj: 1.00 1.00 1.00 1.00 Delay/Veh: 22.9 24.4 24.4 23.' User DelAdj: 1.00 1.00 1.00 1.00 AdjDel/Veh: 22.9 24.4 24.4 23.'	Capacity Analy Vol/Sat: C Crit Moves: Green/Cycle: C Volume/Cap: C Uniform Del: 2 IncremntDel: InitQueuDel: Delay Adj: 1 Delay/Veh: 2 User DelAdj: 1 AdjDel/Veh: 2

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #3 North Point St/Stockton St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.301 Loss Time (sec): 8 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 13 2 ************************ Street Name: Stockton St North Point St East Bound West Bound Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Include Include Include Rights: Include Lanes: Volume Module: Base Vol: 16 54 52 15 25 17 22 219 63 17 91 13 Initial Bse: 16 54 52 15 25 17 22 219 63 17 91 13 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 Initial Fut: 16 54 52 15 25 17 22 219 63 17 91 13 PHF Volume: 18 62 60 17 29 20 25 252 72 20 105 15 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 18 62 60 17 29 20 25 252 72 20 105 15 FinalVolume: 18 62 60 17 29 20 25 252 72 20 105 15 Saturation Flow Module: Adjustment: 0.91 0.91 0.91 0.89 0.89 0.89 0.95 0.95 0.95 0.84 0.84 0.84 Lanes: 0.13 0.44 0.43 0.26 0.44 0.30 0.07 0.72 0.21 0.28 1.51 0.21 Final Sat.: 227 764 736 443 738 502 131 1301 374 448 2396 342 _____| Capacity Analysis Module: Vol/Sat: 0.08 0.08 0.08 0.04 0.04 0.04 0.19 0.19 0.19 0.04 0.04 0.04 Crit Moves: **** Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.63 0.63 0.63 0.63 0.63 0.63 Volume/Cap: 0.29 0.29 0.29 0.14 0.14 0.14 0.31 0.31 0.31 0.07 0.07 0.07 Uniform Del: 25.5 25.5 25.5 24.4 24.4 24.4 7.5 7.5 7.5 6.3 6.3 6.3 IncremntDel: 1.5 1.5 1.5 0.6 0.6 0.6 0.7 0.7 0.7 0.1 0.1 0.1 Delay/Veh: 27.1 27.1 27.1 25.0 25.0 25.0 8.2 8.2 8.2 6.4 6.4 6.4 AdjDel/Veh: 27.1 27.1 27.1 25.0 25.0 25.0 8.2 8.2 6.4 6.4 6.4 LOS by Move: C C C C C A A A A A

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HCM2kAvqQ: 3 3

Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)											

******						*****	****	****	*****	****	****	*****
Cycle (sec):			0			Critic					0.4	
Loss Time (se Optimal Cycle		10	9			Averag Level			ec/veh)	:	24	1.8 C
*******				****	*****					****	****	
Street Name:			Columb	us Ave	9				Bay	St		
Approach:		rth Bo				ound		Cast Bo			est Bo	
Movement:		- T			- T			- T			- T	
Control:		rotect			cotect			Permit			Permit	
Rights:		Inclu			Inclu			Incl			Incl	
Min. Green:	8		31	19		19	4 "		47	50		50
Y+R:	4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Lanes:	2 (L 0			1 1	0 1	0		
Volume Module			'			'	'		'			'
Base Vol:	173	125	69	1	157	8	13		130	32		36
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse: Added Vol:	173	125 0	69 0	1	157 0	8	13		130 0	32 0	480	36 0
PasserByVol:	0	0	0	0	0	0	(0	0	0	0
Initial Fut:	173	125	69	1	157	8	13	614	130	32	480	36
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.98	0.98		0.98	0.98		0.98	0.98		0.98	0.98
PHF Volume: Reduct Vol:	177	128	70 0	1	160 0	8	13		133	33	490 0	37 0
Reduced Vol:	177	128	70	1	160	8	13		133	33	490	37
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	177		70	1	160	1	13	627	133	33	490	37 l
Saturation F												
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.76	0.76		0.94	0.94		0.89	0.85		0.84	0.84
Lanes:		0.64	0.36		1.89	0.10		1.96	1.00		1.75	0.13
Final Sat.:	3502		512		3390	173		3323	1615		2789	209
Capacity Anal				1		ı	1		ı	1		ı
Vol/Sat:	-	0.14	0.14	0.05	0.05	0.05	0.19	0.19	0.08	0.18	0.18	0.18
Crit Moves:		****		****				****				
Green/Cycle:			0.31		0.34	0.34		0.43	0.43		0.43	0.43
Volume/Cap: Uniform Del:			0.44		0.14	24.8		21.7	19.2		21.4	21.4
IncremntDel:			0.7	0.2	0.1	0.1	0.2		0.1	0.2		0.2
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Delay/Veh: User DelAdj:		30.6	30.6		24.8	24.8	21.9	21.9	19.3		21.6	21.6
AdiDel/Veh:		30.6	30.6		24.8	24.8		21.9	19.3		21.6	21.6
LOS by Move:			C	D	C	С	(В	C	С	С
HCM2kAvgQ:	3	6	6	2	2	2	8	8	3	7	7	7

Α

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #5 Bay St/Stockton St *************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.343 Loss Time (sec): 7 Average Delay (sec/veh): Optimal Cycle: 90 Level Of Service: 10 3 ************************ Street Name: Stockton St Bay St East Bound West Bound Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Permitted Permitted Include Include Include Rights: Include Lanes: Volume Module: Base Vol: 55 42 59 24 44 38 37 600 33 29 485 Initial Bse: 55 42 59 24 44 38 37 600 33 29 485 47 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 57 43 61 25 45 39 38 619 34 30 500 48 0 FinalVolume: 57 43 61 25 45 39 38 619 34 30 500 48 Saturation Flow Module: Adjustment: 0.83 0.83 0.83 0.88 0.88 0.88 0.85 0.85 0.85 0.84 0.84 0.84 Lanes: 0.35 0.27 0.38 0.23 0.41 0.36 0.11 1.79 0.10 0.10 1.73 0.17 Final Sat.: 554 423 595 377 691 597 178 2886 159 166 2769 268 _____| Capacity Analysis Module: Vol/Sat: 0.10 0.10 0.10 0.07 0.07 0.07 0.21 0.21 0.21 0.18 0.18 0.18 Crit Moves: **** Volume/Cap: 0.46 0.46 0.46 0.30 0.30 0.30 0.31 0.31 0.31 0.26 0.26 0.26 Uniform Del: 30.3 30.3 30.3 29.1 29.1 29.1 5.2 5.2 4.9 4.9 IncremntDel: 4.3 4.3 4.3 2.0 2.0 2.0 0.4 0.4 0.4 0.3 0.3 0.3

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HCM2kAvqQ: 4 4

Delay/Veh: 34.6 34.6 34.6 31.2 31.2 31.2 5.5 5.5 5.5 5.2 5.2 5.2 AdjDel/Veh: 34.6 34.6 34.6 31.2 31.2 31.2 5.5 5.5 5.5 5.2 5.2 5.2 LOS by Move: C C C C C A A A A A

Existing+Cruise Terminal WeTue May 31, 2011 09:49:28 _____

		т		f Sor	rice C	omputa		on [onort				
	2000 но										ve)		
******												*****	*****
Intersection					*****	*****	**	****	*****	*****	****	*****	*****
Cycle (sec):		9	0			Critic	al	Vol	L./Car	(X):		0.3	382
Loss Time (s	ec):		9			Averag	e	Dela	ay (se	c/veh)	:	8	3.9
Optimal Cycle	e:	9	0			Level	Of	Ser	vice:				A
******	*****	****	*****	****	*****	*****	* *	***	*****	*****	****	*****	*****
Street Name:			Kearn	y St						Bay	St		
Approach:	Nort				uth Bo				ast Bo		W	est Bo	ound
Movement:			- R			- R			- T			- T	
							-						
Control:			ted]	Permit			E	Permit			Permit	
Rights:		Inclu 20		20	Inclu 20			C 1	Inclu		C 1	Inclu	
Min. Green: Y+R:	20 4.0		20 4.0	20 4.0		20 4.0		61 4.0		61 4.0	61	61 4.0	61 4.0
Lanes:			0 0			0 0			L 0		0		
Lanes.			1										
Volume Modul			1	1		'				1	'		
Base Vol:	58	7	14	7	9	30		20	607	62	93	474	82
Growth Adj:	1.00 1		1.00	1.00	1.00	1.00	1	.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	58	7	14	7	9	30		20	607	62	93	474	82
Added Vol:	0	0	0	0	0	0		0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0		0	0	0	0	0	0
Initial Fut:		7	14	7	9	30		20	607	62	93	474	82
User Adj:	1.00 1		1.00		1.00	1.00			1.00	1.00		1.00	1.00
PHF Adj:	0.89 (0.89	0.89		0.89	0		0.89	0.89		0.89	0.89
PHF Volume:	65	8	16	8	10	34		22	682	70	104	533	92
Reduct Vol: Reduced Vol:	0 65	0	0 16	0	0 10	0 34		0 22	0 682	0 70	104	0 533	0 92
PCE Adi:	1.00 1		1.00		1.00	1.00	1		1.00	1.00		1.00	1.00
MLF Adj:	1.00 1		1.00		1.00	1.00			1.00	1.00		1.00	1.00
FinalVolume:	65	8	16	8	10	34	_	22	682	70	104	533	92
							1-						1
Saturation F	low Mod	dule:											
Sat/Lane:	1900 1	L900	1900	1900	1900	1900	1	900	1900	1900	1900	1900	1900
Adjustment:	0.75		0.75		0.88	0.88			0.87	0.87	0.68	0.68	0.68
Lanes:	0.73 (0.18		0.20	0.65	0		1.76	0.18		1.46	0.25
Final Sat.:	1042		251	254	327	1091		96	2900	296		1893	328
							-						
Capacity Ana Vol/Sat:			e: 0.06	0 03	0 03	0 02	0	2.4	0 24	0 24	0 20	0.28	0.28
Voi/Sat: Crit Moves:		1.06	0.06	0.03	0.03	0.03	U	. 24	0.24	0.24	0.28	U.Z8	0.28
Green/Cycle:			0.22	0 22	0.22	0.22	0	60	0.68	0.68	0 60	0.68	0.68
Volume/Cap:			0.28		0.14	0.14			0.35	0.35		0.42	0.42
Uniform Del:			29.0		28.1	28.1		6.1	6.1	6.1	6.5	6.5	6.5
IncremntDel:		2.2	2.2	0.8	0.8	0.8		0.4	0.4	0.4	0.7	0.7	0.7
InitQueuDel:		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00 1	L.00	1.00	1.00	1.00	1.00	1	.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	31.3		31.3		28.9	28.9		6.5	6.5	6.5	7.2	7.2	7.2
User DelAdj:			1.00		1.00	1.00			1.00	1.00		1.00	1.00
AdjDel/Veh:			31.3		28.9	28.9		6.5	6.5	6.5	7.2	7.2	7.2
LOS by Move:		C	C	C	C	C		A	A	A	A		A
HCM2kAvgQ:	2	2	2	1	1	1		5	5	5	5	5	5

			Level 0	f Serv	vice (Computa	tion 1	Report				
	2000		peratio			-		-		ve)		
******											****	*****
Intersection	#7 B	roadw	ay St/S	ansome	e St							
******	****	****	*****	****	****	*****	****	*****	*****	****	****	*****
Cycle (sec):			80			Critic	al Vo	l./Cap).(X):		0.3	339
Loss Time (s	ec):		9			Averag	e Dela	ay (se	ec/veh)	:	12	2.4
Optimal Cycl	e:		80			Level	Of Se	rvice:	:			В
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Sanso	me St					Broadw	ay St		
Approach:	No:	rth B	ound	Sou	ıth B	ound	E	ast Bo	ound	We	est Bo	ound
Movement:			- R			- R		- T			- T	
Control:	Sp.	lit P	hase	Sp.	lit Pl	nase]	Permit	ted]	Permit	ted
Rights:		Incl	ude		Incl	ude		Incl	ıde		Incl	ıde
Min. Green:	27	27	27	0	0	0	44	44	0	0	44	44
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lanes:	0	1 0	1 0	0 (0 0	0 0	0	1 1	0 0	0 () 1	1 0
Volume Modul	e:											
Base Vol:	145	181	18	0	0	0	72	458	0	0	460	38
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	145	181	18	0	0	0	72	458	0	0	460	38
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		181	18	0	0	0	72	458	0	0	460	38
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.94	0.94		0.94	0.94		0.94	0.94		0.94	0.94
PHF Volume:	154	193	19	0	0	0	77	487	0	0	489	40
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	193	19	0	0	0	77	487	0	0	489	40
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	154	193	19	0	0	0	. 77	487	0	0	489	40
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:		0.88	0.88		1.00	1.00		0.78	1.00		0.94	0.94
Lanes:		1.06	0.10		0.00	0.00		1.73	0.00		1.85	0.15
Final Sat.:		1766	176	. 0	0	0	400	2546	0	. 0	3298	272
			,									
Capacity Ana				0 00	0 00	0 00	0 10	0 10	0 00	0 00	0 15	0 15
Vol/Sat:	****	0.11	0.11	0.00	0.00	0.00	0.19	0.19	0.00	0.00	0.15	0.15
Crit Moves:		0 04	0 04	0 00	0 00	0 00	0 55		0 00	0 00	0 55	0 55
Green/Cycle:			0.34		0.00	0.00		0.55	0.00		0.55	0.55
Volume/Cap:		0.32	0.32		0.00	0.00		0.35	0.00		0.27	0.27
Uniform Del:			19.7	0.0	0.0	0.0		10.0	0.0	0.0	9.5	9.5
IncremntDel:	0.2	0.2	0.2	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	1.00		0.00	0.00		1.00	0.00		1.00	1.00
Delay/Veh:		19.9	19.9	0.0	0.0	0.0		10.1	0.0	0.0	9.6	9.6
User DelAdj:			1.00		1.00	1.00		1.00	1.00	0.0	1.00	1.00
AdjDel/Veh:		19.9 B	19.9 B	0.0 A	0.0	0.0 A	10.1 B	10.1 B	0.0 A	0.0 A	9.6 A	9.6
LOS by Move:		В 4	В 4	A 0	A 0	A 0	В 4	В 4	A 0	A 0		A
HCM2kAvgQ:	4	4	4	0	0	Ü	4	4	U	U	3	3

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	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)													
******											*****	*****		
Intersection														
*******						*****	****	****	*****	****	****	*****		
Cvcle (sec):			30			Critic	al Vo	l./Car	o.(X):		0.3	305		
Loss Time (se	ec):		9						ec/veh)	:	1	7.5		
Optimal Cycle	e:		70			Level						В		
*****	****	****	*****	****	****	*****	****	****	*****	****	****	*****		
Street Name:			Batte	ry St					Broadw	ay St				
Approach:	No:	rth B	ound			ound		ast Bo		W€	est Bo	ound		
Movement:			- R			- R			- R		- T			
Control:	Sp.	lit Pl		Sp.		nase	1		tted]	Permit			
Rights:		Incl				ıde		Incl			Incl			
Min. Green:	0	0	0	44		44	0			17		17		
Y+R:	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0		
Lanes:		0 0		0 :		1 0			1 0		1 1	0 0		
Volume Module	1													
Base Vol:	0	0	0	15	288	83	0	317	161	34	415	0		
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		
Initial Bse:	0	0	0	15	288	83	0	317	161	34	415	0		
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
PasserBvVol:	0	0	0	0	0	0	0	0	0	0	0	0		
Initial Fut:	0	0	0	15	288	83	0	317	161	34	415	0		
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93		
PHF Volume:	0	0	0	16	310	89	0	341	173	37	446	0		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	0	0	0	16	310	89	0	341	173	37	446	0		
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		
FinalVolume:	. 0	0	0	16	310	89	. 0	341	173	. 37	446	0		
Saturation F														
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900		
Adjustment:		1.00	1.00		0.91	0.91		0.90	0.90		0.84	1.00		
Lanes:		0.00	0.00		1.49	0.43		1.33	0.67		1.85	0.00		
Final Sat.:	0	0	0		2592	747		2272	1154		2956	0		
Capacity Ana	lvsis	Modu	le:											
Vol/Sat:		0.00	0.00		0.12	0.12	0.00	0.15	0.15	0.15	0.15	0.00		
Crit Moves:				****							****			
Green/Cycle:	0.00	0.00	0.00		0.55	0.55		0.34	0.34		0.34	0.00		
Volume/Cap:		0.00	0.00		0.22	0.22		0.44	0.44		0.45	0.00		
Uniform Del:	0.0	0.0	0.0	9.2	9.2	9.2		20.7	20.7		20.7	0.0		
IncremntDel:	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.3	0.3	0.3	0.3	0.0		
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Delay Adj:		0.00	0.00		1.00	1.00		1.00	1.00		1.00	0.00		
Delay/Veh:	0.0	0.0	0.0	9.3	9.3	9.3		20.9	20.9		21.0	0.0		
User DelAdj:	0.0	0.0	0.0	9.3	9.3	9.3		20.9	20.9		21.0	0.0		
AdjDel/Veh: LOS by Move:		0.0 A	0.0 A	9.3 A	9.3 A	9.3 A	U.U	20.9 C	20.9 C	21.0 C	Z1.0	0.0 A		
HCM2kAvqQ:	0	A 0	A 0	A 3	A 3	A 3	0	5	5	5	5	A 0		
	U	U	U	J	2	J	U	J	J	J	J	U		

2	2000 I					Computa (Future				ve)		
******	****	****	*****	*****	*****	*****	****	*****	*****	****	*****	*****
Intersection								*****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	∋:	1	75 13 01	****		Critic Average Level	e Dela Of Sei	ay (se rvice:	ec/veh)		0.5).6 F
Street Name:			Embaro						(EB)/			
Approach:	No	c+h B	ound		ı+h Bo	nind			und			
Movement:			– R						– R		- Т	
Control:			hase			nase					lit Ph	
Rights:	SP.		ude	SP.	Incl		_	Inclu		SP.	Incli	
Min. Green:	17	17		0		0		26	26	19		19
Y+R:		4.0	4.0		4.0			4.0			4.0	4.0
Lanes:			1 0			0 0			0 1		1!	
Volume Module												
Base Vol:		484	48	0	155	0	0	0	315	9	59	9
					1.00				1.00		1.00	
Growth Adj: Initial Bse:	1.00	484	1.00	1.00	155	1.00	1.00	1.00	315	1.00	59	1.00
Added Vol:	302	404	40	0	133	0	0	0	313	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol: Initial Fut:	-	484	48	0	155	0	0	0	315	9	59	9
					1.00			1.00	1.00			
User Adj:	1.00		1.00			1.00				1.00		1.00
PHF Adj:	381	0.95	0.95 51	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume: Reduct Vol:	301	0	0	0	103	0	0	0	332	0	02	0
Reduced Vol:	381	509	51	0	163	0	0	0	332	9	62	9
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	381		51	0.00	163	0	0.00	0	332	9	62	9
rinalvolume:					103			U				9
Saturation Fl												
	1900		1900	1000	1900	1900	1000	1900	1900	1900	1000	1900
	0.92		0.92		1.89	1.00		1.00	0.87	0.98		0.98
Lanes:		0.77	0.14		1.00	0.00		0.00	1.00	0.12		0.12
Final Sat.:	1908		253		3593	0.00		0.00	1644		1424	217
Capacity Anal			,	1		1	1		1	1		1
Vol/Sat:	-			0 00	0.05	0.00	0 00	0.00	0.20	0 04	0.04	0.04
Crit Moves:	****	0.20	0.20	0.00	****	0.00	0.00	0.00	****	****	0.01	0.01
Green/Cycle:		0 17	0.17	0 00	0.26	0.00	0 00	0.00	0.26	0 19	0.19	0.19
Volume/Cap:	1.19		1.19		0.18	0.00		0.00	0.78		0.23	0.23
Uniform Del:			42.0		29.2	0.0	0.0	0.0	34.9	34.8		34.8
IncremntDel:			96.6	0.0	0.1	0.0	0.0	0.0	9.3	0.3		0.3
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			1.00		1.00	0.00		0.00	1.00	1.00		1.00
Delay/Veh: 1		139			29.3	0.0	0.0	0.0	44.1		35.1	35.1
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh: 1			138.6		29.3	0.0	0.0	0.0	44.1	35.1		35.1
LOS by Move:			F	Α.		Α.	Α.		D	D	D	D
HCM2kAvgQ:			22	0	4	0	0	0	12	2	2	2

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*******							****	*****	****	***
Cycle (sec):		90		Criti	cal Vol./Ca	p.(X):		0.	788	
Loss Time (sec	2):	14		Avera	ge Delay (s	ec/veh	1):	9	7.4	
Optimal Cycle:	:	180		Level	Of Service	:			F	
*********	******	*****	*******	*****	*****	*****	****	*****	***	* * *
Street Name:		Embar	cadero		North Poin	t St ((EB)/	Kearny	St	(W
Approach:	North	Bound	South	Bound	East E	ound		West B	ound	
Movement:	L - T	- R	L - 1	- R	L - T	- R	L	- T	- 1	R

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Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

Control:	Pi	cotec.	tea	ł	ermit	tea	Sp.	lit Pi	ıase	Sp.	Lit Pi	nase
Rights:		Incl	ude		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	15	36	0	0	17	17	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:												
Volume Module												
Base Vol:	148	839	0	1	326	166	24	158	50	77	34	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	148	839	0	1	326	166	24	158	50	77	34	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:												
Initial Fut:	148	839	0	1	326	166	24	158	50	77	34	14
User Adj:								1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	156	883	0	1	343	175	25	166	53	81	36	15
Reduct Vol:												
Reduced Vol:	156	883	0	1	343	175	25	166	53	81	36	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	156	883	0	1	343	175	25	166	53	81	36	15
Saturation F	low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.48	1.00	0.86	0.44	0.86	0.96	0.96	0.96	0.97	0.97	0.85
Lanes:	1.00	2.00	0.00	0.01	1.58	0.41	0.12	0.76	1.12	0.69	0.31	1.00
Final Sat.:	1805	1830	0	4	1317	671	212	1397	2051	1273	562	1615
				1			1			1		

Capacity Anal	lysis	Modul	e:								
Vol/Sat:	0.09	0.48	0.00	0.26	0.26	0.26	0.12	0.12	0.03	0.06 0.06	0.01
Crit Moves:		****					****			****	
Green/Cycle:	0.16	0.40	0.00	0.24	0.24	0.24	0.22	0.22	0.22	0.22 0.22	0.22
Volume/Cap:	0.53	1.21	0.00	1.10	1.10	1.10	0.54	0.54	0.12	0.29 0.29	0.04
Uniform Del:	34.6	27.0	0.0	34.3	34.3	34.3	30.9	30.9	27.9	29.1 29.1	27.5
IncremntDel:	1.9	105	0.0	70.1	70.1	70.1	1.3	1.3	0.0	0.4 0.4	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0 0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
Delay/Veh:	36.4	132	0.0	104.4	104	104.4	32.2	32.2	28.0	29.5 29.5	27.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
AdiDel/Veh:	36.4	132	0.0	104.4	104	104.4	32.2	32.2	28.0	29.5 29.5	27.5

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4 23 0 19 10 19

LOS by Move: D F A F F

HCM2kAvgQ:

	2000 11		evel 0							\		
******			eratio								*****	*****
Intersection						*****	****	*****	*****	*****	*****	*****
Cycle (sec):		9	0			Critic	al V	ol./Cap	o.(X):		0.4	154
Loss Time (s			7						ec/veh)	:	12	
Optimal Cycl			31	+++++		Level				++++		B
Street Name:			Embarc							st.		
Approach:			ound		ath Bo	ound		East B	ound		est Bo	ound
Movement:			- R								- T	
Control: Rights:		otect		Pi	Incli		5	Ovl	nase	Sp.	Incli Incli	
Min. Green:		53	0	0	25	25		7 0		0	0	0
Y+R:			4.0								4.0	4.0
Lanes:			0 0			1 0			0 2		0 0	
Volume Modul							1					
Base Vol:	642	951	0	0	564	36	3	6 0	591	0	0	0
Growth Adj:			1.00	1.00	1.00	1.00		0 1.00	1.00	1.00	1.00	1.00
Initial Bse:		951	0		564	36	3		591	0	0	0
Added Vol:	0	0	0	0	0	0			0	0	0	0
PasserByVol: Initial Fut:		0 951	0	0	0 564	0 36	3		0 591	0	0	0
User Adi:	1.00		1.00		1.00	1.00		0 1.00	1.00		1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.9	2 0.92	0.92	0.92	0.92	0.92
PHF Volume:			0	0		39	3		642	0	0	0
Reduct Vol: Reduced Vol:		1024	0	0	0 613	0 39	3		0 642	0	0	0
PCE Adj:	1.00		1.00		1.00	1.00		0 1.00	1.00	-	1.00	1.00
MLF Adj:			1.00		1.00	1.00		0 1.00	1.00		1.00	1.00
FinalVolume:			0		613	39	3		642	0	0	0
Saturation F												
Sat/Lane:				1900	1900	1900	190	0 1900	1900	1900	1900	1900
Adjustment:			1.00			0.87		5 1.00	0.69		1.00	1.00
Lanes: Final Sat.:	2.00 3502		0.00		1.88	0.12 197	1.0	0.00	2.00 2615	0.00	0.00	0.00
Final Sat.:												-
Capacity Ana						'			'			'
Vol/Sat:		0.31	0.00	0.00	0.20	0.20		2 0.00	0.25	0.00	0.00	0.00
Crit Moves:		0 04	0 00	0 00	****	0 00	***		0 54	0 00	0 00	0 00
Green/Cycle: Volume/Cap:			0.00		0.38	0.38		8 0.00	0.54		0.00	0.00
Uniform Del:		1.6	0.0		21.7	21.7	39.		12.4	0.0	0.0	0.0
IncremntDel:	0.2	0.1	0.0	0.0	0.4	0.4	1.	1 0.0	0.2	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.		0.0	0.0	0.0	0.0
Delay Adj:			0.00		1.00	1.00	1.0	0.00	1.00		0.00	0.00
Delay/Veh: User DelAdj:		1.7	0.0		22.1	1.00		2 0.0	12.6	1.00	0.0	0.0
AdjDel/Veh:		1.7	0.0	0.0		22.1	40.		12.6	0.0		0.0
LOS by Move:	В		A	A		С		D A	В	A		A
HCM2kAvgQ:	6	3	0	0	7	7		1 0	6	0	0	0

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)

Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

******									ternati		ale ale ale ale ale	de ale ale ale ale ale
Intersection									*****	*****	****	*****
******	****	****	*****	*****	****	*****	*****	****				
Cycle (sec): Loss Time (se Optimal Cycle		!	90			Criti	cal Vo	l./Caj	p.(X):		0.	658
Loss Time (se	ec):		13			Avera	ge Del	ay (s	ec/veh)	:	1	8.2
********	∋: *****	*****	/9 ******	*****	****	Level	OI Se	rvice	: ******	****	****	В *****
Street Name:			Embar						St (EB)			
Approach:	No	rth B	ound	So	uth B	ound	E	ast B	ound	W	est B	ound
Movement:	L ·	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
Control:	D-	rotect	t ed	D	rotec	ted	 Sn	1i+ P	 hase		1 i + P	hase
Control: Rights: Min. Green: Y+R: Lanes:		Incl	ude		Incl	ude	ъp	Incl	ude	op	Incl	ude
Min. Green:	10	40	0	10	40	0	16	16	16	7	7	7
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 (0 2	0 0	1	0 2	1 0	0	1 0	1 0	0	0 0	0 0
Volume Module	· ·											
Base Vol:			0	38	1100	17	83	222	89	0	0	0
Growth Adj:										1.00	1.00	1.00
Initial Bse:	55	1373	0							0		
Added Vol: PasserByVol:	0	0	0		0	0	0	0	0			
Initial Fut:	55	1373	0	38	1100					0		
User Adj:												
PHF Adj:								0.92			0.92	
PHF Volume:	60	1492	0	41	1196	18	90	241		0		-
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0			0		
Reduced Vol: PCE Adi:								241				
MLF Adj:											1.00	
FinalVolume:	60	1492	0	41	1196	18	90	241	97	0	0	0
Saturation F: Sat/Lane:				1000	1000	1000	1000	1000	1900	1000	1000	1000
Adjustment:												
Lanes:									0.45			
Final Sat.:									763			
Capacity Anal Vol/Sat:				0 02	0 23	0 23	0 13	0 13	0 13	0 00	0 00	0.00
Crit Moves:		****		****	0.23	0.25	****		0.13	0.00	0.00	0.00
Green/Cycle:		0.57	0.00	0.11	0.54	0.54	0.18	0.18	0.18	0.00	0.00	0.00
Volume/Cap:								0.71			0.00	0.00
Uniform Del:					12.3		34.8				0.0	0.0
<pre>IncremntDel: InitQueuDel:</pre>				0.5	0.1		4.1			0.0		0.0
									1.00		0.00	
Delay Adj: Delay/Veh:	35.3	15.8	0.0	36.9			38.9			0.0		0.0
User DelAdj:	1.00	1.00	1.00	1.00				1.00			1.00	
AdjDel/Veh:								38.9		0.0		
LOS by Move: HCM2kAvqQ:	D 1	1 A	A n	D 1	B 7	B 7	D 7	D 7	D 7	A n	A	A
	1	± 0	U	1	,	,	,	,	,	0	0	U

		HCM Or	Level O	ns Met	hod	Future	Volum	ne Alt	ernativ			
**************************************	#13 E	Embaro	cadero ,	/ Lomb	pard S	St / Bat	tery	St				
**************************************	ec):	1	90 L1 76			Critica Average Level (al Vol e Dela Of Ser	l./Cap ay (se rvice:	o.(X): ec/veh):	•	0.5	536 7.7 B
Street Name: Approach: Movement:	Nor L -	th Bo	Embarca ound - R	adero Sou L -	ith Bo	ound - R	Lomk Ea L -	oard S ast Bo - T	t (EB) ound - R	/ Bat We L	tery est Bo - T	(WB) ound - R
Min. Green: 9 35 35 9 35 35 21 21 21 6											lit Ph Inclu 6	nase ide 6
Y+R: Lanes:) 1) 2	4.0 0 1	0 1	L 0		0 (
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume: Saturation Fl Sat/Lane:	27 1.00 27 0 0 27 1.00 0.92 29 0 29 1.00 1.00 29	1342 1.00 1342 0 0 1342 1.00 0.92 1459 0 1459 1.00 1.00 1459	0 1.00 0 0 0 0 0 1.00 0.92 0 0 0 1.00 1.00	66 1.00 66 0 0 66 1.00 0.92 72 0 72 1.00 1.00 72	940 1.00 940 0 0 940 1.00 0.92 1022 1.00 1.00 1.00 1.00	216 1.00 216 0 0 216 1.00 0.92 235 0 235 1.00 1.00 235	44 1.00 44 0 0 44 1.00 0.92 48 0 48 1.00 1.00 48	0 1.00 0 0 0 0 1.00 0.92 0 0 1.00 1.00	130 1.00 130 0 0 130 1.00 0.92 141 0 141 1.00 141	0 1.00 0 0 0 1.00 0.92 0 0 1.00 1.00 1.00	0 1.00 0 0 0 0 1.00 0.92 0 0 1.00 1.00 0	0 1.00 0 0 0 0 0 0.92 0 0 0 1.00 1.00 0
Adjustment: Lanes: Final Sat.:	1805	2.00 3610	0.95 0.00 0	0.95 1.00 1805	2.00 3610	0.85 1.00 1615	0.95 1.00 1809		0.85 1.00 1615	0.00	1.00 1.00 1900	1.00 0.00 0
Capacity Anal Vol/Sat: Crit Moves:	0.02	0.40	0.00	0.04		0.15	0.03		0.09		0.00	0.00
Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	0.12 34.5 0.2 0.0 1.00 34.7 1.00 34.7	0.74 15.7 1.6 0.0 1.00 17.2 1.00	0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00 1.00 0.0	0.10 0.40 38.0 1.4 0.0 1.00 39.4 1.00 39.4 D	0.55 14.9 0.4 0.0 1.00 15.3 1.00	0.51 0.28 12.5 0.2 0.0 1.00 12.7 1.00 12.7 B	0.23 0.11 27.2 0.1 0.0 1.00 27.3 1.00 27.3 C	0.00 0.0 0.0	0.23 0.37 29.0 0.6 0.0 1.00 29.6 1.00 29.6 C	0.00 0.0 0.0 0.0	0.00 0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0 A	0.00 0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0

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Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

******		HCM O	perati	ons Me	thod		e Volu	me Al	ternati			
Intersection	#14	Embar	cadero	/ Gre	en St	/ Dav	is St					
Cycle (sec): Loss Time (s Optimal Cycl	ec): e:		90 14 89			Critic Averac Level	cal Vo ge Del Of Se	l./Cap ay (se rvice	p.(X): ec/veh) :	:	0.5	508 0.0 C
Street Name: Approach: Movement:	No:	rth B	arcade: ound - R	So L	uth B	ound - R	L	- T	ound - R	L ·	- T	- R
Control: Rights: Min. Green:	P:	rotec Incl	ted	P.		ted	Sp	lit Pl	hase ude		lit Pl Incl	hase
Y+R: Lanes:	4.0	4.0 0 2	4.0 0 0	4.0	4.0 0 1	4.0	4.0	4.0 0 1!	4.0 0 0	4.0	4.0 1 0	4.0
Volume Modul Base Vol: Growth Adj:	e: 30	1358	0	9	924	15	32		7 1.00	. 0	0	0
Initial Bse: Added Vol: PasserByVol:	3 0 0	1358	0 0		924	15 0 0	32	0	7 0	0 0	0 0	0 0
Initial Fut: User Adj: PHF Adj:	30 1.00	1358 1.00 0.94	0	9	924 1.00 0.94	15 1.00	32 1.00		7 1.00 0.94	0	0 1.00 0.94	0 1.00 0.94
PHF Volume: Reduct Vol: Reduced Vol:	32	1445	0 0	10 0 10	983 0 983	16 0 16	34 0 34	0	7 0 7	0 0	0 0	0 0
PCE Adj: MLF Adj: FinalVolume:	1.00	1.00 1.00 1445		1.00	1.00	1.00	1.00	1.00	1.00 1.00 7	1.00	1.00	1.00
Saturation F	low M	odule	:						1900			1900
Adjustment: Lanes: Final Sat.:	0.95 1.00 1805	1900 0.95 2.00 3610	1.00 0.00 0	0.95 1.00 1805	1900 0.95 1.97 3545	0.95 0.03 58	0.94 0.82 1462	1900 1.00 0.00 0	0.94 0.18 320	1.00 0.00 0	1900 1.00 1.00 1900	1.00 0.00 0
Capacity Ana Vol/Sat: Crit Moves:	lysis	Modu	le:		0.28			0.00	'	'	0.00	0.00
Green/Cycle: Volume/Cap: Uniform Del: IncremntDel:	0.19 37.6	0.80	0.00 0.00 0.0	0.07	0.48 0.57 16.6 0.5	0.48 0.57 16.6 0.5			0.27 0.09 24.8 0.1		0.00	0.00 0.00 0.0
InitQueuDel: Delay Adj: Delay/Veh: User DelAdj:	0.0 1.00 38.1	0.0 1.00 21.4	0.0	0.0 1.00 38.7	0.0 1.00 17.1 1.00	0.0	0.0 1.00 24.9	0.0 0.00 0.0 1.00	0.0 1.00 24.9 1.00	0.0	0.0 0.00 0.0 1.00	0.0 0.00 0.0 1.00
AdjDel/Veh: LOS by Move: HCM2kAvgQ:	38.1	21.4 C	0.0 A	38.7	17.1	17.1	24.9 C	0.0 A	24.9 C	0.0 A	0.0	0.0

	Level Of Service Computation Report													
2	2000 I					(Future				ve)				
******	****	****	*****	****	*****	*****	****	*****	*****	****	****	*****		
Intersection							****	*****	*****	****	****	******		
Cvcle (sec):		9	90			Critic	al Vo	l./Car	o.(X):		0.5	511		
Loss Time (se	ec):		17			Averag					3:	2.2		
Optimal Cycle		9	90 17 90			Level						C		
*****	****	****	*****	****	*****	*****	****	*****	*****	****	****	*****		
Street Name:			Embaro	adero					Broadw	ay St				
Approach:	Noi	rth Bo	ound	Sou	ath Bo	ound	E	ast Bo	ound	We	est B	ound		
Movement:			- R			- R			- R					
				Pi		ed				Sp		nase		
Rights:		Incl			Inclu			Incl			Ovl			
Min. Green:		37	0		28			0			0	0		
Y+R:		4.0	4.0			4.0			4.0					
Lanes:			0 0			1 0			0 1			0 0		
Volume Module														
Base Vol:		1320	0	6	862	69	93	0	245	0	0	0		
Growth Adj:		1.00			1.00	1.00		1.00	1.00		1.00	1.00		
Initial Bse:			0	6	862	69	93	0	245	0	0	0		
Added Vol:	0		0	0		0	0	0	0	0	0	0		
PasserByVol:			0	0	0	0	0	0	0	0	0	0		
Initial Fut:			0	6	862	69	93	0	245	0	0	0		
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00		
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00		
PHF Volume:		1320	0	6		69	93	0	245	0	0	0		
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0		
Reduced Vol:	359	1320	0	6	862	69	93	0	245	0	0	0		
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
FinalVolume:	359	1320	0	6	862	69	93	0	245	0	0	0		
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000		
Sat/Lane:			1900		1900	1900		1900			1900			
Adjustment:						0.94		1.00		1.00		1.00		
Lanes: Final Sat.:		2.00	0.00		1.85	0.15 265		0.00	1.00 1615		0.00	0.00		
Final Sat.:									l 1012	1		I		
Capacity Anal						ı			1			'		
Vol/Sat:		0.37	0.00	0.00	0.26	0.26		0.00	0.15	0.00	0.00	0.00		
Crit Moves:	****					****	****							
Green/Cycle:	0.18	0.41	0.00	0.08	0.31	0.31	0.32	0.00	0.32	0.00	0.00	0.00		
Volume/Cap:	0.58	0.89	0.00	0.04	0.84	0.84	0.16	0.00	0.47	0.00	0.00	0.00		
Uniform Del:	33.9	24.6	0.0	38.4	28.9	28.9	21.8	0.0	24.4	0.0	0.0	0.0		
<pre>IncremntDel:</pre>	1.3	7.0	0.0	0.1	5.8	5.8	0.1	0.0	0.7	0.0	0.0	0.0		
<pre>InitQueuDel:</pre>			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00		
Delay/Veh:	35.2	31.6	0.0	38.5	34.7	34.7	21.9	0.0	25.0	0.0	0.0	0.0		
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
AdjDel/Veh:	35.2	31.6	0.0	38.5	34.7	34.7	21.9	0.0	25.0	0.0	0.0	0.0		
LOS by Move:	D	С	A	D	С	С	С	A	С	A	A	A		
HCM2kArraO.	1	17	0	0	13	13	2	0	5	0	Λ	0		

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HCM2kAvgQ:

Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

		HCM Or	Level C	ns Met	thod	(Future	e Volu	me Alt	ernati			
************ Intersection *********	#16 1	Embaro	cadero	/ Wasl	hingt	on St						
Cycle (sec): Loss Time (sec) Optimal Cycle	ec): e:	-	90 17 90			Critic Averac Level	cal Vo ge Del Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.4 32	446 2.5 C
Street Name: Approach: Movement:	No:	rth Bo	Embarc ound - R	adero Son L	uth Bo	ound - R	E L	ast Bo	Washing ound - R	ton S W	t est Bo - T	ound - R
Control: Rights: Min. Green: Y+R: Lanes:	12 4.0 2	rotect Inclu 30 4.0 3	ted ude 0 4.0 0 0	10 4.0	Incl 28 4.0 0 2	ted ude 0 4.0 1 0	33 4.0	lit Ph Inclu 0 4.0 0 0	nase ude 33 4.0 0 1	0 4.0	lit Ph Inclu 0 4.0	nase ude 0 4.0 0 0
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	235 1.00 235 0 0 235 1.00 1.00 235 1.00 235 1.00 235	1567 1.00 1567 0 0 1567 1.00 1567 0 1567 1.00 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0	11 1.00 11 0 0 11 1.00 1.00 11 1.00 1.00	1061 1.00 1061 0 0 1061 1.00 1061 0 1061 1.00 1.00	108 1.00 108 0 108 1.00 1.00 1.00 1.08 1.00 1.00	97 1.00 97 0 0 97 1.00 1.00 97 1.00 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00	125 1.00 125 0 0 125 1.00 1.00 125 1.00 1.00 1.00	0 1.00 0 0 0 1.00 1.00 0 0 0	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	low Mo 1900 0.92 2.00 3502	1900 0.91 3.00 5187	1900 1.00 0.00	1900 0.95 1.00 1805	1900 0.90 2.72 4642	1900 0.90 0.28 473	1900 0.95 1.00 1805	1900 1.00 0.00 0	1900 0.85 1.00 1615	1900 1.00 0.00	1900 1.00 0.00 0	1.00 0.00 0
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	0.13 0.50 36.2 0.9 0.0 1.00 37.1 1.00 37.1	Modul 0.30 **** 0.33 0.91 28.7 7.3 0.0 1.00 36.0 1.00	0.00 0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0.00	0.01 **** 0.11 0.05 35.8 0.1 0.0 1.00 35.9 1.00	0.23 0.31 0.73 27.7 1.8 0.0 1.00 29.5 1.00 29.5 C	0.23 0.31 0.73 27.7 1.8 0.0 1.00 29.5 1.00 29.5 C	0.05 **** 0.37 0.15 19.1 0.1 0.0 1.00	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0	0.08 0.37 0.21 19.6 0.2 0.0 1.00 19.7 1.00 19.7	0.00 0.00 0.00 0.0 0.0 0.0	0.00 0.00 0.00 0.0 0.0 0.0 0.0 0.00 1.00	0.00 0.00 0.00 0.0 0.0 0.0 0.0 0.0 0.0

		1	Level 0	f Ser	vice (Computa	tion 1	Report				
			peratio									
*******	****	****	*****	****	****	*****	****	*****	*****	****	****	*****
Intersection ******							****	*****	******	****	*****	******
Cycle (sec):			90			Critic					0.	
Loss Time (s	ec).		10						ec/veh)			7.4
Optimal Cycl			90			Level				•	_	В
********				****	****					****	****	
Street Name:			Embarc	adero					MTssi	on St		
Approach:		rth Bo			uth Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L	- T	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R
Control:		Permi	tted	1	Permi	tted	Sp.	lit Ph	nase	Sp.	lit Ph	nase
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	0	52	0	52	52	52	28	0	28	0	0	0
Y+R:		4.0	4.0	4.0		4.0	4.0				4.0	4.0
Lanes:	-	0 3				1 0		0 1!		0 (0 0
Volume Modul												
Base Vol:		1570	0		1032	188	266	0	53	0	0	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1570	0		1032	188	266	0	53	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol: Initial Fut:	0	0 1570	0	-	0 1032	0 188	266	0	53	0	0	0
User Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.93	0.93		0.93	0.93		0.93	0.93		0.93	0.93
PHF Volume:		1688	0.55		1110	202	286	0.55	57	0.55	0.55	0.55
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		1688	0		1110	202	286	0	57	0	0	0
PCE Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1688	0	0	1110	202	286	0	57	0	0	0
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment: Lanes:		0.62	1.00		0.60	0.89		1.00	0.94		1.00	1.00
Final Sat.:		3527	0.00		3066	559	1487	0.00	296	0.00	0.00	0.00
			-									1
Capacity Ana						'			'			
Vol/Sat:		0.48	0.00	0.00	0.36	0.36	0.19	0.00	0.19	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.58	0.00	0.00	0.58	0.58	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.00	0.83	0.00	0.00	0.63	0.63	0.62	0.00	0.62	0.00	0.00	0.00
Uniform Del:	0.0	15.4	0.0	0.0	12.6	12.6	26.4	0.0	26.4	0.0	0.0	0.0
IncremntDel:	0.0	3.0	0.0	0.0	0.6	0.6	2.1	0.0	2.1	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:		18.4	0.0		13.2	13.2	28.6	0.0	28.6	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		18.4	0.0		13.2	13.2	28.6	0.0	28.6	0.0	0.0	0.0
LOS by Move:			A	A	В	В	C	A	C	A	A	A
HCM2kAvgQ:	0	13	0	0	8	12	9	0	9	0	0	0

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Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

		1	Level O	f Ser	vice (Computa	tion	Report	:			
			peratio									
******							****	*****	*****	*****	*****	*****
Intersection							****	*****	*****	*****	*****	*****
Cycle (sec):		1	0.0			Critic					0.6	
Loss Time (s			00 10 00			Averag						
Optimal Cycl						Level						В
********		****			****	*****	****	*****			*****	*****
Street Name:		. + 1- D	Embarc		D			D.	Harris		D	
Approach: Movement:			ound - R			una - R		ast Bo - T	ound		est bo - T	
Movement:												
Control:			tted						nase			
Rights:	•	Incl		•		ıde	OP		ıde	op.	Incli	
Min. Green:	0	63	0	0	63	63	27	0	27	0		0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 (2	0 0	0 (0 1	1 0	1	0 0	0 1	0 (0 0	0 0
Volume Modul												
Base Vol:		925	0	0	806	267	183	0	74	0	0	0
Growth Adj:		1.00 925	1.00	1.00	1.00	1.00 267	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: Added Vol:	0	923	0	0	000	267	103	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		925	0	0	806	267	183	0	74	0	0	0
User Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	0	995	0	0	867	287	197	0	80	0	0	0
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	995	0	0	867	287	197	0	80	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			0	0	867	287	197	0	80	0	0	0
Saturation F												
Sat/Lane:		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.67	1.00		0.65	0.91		1.00	0.68	1.00	1.00	1.00
Lanes:	0.00	2.00	0.00	0.00	1.62	0.38	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:		2563	0		1998	662	1805	0	1292	0	0	0
Capacity Ana				0 00	0 40	0 40	0 11	0 00	0 00	0 00	0 00	0 00
Vol/Sat:	0.00	0.39	0.00	0.00	0.43	0.43	0.11 ****	0.00	0.06	0.00	0.00	0.00
Crit Moves: Green/Cycle:	0 00	0 63	0.00	0 00	0.63	0.63		0.00	0.27	0 00	0.00	0.00
Volume/Cap:			0.00		0.69	0.69		0.00	0.27		0.00	0.00
Uniform Del:	0.0		0.0		12.1	12.1	29.9	0.0	28.4	0.0	0.0	0.0
IncremntDel:		0.7	0.0	0.0	1.2	1.2	0.5	0.0	0.3	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:			0.0		13.3	13.3	30.5	0.0	28.7	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		13.3	13.3	30.5	0.0	28.7	0.0		0.0
LOS by Move:		B	A	A	_	B	C	A	C 2	A	A	A
HCM2kAvgQ:	0	10	0	0	11	15	5	0	2	0	0	0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #19 Embarcadero / Bryant St *****************

 Cycle (sec):
 100
 Critical Vol./Cap.(X):
 0.378

 Loss Time (sec):
 10
 Average Delay (sec/veh):
 23.3

 Optimal Cycle:
 95
 Level Of Service:
 C

 *********************** Street Name: Embarcadero Bryant St North Bound South Bound East Bound West Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted Include Include Include Rights: Include 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 Lanes: Volume Module: Base Vol: 54 861 14 31 783 64 58 5 85 4 11 Initial Bse: 54 861 14 31 783 64 58 5 85 4 11 5 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 59 936 15 34 851 70 63 5 92 4 12 5 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 59 936 15 34 851 70 63 5 92 92 4 12 FinalVolume: 59 936 15 34 851 70 63 5 92 4 12 5 -----||-----||------| Saturation Flow Module: Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.76 0.76 0.85 0.94 0.94 0.94 Lanes: 1.00 1.97 0.03 1.00 2.00 1.00 0.92 0.08 1.00 0.20 0.55 0.25 Final Sat.: 1805 3545 58 1805 3610 1615 1322 114 1615 356 978 445 _____| Capacity Analysis Module: Vol/Sat: 0.03 0.26 0.26 0.02 0.24 0.04 0.05 0.05 0.06 0.01 0.01 0.01 Crit Moves: **** **** Green/Cycle: 0.23 0.46 0.46 0.16 0.39 0.39 0.28 0.28 0.28 0.28 0.28 0.28 Volume/Cap: 0.14 0.57 0.57 0.12 0.60 0.11 0.17 0.17 0.20 0.04 0.04 0.04 Uniform Del: 30.8 19.8 19.8 36.0 24.2 19.3 27.2 27.2 27.5 26.2 26.2 26.2 IncremntDel: 0.2 0.5 0.5 0.2 0.7 0.1 0.2 0.2 0.2 0.0 0.0 0.0 Delay/Veh: 30.9 20.3 20.3 36.1 25.0 19.4 27.4 27.4 27.7 26.3 26.3 26.3 AdjDel/Veh: 30.9 20.3 20.3 36.1 25.0 19.4 27.4 27.4 27.7 26.3 26.3 26.3

HCM2kAvgQ: 1 11 11 1 1 1 1 2 2 2 0 0

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LOS by Move: C C C D C B C C C C

Existing+Cruise Terminal WeFri Jun 24, 2011 15:10:39

2(M Ope	ratio	ns Met	:hod (Volu	me Alt	ernati		*****	*****
Intersection #	#20 Em	barca	dero	/ Bran	nnan S	t						
Cycle (sec): Loss Time (sec Optimal Cycle:	:	90 11 90 ****		****		Averag Level	e Del Of Se	ay (se rvice:		:).3 C
Street Name:			mbarc						Brann			
Approach:	Nort	h Bou	nd	Sou	ith Bo	und	E	ast Bo	und	We	est Bo	ound
Movement:	L -					- R	L	- T	- R	L -	- T	- R
-												
Control:	Pro	tecte	d	Pi	otect	ed	Sp	lit Ph	ase	Sp.	lit Ph	iase
Rights:	I	nclud	.e		Inclu	de		Inclu	ide		Inclu	ıde
Min. Green:	10	37	0	14	37	37	28	28	28	28	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0		0			0 1		0 0			0 0	
Volume Module:												
Base Vol:		870	0	2	760	108	60		43	0	0	0
_	1.00 1		1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:		870	0	2	760	108	60		43	0	0	0
Added Vol:	0	0	0	0	0	0	0		0	0	0	0
PasserByVol:	0	0	0	0	0 760	0	0		0 43	0	0	0
Initial Fut: User Adj:	33 1.00 1	870	1.00	1.00		108	1 00	1.00	1.00		1.00	1.00
_	0.93 0		0.93	0.93		0.93		0.93	0.93		0.93	0.93
PHF Volume:		935	0.93	2		116	65		46	0.93	0.93	0.93
Reduct Vol:	0	0	0	0	0 1 7	0	0		0	0	0	0
Reduced Vol:		935	0	2	817	116	65		46	0	0	0
	1.00 1		1.00	1.00		1.00		1.00	1.00		1.00	1.00
_	1.00 1		1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		935	0	2	817	116	65		46	0	0	0
-												
Saturation Flo	ow Mod	ule:										
Sat/Lane:	1900 1	900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
	0.95 0		1.00	0.95		0.85		1.00	0.85		1.00	1.00
	1.00 2		0.00	1.00		1.00		0.00	1.00		0.00	0.00
	1805 3		0	1805		1615	1805		1615	0	0	0
Capacity Analy				0 00	0 00	0 07	0 04	0 00	0 00	0 00	0 00	0 00
Vol/Sat: (.26 ***	0.00	0.00	0.23	0.07	****	0.00	0.03	0.00	0.00	0.00
Crit Moves:			0 00		0 45	0.45			0 21	0 00	0 00	0 00
Green/Cycle: (Volume/Cap: (0.00	0.16		0.45		0.00	0.31		0.00	0.00
Uniform Del: 3			0.0	32.1		14.9	22.1		22.0	0.0	0.00	0.0
IncremntDel:		0.9	0.0	0.0	0.3	0.1	0.1		0.1	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
	1.00 1		0.00	1.00		1.00		0.00	1.00		0.00	0.00
	35.9 2		0.0	32.1		15.0	22.2		22.1	0.0	0.0	0.0
User DelAdj: 1			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh: 3	35.9 2	1.9	0.0	32.1	18.1	15.0	22.2	0.0	22.1	0.0	0.0	0.0
LOS by Move:	D	С	A	С	В	В	C	A	С	A	A	A
HCM2kAvgQ:	1	11	0	0	8	2	1	0	1	0	0	0

	2000 1		Level C							\		
*******			peratio *****								*****	*****
Intersection							****	*****	*****	****	*****	*****
Cycle (sec):		10	00			Critic	al Vo	l./Cap	o.(X):		0.6	510
Loss Time (s		:	10 95						ec/veh)	:	30	
Optimal Cycl			95 ++++++	++++		Level				++++		C
Street Name:			Embaro						Howar			
Approach:		rth Bo	ound		uth Bo	ound	E	ast Bo	ound		est Bo	ound
Movement:			- R								- T	
Control: Rights:	PI	Incli	ted ide	P	roteci Incli	ide	Sp	Incli Incli	iase ide	Sp.	Incli Incli	idse ide
Min. Green:		45	0		40				30	0	0	0
Y+R:			4.0				4.0	4.0	4.0		4.0	4.0
Lanes:			0 0						0 0		0 0	
Volume Modul												
Base Vol:		1418	0	6	900	177	147	0	86	0	0	0
Growth Adj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:			0	6		177	147		86	0	0	0
Added Vol:	0	0	0	0		0	0	0	0	0	0	0
PasserByVol: Initial Fut:		1418	0	0	900	0 177	0 147	0	0 86	0	0	0
User Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.93	0.93		0.93	0.93		0.93	0.93	0.93	0.93	0.93
PHF Volume:		1525	0		968	190	158	0	92	0	0	0
Reduct Vol: Reduced Vol:	120	1525	0	0	0 968	0 190	0 158	0	0 92	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00	-	1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			0		968	190	158	0	92	0	0	0
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900		1900	1900	1900
Adjustment:			1.00			0.43			0.74		1.00	1.00
Lanes: Final Sat.:			0.00		3357	1.00	2226	0.00	0.56 793	0.00	0.00	0.00
											-	-
Capacity Ana												
Vol/Sat:	0.07		0.00		0.29	0.24	0.07	0.00	0.12	0.00	0.00	0.00
Crit Moves: Green/Cycle:	0 16	****	0.00	****	0.44	0.44		0.00	0.30	0 00	0.00	0.00
Volume/Cap:			0.00		0.66	0.54		0.00	0.30		0.00	0.00
Uniform Del:			0.0		22.3	20.8	26.4	0.0	27.7	0.0	0.0	0.0
IncremntDel:			0.0	0.1		1.7	0.1	0.0	0.4	0.0	0.0	0.0
InitQueuDel: Delay Adj:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay/Veh:			0.0		23.4	22.5	26.5	0.0	28.1	0.0	0.0	0.00
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		23.4	22.5	26.5		28.1	0.0	0.0	0.0
LOS by Move:			A	D	C	C	C		C	A		A
HCM2kAvgQ:	3	17	0	0	12	4	3	0	4	0	0	0

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Existing+Cruise Terminal WeTue May 31, 2011 09:49:28

	2000		Level O							ve)		
******											*****	*****
Intersection							****	****	*****	****	*****	*****
Cycle (sec):		9	90			Critic	al Vo	1./Car).(X):		0.6	66
Loss Time (s	ec):		10			Averag	e Del	ay (se	ec/veh)	:	24	1.0
Optimal Cycl			90			Level						С
*******	****	****			*****	*****	****	*****			*****	:*****
Street Name:			Embarc				_		Folso			,
Approach:		rth Bo - T		Sot		ound - R		ast Bo - T			est Bo - T	
Movement:												
Control:		rotect			rotect				nase		lit Ph	
Rights:		Incl			Incli		op			Up.	Inclu	
Min. Green:	12		49	32	32	32	31		31	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1					1 0		0 0		0 (0 0
Volume Modul												
Base Vol:		1124	1 00	1 00	930	68	408	1 00	127	1 00	1 00	1 00
Growth Adj: Initial Bse:		1.00	1.00	1.00	1.00	1.00	408	1.00	1.00	1.00	1.00	1.00
Added Vol:	137	1124	0	0	930	0	400	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		1124	0	0	930	68	408	0	127	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	147	1209	0		1000	73	439	0	137	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		1209	0		1000	73	439	0	137	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj: FinalVolume:		1.00	1.00		1.00	73	439	1.00	137	1.00	1.00	1.00
											-	1
Saturation F				1		1	1		'	1		1
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.70	1.00	1.00	0.96	0.87	0.83	1.00	0.59	1.00	1.00	1.00
Lanes:		2.00	0.00		1.85	0.15		0.00	1.00		0.00	0.00
Final Sat.:		2671	0		3372	247	3152		1114	0	0	0
Capacity Ana Vol/Sat:		Modu. 0.45	0.00	0 00	0.30	0.30	0 14	0.00	0.12	0 00	0.00	0.00
Voi/Sat: Crit Moves:	0.09	****	0.00	****	0.30	0.30	****	0.00	0.12	0.00	0.00	0.00
Green/Cycle:	0 15		0.00		0.40	0.40		0.00	0.34	0 00	0.00	0.00
Volume/Cap:		0.83	0.00		0.75	0.75		0.00	0.36		0.00	0.00
Uniform Del:			0.0		23.3	23.3	22.5	0.0	22.0	0.0	0.0	0.0
IncremntDel:	3.7	4.2	0.0	0.0	2.2	2.2	0.2	0.0	0.6	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:		21.3	0.0		25.6	25.6	22.7	0.0	22.6	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00 25.6	1.00	1.00	1.00	0.0	1.00	1.00
AdjDel/Veh: LOS by Move:		21.3 C	0.0 A	0.0 A	25.6 C	25.6 C	22.7 C		22.6 C	0.0 A	0.0 A	0.0 A
HCM2kAvqQ:	4		0	0	13	12	5		3	0	0	0
	-	-0	-					Ü	_	Ü	Ü	_

2035 Cumulative Conditions

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Cumulative Conditions

Weekday AM Peak Hour

2(000 но	CM Uns	Level (ized Me	ethod	(Futur	re Vol	ume Al	lternat	ive)		
Intersection						*****	****	****	*****	****	****	*****

Average Delay												
Street Name:			Columb	ous Ave	9				Beac	h St		
Approach:	Noi	rth Bo	ound					ast Bo	ound	We		
Movement:			- R	L -	- T	- R	L ·		- R	L -	- T	- R
Control:	St						Un	contro	olled	Und	contro	olled
Rights:		Incl			Inclu				ıde		Incl	
Lanes:			0 0						1 0		L 0	
Volume Module												
Base Vol:	31	0		0				130	37	7		0
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	31	0	5	0	0	0	0	130	37	7	67	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	0	5	0	0	0	0	130	37	7		0
User Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.96		0.96	0.96		0.96		0.96	0.96		0.96	0.96
PHF Volume:	32	0	5	0	0	0	0	135	39	7		0
Reduct Vol:		0	0		0	0	0		0	0		0
FinalVolume:		0	5	0	0	0	0		39	7		0
Critical Gap												
Critical Gp:			6.2	vvvvv	vvvv	vvvvv	vvvvv	vvvv	vvvvv	4 1	vvvv	vvvvv
FollowUpTim:									XXXXX			XXXXX
Capacity Modi	ıle:											
Cnflict Vol:		239							XXXXX			XXXXX
Potent Cap.:									xxxxx			XXXXX
Move Cap.:									XXXXX		xxxx	XXXXX
Volume/Cap:			0.01						XXXX			XXXX
Level Of Serv										0 0		
2Way95thQ:			xxxxx						xxxxx			xxxxx
Control Del: LOS by Move:	KXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX			xxxxx *
_									- RT			
Movement: Shared Cap.:			- RT								- LTR	
SharedOueue:									XXXXX			XXXXX
SharedQueue:												XXXXX
Shared LOS:			xxxxx *			×××××		xxxx *		7.6 A		*XXXX
		9.9										^
ApproachDel: ApproachLOS:		9.9 A		X	xxxxx		X	xxxxx *		X2	xxxxx	
ApproachLUS:	*****		*****	*****	*****	*****	*****	****	*****	****	^ *****	*****
					_		_					

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Note: Queue reported is the number of cars per lane.

2035 Cumulative Weekday AM Tue May 31, 2011 16:00:59

		HCM Or	peratio	ons Me	thod		Volu	me Alt	ernati			
**************************************	#2 No	orth B	Point S	St/Col	umbus	Ave						
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	ğ	9 9 90			Critic Averag Level	al Vo ge Del Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.1	250 3.2 B
Street Name: Approach: Movement:	L -	- T	Columb ound - R	So:	uth Bo	- R	L	ast Bo - T	North F ound - R	We L	est Bo - T	- R
Control: Rights: Min. Green:		Permit Incl	ted		Permit Incl	tted		Permit Incl	ted		Permit Incl	ted
Y+R: Lanes:	1 (1 0	0		1 0	0	0 1!	4.0 0 0	0		4.0 1 0
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol:	25 1.00	78 1.00 78 0	11 1.00 11 0	14	51 1.00 51 0	16 1.00 16	21	218 1.00	37 1.00 37 0	33	123 1.00	36 1.00 36
PasserByVol: Initial Fut: User Adj: PHF Adj:	0 25 1.00 0.89	0 78 1.00 0.89	0 11 1.00 0.89	0 14 1.00 0.89	0 51 1.00 0.89	0 16 1.00 0.89	0 21 1.00 0.89	0 218 1.00 0.89	0 37 1.00 0.89	0 33 1.00 0.89	0 123 1.00 0.89	36 1.00 0.89
PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:		88 0 88 1.00 1.00	12 0 12 1.00 1.00		57 0 57 1.00 1.00	0 18 1.00		0 245 1.00 1.00	42 0 42 1.00 1.00		0 138 1.00 1.00	40 40 1.00 1.00
Saturation F	 low Mo	odule	 :									
Sat/Lane: Adjustment: Lanes: Final Sat.:	0.70 1.00 1322	0.88 1634	0.98 0.12 230	0.84 0.35 553	2013	0.84 0.39 632	0.95 0.08 138	1900 0.95 0.79 1430	0.95 0.13 243	0.80 0.34 522	1900 0.80 1.28 1947	1900 0.80 0.38 570
Capacity Anal Vol/Sat: Crit Moves:	lysis					0.03		0.17			0.07	
Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	0.07 21.8 0.3 0.0 1.00 22.1 1.00 22.1	0.17 22.6 0.6 0.0 1.00 23.2 1.00 23.2 C	0.31 0.17 22.6 0.6 0.0 1.00 23.2 1.00 23.2 C	0.09 22.0 0.2 0.0 1.00 22.2 1.00	0.31 0.09 22.0 0.2 0.0 1.00 22.2 1.00 22.2 C	0.09 22.0 0.2 0.0 1.00 22.2	0.29 9.2 0.7 0.0 1.00 9.9	0.7 0.0 1.00 9.9 1.00 9.9 A	0.59 0.29 9.2 0.7 0.0 1.00 9.9 1.00 9.9 A	0.12 8.2 0.1 0.0 1.00 8.3	0.1 0.0 1.00 8.3 1.00 8.3	0.59 0.12 8.2 0.1 0.0 1.00 8.3 1.00 8.3

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #3 North Point St/Stockton St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.307 Cycle (Sec): 8 Average Delay (sec/veh):
Optimal Cycle: 90 Level Of Service: 13.0 ***********************
 Street Name:
 Stockton St
 North Point St

 Approach:
 North Bound
 South Bound
 East Bound
 West Bound

 Movement:
 L - T - R
 L - T - R
 L - T - R
 L - T - R
 Control: Permitted Permitted Permitted Permitted Include Include Include Rights: Include Lanes: -----|----|-----|------| Volume Module: Base Vol: 31 60 34 6 26 14 24 230 66 7 102 Initial Bse: 31 60 34 6 26 14 24 230 66 7 102 9 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 7 102 PHF Volume: 34 67 38 7 29 16 27 256 73 8 113 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 34 67 38 7 29 16 27 256 73 8 113 FinalVolume: 34 67 38 7 29 16 27 256 73 8 113 10 Saturation Flow Module: Adjustment: 0.89 0.89 0.89 0.93 0.93 0.93 0.95 0.95 0.95 0.88 0.88 0.88 Lanes: 0.25 0.48 0.27 0.13 0.57 0.30 0.07 0.72 0.21 0.12 1.73 0.15 Final Sat.: 420 813 461 231 999 538 135 1294 371 199 2895 255 _____| Capacity Analysis Module: Vol/Sat: 0.08 0.08 0.08 0.03 0.03 0.03 0.20 0.20 0.20 0.04 0.04 0.04 Crit Moves: **** Green/Cycle: 0.28 0.28 0.28 0.28 0.28 0.28 0.63 0.63 0.63 0.63 0.63 0.63 Uniform Del: 25.6 25.6 25.6 24.2 24.2 24.2 7.5 7.5 6.3 6.3 6.3 IncremntDel: 1.6 1.6 1.6 0.4 0.4 0.4 0.7 0.7 0.7 0.1 0.1 0.1 Delay/Veh: 27.2 27.2 27.2 24.6 24.6 24.6 8.3 8.3 8.3 6.4 6.4 6.4 AdjDel/Veh: 27.2 27.2 27.2 24.6 24.6 24.6 8.3 8.3 6.4 6.4 6.4 LOS by Move: C C C C C A A A A A

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HCM2kAvqQ: 3 3 3 1 1 5 5

2035 Cumulative Weekday AM Tue May 31, 2011 16:01:00

	2000		Level O peratio							ve)		
******											*****	*****
Intersection ******						*****	****	****	*****	****	****	*****
Cycle (sec):		9	90			Critic	al Vo	1./Ca	o.(X):		0.6	548
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):		9			Averag				:	38	
Optimal Cycl	e:	1()9			Level						D
						*****	****	****			*****	*****
Street Name: Approach:			Columb ound			nind	E-	act P	Bay		est Bo	aund
Movement:			– R			– R					- Т	
			ed ide									
Rights:												ıde
Min. Green:			31						47		50	50
Y+R:			4.0			4.0			4.0			
Lanes:			1 0			1 0			0 1			1 0
Volume Modul												
Base Vol:		75	67	2	112	7	7	1513	383	36	553	30
Growth Adj:					1.00			1.00	1.00		1.00	1.00
Initial Bse:	115	75	67	2	112	7	7	1513	383	36	553	30
Added Vol:	0		0	-	0	0	-	0	0		0	0
PasserByVol:			0	0		0	0		0	0	0	0
Initial Fut:			67	2		7		1513	383	36	553	30
User Adj: PHF Adj:	1.00	0.97	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:		77	69	2		7		1560	395	37	570	31
Reduct Vol:			0		0	0		0		0		0
Reduced Vol:			69	2		7		1560		37		31
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00			1.00	1.00
FinalVolume:					115	7		1560	395	. 37		31
Saturation F												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:					0.94	0.94		0.90			0.59	
	2.00		0.47		1.85	0.12		1.99			1.79	0.10
Final Sat.:				59		207	16		1615	131		109
Capacity Ana				0 02	0 00	0 02	0.46	0 46	0 04	0 00	0 00	0 00
Vol/Sat: Crit Moves:		****	0.10	****	0.03	0.03	0.46	0.46	0.24	0.20	0.20	0.20
Green/Cycle:			0.28		0.32	0.32	0 46	0.46	0.46	0 46	0.46	0.46
Volume/Cap:			0.36		0.11	0.11		0.99	0.53		0.62	0.62
Uniform Del:			31.1	38.5	25.9	25.9		29.4	21.1	22.3	22.3	22.3
IncremntDel:	0.3	0.6	0.6	0.2	0.0	0.0	21.2	21.2	0.8	1.2	1.2	1.2
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Delay Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Delay/Veh:			31.7		25.9	25.9		50.5	21.9		23.5	23.5
User DelAdj:			1.00		1.00	1.00 25.9		1.00	1.00		1.00	1.00
AdjDel/Veh: LOS by Move:			31.7 C	38.7 D			50.5 D		21.9 C	23.5 C		23.5 C
HCM2kAvqQ:							35			8		8
52.	_	_	-	_	_	_			-	-	-	-

			Level C									
******			peratio									
Intersection							^^^^	^^^^			^ ^ ^ ^ ^ ^	
*******					****	*****	****	****	*****	*****	****	*****
Cycle (sec):			90			Critic						671
Loss Time (s	ec):		7						ec/veh)			1.6
Optimal Cycl			90			Level						В
******	****	****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Stockt						Вау	/ St		
Approach:		rth B				ound		ast Bo			est Bo	
Movement:			- R			- R		- T			- T	
Control:		Permi		1	Permit			Permit			Permit	
Rights: Min. Green:	20	Incl 20	uae 20	20	Incl	20	63	Inclu 63	1de 63	63	Inclu 63	uae 63
Min. Green: Y+R:	4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Lanes:		0 1!				0 0		1 0			1 0	
	-											
Volume Modul	e:		'			'			'			
Base Vol:	36	21	104	34	17	49	33	1450	19	37	651	72
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	36	21	104	34	17	49	33	1450	19	37	651	72
Added Vol:	0	0	0	0	0	0	0		0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		21	104	34	17	49		1450	19	37		72
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj: PHF Volume:	40	0.90	0.90 116	38	0.90	0.90 54		0.90 1611	0.90 21	41	0.90 723	0.90
Reduct Vol:	0	0	0	0	0	0	0		0	0	723	0
Reduced Vol:		23	116	38	19	54		1611	21	41	723	80
PCE Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	40	23	116	38	19	54	37	1611	21	41	723	80
Saturation F	low M	odule	:									
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:		0.83	0.83		0.81	0.81		0.87	0.87		0.74	0.74
Lanes:		0.13	0.65		0.17	0.49		1.93	0.03		1.71	0.19
Final Sat.:	355		1024	523		753		3186	42 I		2412	267
Capacity Ana												
Vol/Sat:		0.11	0.11	0 07	0.07	0.07	0 51	0.51	0.51	0 30	0.30	0.30
Crit Moves:		****						****				
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.70	0.70	0.70	0.70	0.70	0.70
Volume/Cap:	0.51	0.51	0.51	0.33	0.33	0.33	0.72	0.72	0.72	0.43	0.43	0.43
Uniform Del:	30.7	30.7	30.7	29.3	29.3	29.3	8.2	8.2	8.2	5.8	5.8	5.8
IncremntDel:		5.1	5.1	2.5	2.5	2.5	2.0		2.0	0.7	0.7	0.7
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Delay Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Delay/Veh:		35.8	35.8		31.9	31.9		10.2	10.2	6.5	6.5	6.5
User DelAdj: AdjDel/Veh:		35.8	1.00		1.00	1.00		1.00	1.00	6.5	1.00	1.00
LOS by Move:		33.0 D	33.0 D	31.9 C	31.9 C	31.9 C	10.2 B		10.2 B	0.5 A		0.3 A
HCM2kAvqQ:	5	5	5	3	3	3	14	_	14	6	6	6
	9		9			,				0	0	0

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						omputa						
******	2000 HC											
							^^^^			^^^^		
Intersection					*****	*****	****	*****	*****	****	*****	*****
Cycle (sec):			0			Critic					0.5	
Loss Time (s	ec):		9						ec/veh)	:).6
Optimal Cycl		9	0			Level						В
******	*****	****	*****	****	*****	*****	****	*****	*****	****	*****	*****
Street Name:			Kearn	y St					Bay	St		
Approach:	Nort	:h Bo	und	Sot	ath Bo	und	E	ast Bo	ound	We	est Bo	ound
Movement:			- R		- T			- T			- T	
Control:			ted	I	Permit]	Permit]	Permit	
Rights:		Inclu			Inclu			Incl			Incl	
Min. Green:	20	20	20	20	20	20	61		61	61		61
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0
Lanes:	0 0		0 0			0 0		1 0	1 0	0 :		1 0
Volume Modul	1											
Base Vol:	40	3	13	4	13	15	1.0	1398	185	46	698	30
Growth Adj:	1.00 1		1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		3	13	4	13	15		1398	185	46	698	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	Ō	0	Ō	0	0	0	0	0	0	0	0	0
Initial Fut:	40	3	13	4	13	15	10	1398	185	46	698	30
User Adj:	1.00 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97 0	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	41	3	13	4	13	15	10	1441	191	47	720	31
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	41	3	13	4	13	15	10	1441	191	47	720	31
PCE Adj:	1.00 1	L.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00 1		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	41	3	13	4	13	15		1441	191	47	720	31
2												
Saturation F			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:	1900 1 0.78 0		1900		1900	1900		1900	1900		1900	1900 0.71
Adjustment: Lanes:	0.78		0.78		0.92	0.92		1.76	0.09		1.80	0.71
Final Sat.:	1060	79	344	218	707	816		2962	392		2417	104
										1		
Capacity Ana				'		'			1	'		'
Vol/Sat:			0.04	0.02	0.02	0.02	0.49	0.49	0.49	0.30	0.30	0.30
Crit Moves:	*	***						****				
Green/Cycle:	0.22 0	.22	0.22	0.22	0.22	0.22	0.68	0.68	0.68	0.68	0.68	0.68
Volume/Cap:	0.18 0	1.18	0.18	0.09	0.09	0.09	0.72	0.72	0.72	0.44	0.44	0.44
Uniform Del:	28.3 2	28.3	28.3	27.7	27.7	27.7	9.1	9.1	9.1	6.7	6.7	6.7
IncremntDel:		1.2	1.2	0.4	0.4	0.4	2.0	2.0	2.0	0.8	0.8	0.8
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00 1		1.00		1.00	1.00		1.00	1.00		1.00	1.00
Delay/Veh:	29.5 2		29.5		28.2	28.2		11.1	11.1	7.4	7.4	7.4
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			29.5		28.2	28.2		11.1	11.1	7.4	7.4	7.4
LOS by Move:		C	C	C	C	C 1	В 16	B	В 16	A 6	A 6	A 6
HCM2kAvgQ:	1	1	1	1	1	1	Тρ	16	Τ.0	ь	О	Ö

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************************************
Tintersection #7 Broadway St/Sansome St ***********************************
Intersection #7 Broadway St/Sansome St ***********************************
Cycle (sec): 80
Cycle (sec): 80
Street Name: North Bound South Bound East Bound West Bound Movement: L - T - R L - T R L - T - R L - T T - R L - T T - R L T T T T R L T T T T R L T T T T R L T T T T
Street Name: North Bound South Bound East Bound West Bound Movement: L - T - R L - T R L - T - R L - T T - R L - T T - R L T T T T R L T T T T R L T T T T R L T T T T
Street Name: North Bound South Bound East Bound West Bound Movement: L - T - R L - T R L - T - R L - T T - R L - T T - R L T T T T R L T T T T R L T T T T R L T T T T
Street Name: North Bound South Bound East Bound West Bound Movement: L - T - R L - T R L - T - R L - T T - R L - T T - R L T T T T R L T T T T R L T T T T R L T T T T
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L L - T - R L L - T L L L L L L L L L L L L L L L L
Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Control: Split Phase Rights: Include Inc
Control: Split Phase
Control: Split Phase Include I
Rights: Include Include Include Include Min. Green: 27 27 27 27 0 0 0 44 44 0 0 44 44 44 47 1 0 0 44 44 47 1 0 0 44 44 47 1 0 0 44 44 47 1 0 0 44 44 47 1 0 0 0 44 44 47 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Rights: Include Include Include Include Min. Green: 27 27 27 27 0 0 0 44 44 0 0 44 44 44 47 1 0 0 44 44 47 1 0 0 44 44 47 1 0 0 44 44 47 1 0 0 44 44 47 1 0 0 0 44 44 47 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Y+R:
Y+R:
Lanes: 0 1 0 1 0 1 0 0 0 0 0 0 1 0 1 0 1 0 0 0 0 0 1 0 1 0 0 0 0 0 1 0 1 0 0 0 0 0 1 0
Volume Module: Base Vol: 118 266 65 0 0 0 262 1185 0 0 608 159 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 118 266 65 0 0 0 262 1185 0 0 608 159 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 118 266 65 0 0 0 262 1185 0 0 608 159 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 118 266 65 0 0 0 262 1185 0 0 608 159 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 0.98 0.98 0.98 0.98 0.98 0.98 0.98 0.98
PHF Volume: 120 271 66 0 0 0 267 1209 0 0 620 162 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 120 271 66 0 0 0 267 1209 0 0 620 162 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 120 271 66 0 0 0 267 1209 0 0 620 162 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Final Volume: 120 271 66 0 0 0 267 1209 0 0 620 162
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.89 0.89 0.89 1.00 1.00 1.00 0.57 1.00 1.00 1.00 0.97 0.97 Lanes: 0.53 1.18 0.29 0.00 0.00 0.00 1.00 1.00 0.00 0.00 0.79 0.21 Final Sat.: 892 2010 491 0 0 0 1079 1900 0 0 1464 383
Lanes: 0.53 1.18 0.29 0.00 0.00 0.00 1.00 1.00 0.00 0.00 0.79 0.21 Final Sat.: 892 2010 491 0 0 0 1079 1900 0 0 1464 383
Final Sat.: 892 2010 491 0 0 0 1079 1900 0 0 1464 383
Capacity Analysis Module:
Vol/Sat: 0.14 0.14 0.14 0.00 0.00 0.00 0.25 0.64 0.00 0.00 0.42 0.42
Crit Moves: ****
Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55
Volume/Cap: 0.40 0.40 0.40 0.00 0.00 0.00 0.45 1.16 0.00 0.00 0.77 0.77
Uniform Del: 20.3 20.3 20.3 0.0 0.0 0.0 10.8 18.0 0.0 0.0 14.1 14.1
IncremntDel: 0.2 0.2 0.2 0.0 0.0 0.0 0.5 81.7 0.0 0.0 3.7 3.7
InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.
Delay Adj: 1.00 1.00 1.00 0.00 0.00 1.00 1.00 0.00 0.00 1.00 1.00
Delay/Veh: 20.5 20.5 20.5 0.0 0.0 0.0 11.3 99.7 0.0 0.0 17.7 17.7
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 20.5 20.5 20.5 0.0 0.0 0.0 11.3 99.7 0.0 0.0 17.7 17.7

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	2000 1					Computa (Future				110)		
********											****	*****
Intersection												
*******						*****	****	****	*****	****	****	*****
Cvcle (sec):			30			Critic					1.0	
Loss Time (se	ac).		9						ec/veh)		135	
Optimal Cycle			30			Level				•	100	F
******				****	****					****	****	-
Street Name:			Batte	ry St					Broadw	av St		
Approach:	No	rth Bo			uth Bo	ound	Ea	ast B			est Bo	ound
Movement:		- T				- R			- R		- T	
				1						1		
Control:	Sp.	lit Ph	nase	Sp.	lit Ph	nase	.]	Permi	tted	·	ermit	ted
Rights:		Incl	ıde		Incl	ıde		Incl	ude		Incl	ıde
Min. Green:	0	0	0	34	34	34	0	27	27	27	27	27
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 (0 0	0 0	0	1 0	1 0	0 (0 0	1 0	1 () 1	0 0
Volume Module	≘:											
Base Vol:	0	0	0	61	626	106	0	776	474	27	662	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	0	0	61	626	106	0	776	474	27	662	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	61	626	106	0	776	474	27	662	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.97	0.97		0.97	0.97		0.97	0.97		0.97	0.97
PHF Volume:	0	0	0	63	645	109	0	800	489	28	682	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	63	645	109	0	800	489	28	682	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	. 0	0	0	. 63	645	109	. 0	800	489	. 28	682	0
Saturation F												
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		1.00	1.00		0.92	0.92		0.95	0.95		1.00	1.00
Lanes:		0.00	0.00		1.58	0.27		0.62	0.38		1.00	0.00
Final Sat.:	0.00	0.00	0.00		2759	467		1119	684		1900	0.00
Capacity Ana	lvsis	Modu.	le:									
Vol/Sat:			0.00	0.23	0.23	0.23	0.00	0.71	0.71	0.02	0.36	0.00
Crit Moves:					****			****				
Green/Cycle:	0.00	0.00	0.00	0.43	0.43	0.43	0.00	0.46	0.46	0.46	0.46	0.00
Volume/Cap:			0.00	0.55	0.55	0.55	0.00	1.55	1.55	0.04	0.78	0.00
Uniform Del:	0.0	0.0	0.0	17.3	17.3	17.3	0.0	21.5	21.5	11.8	18.0	0.0
<pre>IncremntDel:</pre>	0.0	0.0	0.0	0.4	0.4	0.4	0.0	251	251.3	0.0	4.4	0.0
<pre>InitQueuDel:</pre>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Delay/Veh:	0.0	0.0	0.0	17.7	17.7	17.7	0.0	273	272.8	11.8	22.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0		17.7	17.7	0.0		272.8	11.8	22.5	0.0
LOS by Move:		A	A	В	В	В	A	F	F	В	С	A
HCM2kAvgQ:	0	0	0	8	8	8	0	86	86	0	15	0

		I	Level C	of Ser	vice (Computa	tion 1	Report				
	2000	HCM Or	peratio	ns Met	thod	(Future	Volum	ne Alt	ernati	ve)		
********											****	*****
Intersection	#9 E	mbarca	adero/	Beach	St /	Grant	St					
******	****	****	*****	****	****	*****	****	*****	*****	****	****	*****
Cvcle (sec):		-	75			Critic	al Vo	l./Car).(X):		0.2	288
Loss Time (s	ec):	1	L3			Averag	e Dela	av (se	c/veh)	:	3 '	7.0
Optimal Cycl		10				Level						D
******		****	*****	****	****					****	****	*****
Street Name:			Embaro	adero			Bea	ach St	(EB)/	Grant	St (VB)
Approach:	No:	rth Bo	ound	Son	uth Bo	ound	Ea	ast Bo	ound	W	est Bo	ound
Movement:	L	- T	- R		- T			- T		L ·	- T	- R
	1			1		1	1		1	1		1
Control:	Sp.	lit Ph	nase	Sp.	lit Ph	nase	Sp.	lit Ph	nase	Sp.	lit Ph	nase
Rights:	-	Incl		-	Incl		-	Inclu		-	Incl	
Min. Green:	17	17	17	26	26	0	0	0	26	19	19	19
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:		1 0	1 0		0 1			0 0		0		
	1			1			1			1		
Volume Modul	e:											
Base Vol:	161	104	27	0	17	0	0	0	160	7	9	17
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	161	104	27	0	17	0	0	0	160	7	9	17
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserBvVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	161	104	27	0	17	0	0	0	160	7	9	17
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1 00	1.00	1.00
PHF Adj:	0.87		0.87		0.87	0.87		0.87	0.87	0.87		0.87
PHF Volume:	185	120	31	0	20	0	0	0	184	8	10	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	185	120	31	0	20	0	0	0	184	8	10	20
PCE Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	185	120	31	0	20	0	0	0	184	8	10	20
							1			-		1
Saturation F				1		1	1		1	1		1
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.91	0.91		1.00	1.00		1.00	0.87		0.92	0.92
Lanes:		0.79	0.21		1.00	0.00		0.00	1.00		0.27	0.52
Final Sat.:		1375	357		1900	0.00	0.00	0.00	1644	371	477	901
						1	1					1
Capacity Ana			,	1		1	1		1	1		1
Vol/Sat:		0.09	0.09	0 00	0.01	0.00	0 00	0.00	0.11	0 02	0.02	0.02
Crit Moves:	****	0.05	0.00	0.00	****	0.00	0.00	0.00	****	****	0.02	0.02
Green/Cycle:		0 17	0.17	0 00	0.26	0.00	0 00	0.00	0.26	0 10	0.19	0.19
Volume/Cap:		0.52	0.52		0.20	0.00		0.00	0.43		0.12	0.12
Uniform Del:			38.3		28.1	0.0	0.0	0.0	31.4		34.0	34.0
IncremntDel:	2.5	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.7	0.2	0.2	0.2
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2
Delay Adj:		1.00	1.00		1.00	0.00		0.00	1.00		1.00	1.00
		39.0	39.0		28.2				32.1		34.2	34.2
Delay/Veh:			1.00		1.00	0.0	0.0	0.0	1.00		1.00	1.00
User DelAdj:					28.2	0.0		0.0	32.1		34.2	34.2
AdjDel/Veh:		39.0 D	39.0	0.0 A	28.2 C		0.0		32.1 C	34.2 C	34.Z	
LOS by Move:			D			A	A 0	A				C
HCM2kAvgQ:	7	5	5	0	0	0	U	0	5	1	1	1

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Level Of Service Computation Report

2035 Cumulative Weekday AM Tue May 31, 2011 16:01:00

******	2000 HCM Or	peratio	ons Met	thod	(Future	e Volum	me Alt	ternati	ve)		
Intersection	#10 Embaro	cadero/	/ Nortl	n Poi	nt St /	/ Kearı	ny St				
*********** Cycle (sec): Loss Time (s Optimal Cycl *******	ec): 1	96 16 00			Critic Averaç Level	cal Vol ge Dela Of Se	l./Cap ay (se rvice	p.(X): ec/veh) :	:	0.3	329 L.7 C
Street Name: Approach: Movement:	North Bo L - T	ound - R	Soi L	uth Bo - T	ound – R	E a	ast Bo - T	ound - R	W.	est Bo - T	ound – R
Control: Rights: Min. Green: Y+R:	Protect Inclu 17 44 4.0 4.0 1 0 2	0 4.0 0	0 4.0 0	Included Front Protect Included Front Protect Includes Front Protect	23 4.0 1 0	20 4.0	lit Pl Incl 20 4.0 0 1!	nase ude 20 4.0 0 1	20 4.0 0	lit Ph Inclu 20 4.0 1 0	nase ide 20 4.0 0 1
Volume Modul Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj:	e: 171 286 1.00 1.00 171 286 0 0 0 171 286 1.00 1.00 171 286 1.00 1.00 0.95 0.95 180 301 1.00 1.00 1.00 1.00 1.00 1.00 180 301	0 1.00 0 0 0 0 1.00 0.95 0 0 0	0 1.00 0 0 0 1.00 0.95 0 0 0	170 1.00 170 0 0 170 1.00 0.95 179 0 179 1.00 1.00	20 1.00 20 0 20 20 1.00 0.95 21 0 21 1.00 1.00	3 1.00 3 0 0 3 1.00 0.95 3 0 3 1.00 1.00	241 1.00 241 0 0 241 1.00 0.95 254 0 254 1.00 1.00	30 1.00 30 0 0 30 1.00 0.95 32 0 32 1.00 1.00	29 1.00 29 0 0 29 1.00 0.95 31 0 31 1.00 1.00	6 1.00 6 0 0 6 1.00 0.95 6 0 6 1.00 1.00	18 1.00 18 0 0 18 1.00 0.95 19 0 1.00 1.00
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	low Module: 1900 1900 0.95 0.72 1.00 2.00 1805 2736	1900 1.00 0.00	1900 1.00 0.00 0	1900 0.71 1.84 2472	1900 0.93 0.16 291	1900 0.98 0.01 22	1900 0.98 0.93 1738	1900 0.98 1.06 1976	1900 0.96 0.83 1511	1900 0.96 0.17 313	1900 0.85 1.00 1615
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	1ysis Modul 0.10 0.11 ***** 0.19 0.44 0.53 0.25 36.7 17.6 1.7 0.1 0.0 0.0 1.00 1.00 38.4 17.7 1.00 1.00 38.4 17.7	0.00 0.00 0.00 0.00 0.0 0.0 0.00 0.00 1.00 0.0	0.00 **** 0.00 0.00 0.0 0.0 0.0 0.00 0.00	0.07 0.25 0.29 30.1 0.2 0.0 1.00 30.3 1.00 30.3	0.07 0.25 0.29 30.1 0.2 0.0 1.00 30.3 1.00 30.3	0.15 **** 0.20 0.73 37.5 6.8 0.0 1.00 44.3 1.00 44.3	0.15 0.20 0.73 37.5 6.8 0.0 1.00 44.3 1.00 44.3	0.02 0.20 0.08 32.5 0.0 1.00 32.5 1.00 32.5	0.02 0.20 0.10 32.7 0.1 0.0 1.00 32.8 1.00 32.8	0.02 **** 0.20 0.10 32.7 0.1 0.0 1.00 32.8 1.00 32.8 C	0.01 0.20 0.06 32.4 0.1 0.0 1.00 32.5 1.00 32.5

			Level 0									
******			peratio								to all all all all all	and the standards of the
										^^^^		
Intersection												
	^^^^		90	^ ^ ^ ^ ^ ^						^^^^	0.7	
Cycle (sec):			7			Critic				_	18	
Loss Time (s			31			Level			ec/veh)	:	1.5	B B
Optimal Cycl				+++++	+++++					+++++	+++++	
Street Name:			Embarc						Bav			
Approach:	No	rth B			ı+h Bo	ound	F	ast Bo	_		est Bo	und
Movement:			– R		- T			азс во - Т			- T	
Control:		rotect			rotect				nase		lit Ph	
Rights:		Incl			Incli		JP.	Ovl	iasc	op.	Inclu	
Min. Green:	42		0	0		25	7		42	0	0	0
Y+R:	4.0		4.0		4.0	4.0	4.0		4.0	4.0		4.0
Lanes:		0 2				1 0		0 0			0 0	
Volume Modul			'	'		'	'		'	'		'
Base Vol:	725	437	0	0	441	27	22	0	1391	0	0	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		437	0	0	441	27	22	0	1391	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserBvVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	725	437	0	0	441	27	22	0	1391	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	788	475	0	0	479	29	24	0	1512	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	788	475	0	0	479	29	24	0	1512	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	788	475	0	0	479	29	24	0	1512	0	0	0
Saturation F			:									
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:		0.87	1.00		0.87	0.87		1.00	0.69		1.00	1.00
Lanes:		2.00	0.00		1.88	0.12		0.00	2.00		0.00	0.00
Final Sat.:		3321	0		3101	190	1805	0	2615	0	0	0
Capacity Ana												
Vol/Sat:		0.14	0.00	0.00	0.15	0.15	0.01	0.00	0.58	0.00	0.00	0.00
Crit Moves:	****				****				****			
Green/Cycle:			0.00		0.28	0.28		0.00	0.64		0.00	0.00
Volume/Cap:		0.19	0.00		0.56	0.56		0.00	0.90		0.00	0.00
Uniform Del:		3.4	0.0		27.8	27.8	30.8	0.0	13.5	0.0	0.0	0.0
IncremntDel:		0.0	0.0	0.0	0.8	0.8	0.1	0.0	6.8	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:	16.7	3.5	0.0		28.5	28.5	30.9	0.0	20.3	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	16.7		0.0	0.0 A	28.5	28.5	30.9	0.0	20.3	0.0	0.0	0.0
LOS by Move:			A	A 0	C	C	C 1		C 21	A 0	A 0	A 0
HCM2kAvgQ:	7	2	0	0	6	6	1	0	21	U	0	U

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*****		HCM Or	peratio	ns Met	thod	Computa (Future	Volu	me Alt	ernati		to the standards	
Intersection	#12 1	Embar	cadero/	Chest	tnut S	St / Sa	nsome	St				
Cycle (sec): Loss Time (s Optimal Cycl	ec): e:	-	90 13 79			Critic Averag Level	al Vo e Del Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.0	678 6.2 B
Street Name: Approach: Movement:	No:	- T	Embarc ound - R	Son L	uth Bo - T	- R	E L	ast Bo - T	- R	W.	est Bo - T	- R
Control: Rights: Min. Green: Y+R: Lanes:	10 4.0	rotect Inclu 40 4.0	ted	10 4.0	rotect Inclu 40 4.0	ied ide 0	Sp 16 4.0	lit Ph Inclu 16 4.0	nase ide 16	7 4.0	lit Pl Incl 7 4.0	nase ude 7
Volume Modul Base Vol: Growth Adj: Initial Bse: Added Vol: FasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: FCE Adj:	147 1.00 147 0 0 147 1.00 0.92 160 0	1024 1.00 1024 0 0 1024 1.00 0.92 1113		0 1.00 0 0 0 1.00 0.92 0	1821 1.00 1821	14 1.00 14 0 0 14 1.00 0.92 15 0	146 1.00 146 0 0 146 1.00 0.92 159 0	138 1.00 138 0 0 138 1.00 0.92 150	39 1.00 39 0 0 39 1.00 0.92 42 0 42	0 1.00 0 0 0 0 1.00 0.92 0	0 1.00 0 0 0 0 1.00 0.92 0 0	0 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
MLF Adj: FinalVolume:	1.00 160	1.00	1.00	1.00	1.00 1979	1.00 15	1.00 159	1.00 150	1.00	1.00	1.00	1.00
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 0.95 1.00 1805	1900 0.95 2.00 3610	1900 1.00 0.00 0	1.00 1.00 1900	1900 0.91 2.98 5142	1900 0.91 0.02 40	0.87 0.91 1493	1900 0.87 0.85 1412	1900 0.87 0.24 399	1.00 0.00 0	1900 1.00 0.00 0	1900 1.00 0.00 0
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh:	0.09 **** 0.13 0.70 37.6 9.2 0.0 1.00 46.8 1.00	0.31 0.68 0.45 6.8 0.1 0.0 1.00 6.9	0.00 0.00 0.00 0.0 0.0 0.0 0.0 0.0 0.0	0.00 0.00 0.0 0.0 0.0 0.00 0.00	0.38 **** 0.55 0.70 14.7 0.8 0.0 1.00 15.5 1.00 15.5	0.38 0.55 0.70 14.7 0.8 0.0 1.00 15.5 1.00 15.5	0.18 0.60 34.0 1.7 0.0 1.00 35.7		0.11 0.18 0.60 34.0 1.7 0.0 1.00 35.7 1.00 35.7	0.00 0.00 0.0 0.0 0.0	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00	0.00 0.00 0.00 0.0 0.0 0.0 0.00 1.00
LOS by Move: HCM2kAvgQ:		A	A 0	A 0	В	B 15	D 6	D	D 6	A 0		A 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #13 Embarcadero / Lombard St / Battery St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.553 Critical vol. Cag.(A).

Loss Time (sec): 11 Average Delay (sec/veh):

Optimal Cycle: 76 Level Of Service: 21 4 ************************* Street Name: Embarcadero Lombard St (EB) / Battery (WB)
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Include Include Include Rights: 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 Lanes: -----|----|-----||-------| Volume Module: Base Vol: 109 1154 0 27 1238 608 18 0 216 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 118 1254 0 29 1346 661 20 0 235 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 118 1254 0 29 1346 661 20 0 235 0 0 0 0 235 0 0 Saturation Flow Module: Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 1.00 2.00 1.00 1.00 0.00 1.00 0.00 1.00 0.00 Final Sat.: 1805 3610 0 1805 3610 1615 1809 0 1615 0 1900 0 ______||___| Capacity Analysis Module: Vol/Sat: 0.07 0.35 0.00 0.02 0.37 0.41 0.01 0.00 0.15 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.10 0.49 0.00 0.13 0.52 0.52 0.26 0.00 0.26 0.00 0.00 0.00 Volume/Cap: 0.66 0.71 0.00 0.13 0.72 0.79 0.04 0.00 0.55 0.00 0.00 0.00 Uniform Del: 39.0 18.0 0.0 35.0 16.9 17.9 24.7 0.0 28.6 0.0 0.0 0.0 IncremntDel: 8.5 1.4 0.0 0.3 1.4 5.3 0.0 0.0 1.6 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 47.5 19.4 0.0 35.2 18.3 23.2 24.8 0.0 30.2 0.0 0.0 0.0 AdjDel/Veh: 47.5 19.4 0.0 35.2 18.3 23.2 24.8 0.0 30.2 0.0 0.0 0.0 LOS by Move: D B A D B C C A C A A A HCM2kAvgQ: 3 14 0 1 15 15 0 0 6

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2035 Cumulative Weekday AM Tue May 31, 2011 16:01:00

		HCM Or	Level O Deratio	ns Met	thod ((Future	Volu	me Alt	ernati			
*****								*****	*****	****	*****	*****
Intersection								*****	*****	****	*****	*****
Cycle (sec):			90			Critic					0.6	
Loss Time (se			L4			Averag		4		:	28	3.3
Optimal Cycle			39 ******	****	*****	Level				****	*****	C *****
Street Name:			arcader						Gree			
Approach:	No	rth Bo			uth Bo	ound	E	ast Bo			est Bo	ound
Movement:	L	- T	- R	L ·	- T	- R	L	- T	- R	L -	- T	- R
Control:	P.	rotect		P	rotect		Sp	lit Ph		Sp	lit Ph	
Rights:		Inclu		_	Inclu			Inclu			Inclu	
Min. Green: Y+R:	4.0	44	0 4.0	7	41	0	24		24	4.0	0 4.0	0
1+K: Lanes:	1					4.0	0		4.0	0 1		4.0
Volume Module			'			'			'	'		'
Base Vol:	174	1240	0	18	1262	70	26	0	71	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		1240	0		1262	70	26	0	71	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut: User Adi:		1240	1.00		1262	70 1.00	26	1.00	71	1 00	1.00	1.00
User Adj: PHF Adj:		0.90	0.90		0.90	0.90	0.90		0.90		0.90	0.90
PHF Volume:		1378	0.50		1402	78	29	0.50	79	0.50	0.50	0.50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	193	1378	0	20	1402	78	29	0	79	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		1378	0		1402	78	. 29	0	79	. 0	0	0
Saturation F												
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.95	1.00	0.95	0.94	0.94		1.00	0.89		1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	1.89	0.11	0.27	0.00	0.73	0.00	1.00	0.00
Final Sat.:		3610	0	1805	3393	188	453	0	1237	0	1900	0
Capacity Anal Vol/Sat:		0.38	0.00	0 01	0.41	0.41	0 06	0.00	0.06	0 00	0.00	0.00
Crit Moves:	****	0.30	0.00	0.01	****	0.41	****	0.00	0.00	0.00	0.00	0.00
Green/Cycle:		0.50	0.00	0.08	0.46	0.46		0.00	0.27	0 00	0.00	0.00
Volume/Cap:		0.77	0.00		0.90	0.90	0.24		0.24		0.00	0.00
Uniform Del:			0.0	38.6	22.5	22.5	25.8	0.0	25.8	0.0	0.0	0.0
IncremntDel:	35.6	2.0	0.0	0.4	7.2	7.2	0.3	0.0	0.3	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh: User DelAdj:		20.3	0.0		29.7	29.7 1.00	26.1	0.0	26.1	0.0	0.0	0.0
AdiDel/Veh:			0.0		29.7	29.7	26.1		26.1	0.0	0.0	0.0
LOS by Move:		20.5 C	0.0 A	33.0 D	23.7 C	23.7 C	20.1 C		20.1 C	0.0 A	0.0 A	0.0 A
HCM2kAvgQ:	5		0	0	21	21	2		2	0	0	0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #15 Embarcadero / Broadway St ******************

 Cycle (sec):
 90
 Critical Vol./Cap.(X):
 1.024

 Loss Time (sec):
 17
 Average Delay (sec/veh):
 169.7

 Optimal Cycle:
 176
 Level Of Service:
 F

 *********************** Street Name: Embarcadero Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase
 Rights:
 Include
 Include
 Include
 Include
 OV1

 Min. Green:
 16
 37
 0
 7
 28
 28
 29
 0
 29
 0
 0
 0

 Y+R:
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 1 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 Lanes: Volume Module: Base Vol: 715 1302 0 3 1289 51 110 0 482 Initial Bse: 715 1302 0 3 1289 51 110 0 482 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 715 1302 0 3 1289 51 110 0 482 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 715 1302 0 3 1289 51 110 0 482 0 0 0 0 482 0 0 FinalVolume: 715 1302 0 3 1289 51 110 0 482 0 0 Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.94 0.94 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 1.00 1.92 0.08 1.00 0.00 1.00 0.00 0.00 ______||___| Capacity Analysis Module: Vol/Sat: 0.40 0.36 0.00 0.00 0.37 0.37 0.06 0.00 0.30 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.18 0.41 0.00 0.08 0.31 0.31 0.32 0.00 0.32 0.00 0.00 0.00 Volume/Cap: 2.23 0.88 0.00 0.02 1.20 1.20 0.19 0.00 0.93 0.00 0.00 0.00 Uniform Del: 37.0 24.4 0.0 38.3 31.0 31.0 22.0 0.0 29.5 0.0 0.0 0.0 IncremntDel:562.7 6.3 0.0 0.1 98.9 98.9 0.2 0.0 22.7 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 599.7 30.7 0.0 38.4 130 129.9 22.2 0.0 52.2 0.0 0.0 0.0 AdjDel/Veh: 599.7 30.7 0.0 38.4 130 129.9 22.2 0.0 52.2 0.0 0.0 0.0

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HCM2kAvqQ: 67 16

LOS by Move: F C A D F F C A D A A A

0 0 33 33 2 0 12 0 0

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						Computa						
						(Future						
************ Intersection							****	*****	*****	****	*****	*****
*****							****	*****	*****	****	****	*****
Cycle (sec):			90			Critic	al Vo	l./Cap).(X):		0.	789
Loss Time (s			17 90			Averag				:	126	
Optimal Cycl						Level						F
*******						*****	****					*****
Street Name:			Embaro				_		Vashing			,
Approach:						ound					est Bo	
Movement:			- R			- R					- T	
							Sn	lit Ph	nase	Sp		
Rights:		Incl	ude		Incl	ed ide	- 1	Incl	ıde	- 1	Incl	ıde
Min. Green:		30			28	0			33			0
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:			0 0			1 0			0 1		0 C	
Volume Modul												
Base Vol:		1943			1715		71	0	175	0	0	0
Growth Adj:					1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1943			1715	80	71	0	175 0	0	0	0
Added Vol: PasserByVol:		0		-	0	0	0	0	0	0	0	0
Initial Fut:			0	-	1715	80	71	0	175	0	0	0
User Adi:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:		1943	0		1715	80	71	0	175	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	455	1943	0	7	1715	80	71	0	175	0	0	0
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00
MLF Adj:					1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:					1715	80	. 71		175		0	0
Saturation F												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:					0.90	0.90		1.00			1.00	1.00
-	1.00		0.00		2.87	0.13		0.00	1.00		0.00	0.00
Final Sat.:	1805	5187	0	1805	4921	230	1805	0	1615	0	0	0
Capacity Ana												
Vol/Sat:			0.00	0.00		0.35		0.00	0.11	0.00	0.00	0.00
Crit Moves:					****		****					
Green/Cycle:					0.31	0.31		0.00	0.37		0.00	0.00
Volume/Cap:			0.00		1.12	1.12		0.00	0.30		0.00	0.00
Uniform Del: IncremntDel:			0.0		31.0	31.0 63.1	18.8	0.0	20.2	0.0	0.0	0.0
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:			0.0		94.1	94.1	18.9	0.0	20.5	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0	35.8	94.1	94.1	18.9	0.0	20.5	0.0	0.0	0.0
LOS by Move:				D		F	В		С	A		A
HCM2kAvgQ:	38	28	0	0	26	26	1	0	4	0	0	0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************** Intersection #17 Embarcadero / Mission St *****************

 Cycle (sec):
 90
 Critical Vol./Cap.(X):
 1.000

 Loss Time (sec):
 10
 Average Delay (sec/veh):
 88.2

 Optimal Cycle:
 180
 Level Of Service:
 F

 *********************** Street Name: Embarcadero MIssion St East Bound West Bound Approach: North Bound South Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Split Phase 0 0 3 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 Lanes: Volume Module: Base Vol: 0 2321 0 0 1762 167 99 0 172 Initial Bse: 0 2321 0 0 1762 167 99 0 172 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 0 2496 0 0 1895 180 106 0 185 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 2496 0 0 1895 180 106 0 185 0 0 0 0 185 Ω Ω FinalVolume: 0 2496 0 0 1895 180 106 0 185 0 0 Saturation Flow Module: Adjustment: 1.00 0.61 1.00 1.00 0.60 0.90 0.90 1.00 0.90 1.00 1.00 1.00 Lanes: 0.00 3.00 0.00 0.00 2.82 0.18 0.37 0.00 0.63 0.00 0.00 0.00 Final Sat.: 0 3475 0 0 3225 306 623 0 1082 0 0 ______||___| Capacity Analysis Module: Vol/Sat: 0.00 0.72 0.00 0.00 0.59 0.59 0.17 0.00 0.17 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.00 0.58 0.00 0.00 0.58 0.58 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.00 1.24 0.00 0.00 1.02 1.02 0.55 0.00 0.55 0.00 0.00 0.00 Uniform Del: 0.0 19.0 0.0 0.0 19.0 19.0 25.8 0.0 25.8 0.0 0.0 0.0 IncremntDel: 0.0 114 0.0 0.0 24.2 24.2 1.2 0.0 1.2 0.0 0.0 0.0 Delay Adj: 0.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00 Delay/Veh: 0.0 133 0.0 0.0 43.2 43.2 27.0 0.0 27.0 0.0 0.0 0.0 AdjDel/Veh: 0.0 133 0.0 0.0 43.2 43.2 27.0 0.0 27.0 0.0 0.0 0.0

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HCM2kAvqQ: 0 45

LOS by Move: A F A A D D C A C A A A

0 0 22 32 7 0 7 0 0

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	2000		Level O							ve)		
*******	****	****	*****	****	****	*****	****	*****	*****	****	****	*****
Intersection							****	*****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	e:	18	00 10 30 *****			Critic Averag Level	e Del Of Se	ay (se rvice:	ec/veh)	:		9.2 F
Street Name:			Embarc	adero					Harris	on St		
Approach:	No	rth Bo			uth B	ound	E	ast Bo	ound		est Bo	ound
Movement:			- R			- R		- T			- T	
Control:		Permit]		ted			nase	Sp.		
Rights:		Incl			Incl				ıde		Incl	
Min. Green:		63	0	0		63	27		27	0	0	0
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0
Lanes:		0 2				1 0			0 1	0 (
Volume Module												
Base Vol:		1872	0	0	1527	350	230	0	159	0	0	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	1872	0	0	1527	350	230	0	159	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1872	0	0	1527	350	230	0	159	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.93	0.93		0.93	0.93		0.93	0.93		0.93	0.93
PHF Volume:		2013	0		1642	376	247	0	171	0	0	0
Reduct Vol:	0	0	0	0	0 1642	0 376	0 247	0	0 171	0	0	0
Reduced Vol: PCE Adi:		2013	1.00		1.00	1.00		1.00	1.00	-	1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		2013	0		1642	376	247	0	171	0	0	0
Saturation F	low M	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.67	1.00		0.66	0.92		1.00	0.68		1.00	1.00
Lanes:		2.00	0.00		1.72	0.28		0.00	1.00		0.00	0.00
Final Sat.:		2563	0		2143	491	1805	0	1292	. 0	0	0
Capacity Anal Vol/Sat:		0.79	0.00	0 00	0.77	0.77	0 1/	0.00	0.13	0 00	0.00	0.00
Crit Moves:	0.00	****	0.00	0.00	0.77	0.77	****	0.00	0.13	0.00	0.00	0.00
Green/Cycle:	0 00		0.00	0 00	0.63	0.63	0 27	0.00	0.27	0 00	0.00	0.00
Volume/Cap:		1.25	0.00		1.22	1.22	0.51		0.49		0.00	0.00
Uniform Del:		18.5	0.0	0.0	18.5	18.5	30.9	0.0	30.7	0.0	0.0	0.0
IncremntDel:	0.0	116	0.0	0.0	103	103.1	0.9	0.0	1.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:		135	0.0	0.0		121.6	31.8	0.0	31.8	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:		135 F	0.0	0.0 A	122 F	121.6 F	31.8 C	0.0 A	31.8 C	0.0 A	0.0 A	0.0 A
LOS by Move: HCM2kAvgQ:	A 0		A 0	A 0	51	71	7		5	A 0	A 0	A 0
HUMLANYYY.	U	20	U	U	JΙ	/ 1	/	U	J	U	U	U

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #19 Embarcadero / Bryant St *******************

 Cycle (sec):
 100
 Critical Vol./Cap.(X):
 1.918

 Loss Time (sec):
 10
 Average Delay (sec/veh):
 189.4

 Optimal Cycle:
 180
 Level Of Service:
 F

 *********************** Street Name: Embarcadero Bryant St North Bound South Bound East Bound West Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted Include Include Include Rights: Include 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 Lanes: Volume Module: Base Vol: 144 1584 100 158 1487 42 256 240 327 199 90 63 Initial Bse: 144 1584 100 158 1487 42 256 240 327 199 90 63 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 148 1633 103 163 1533 43 264 247 337 205 93 65 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 148 1633 103 163 1533 43 264 247 337 205 93 FinalVolume: 148 1633 103 163 1533 43 264 247 337 205 93 65 -----||-----||------| Saturation Flow Module: Adjustment: 0.95 0.94 0.94 0.95 0.95 0.85 0.68 0.68 0.85 0.17 0.17 0.17 Lanes: 1.00 1.88 0.12 1.00 2.00 1.00 0.52 0.48 1.00 0.56 0.26 0.18 Final Sat.: 1805 3365 212 1805 3610 1615 669 627 1615 178 81 56 -----||-----||------| Capacity Analysis Module: Vol/Sat: 0.08 0.49 0.49 0.09 0.42 0.03 0.39 0.39 0.21 1.15 1.15 1.15 Crit Moves: **** **** Volume/Cap: 0.39 1.18 1.18 0.56 1.18 0.07 1.20 1.20 0.63 3.49 3.49 Uniform Del: 34.0 29.5 29.5 38.8 32.0 21.0 33.5 33.5 28.4 33.5 33.5 33.5 IncremntDel: 0.7 89.9 89.9 2.6 89.1 0.1 108.9 109 2.5 1143 1143 1143 Delay/Veh: 34.7 119 119.4 41.3 121 21.1 142.4 142 30.8 1177 1177 1177 AdjDel/Veh: 34.7 119 119.4 41.3 121 21.1 142.4 142 30.8 1177 1177 1177 LOS by Move: C F F D F C F F F F

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HCM2kAvq0: 4 43 43 4 38 1 29 29 10 44 44 44

2035 Cumulative Weekday AM Fri Jun 24, 2011 15:11:28

		HCM Or	Level O Deratio	ns Met	thod	(Future	Volu	me Alt	ernati			
************** Intersection							****	*****	*****	****	*****	*****
******							****	*****	*****	****	****	*****
Cycle (sec): Loss Time (se Optimal Cycle	:]	90 L1 90	****		Critic Averag Level	e Del Of Se	ay (se rvice:	c/veh)	:		7.2 F
Street Name:			Embarc							an St		
Approach:	No	rth Bo			uth Bo	ound	E	ast Bo			est Bo	ound
Movement:		- T				- R		- T		L ·	- T	- R
Control:	P:	rotect	ed	P	rotect	ed	Sp	lit Ph	ase	Sp.	lit Ph	nase
Rights:		Inclu			Inclu						Inclu	
Min. Green:	10		0	14		37	28		28	28	28	28
Y+R:		4.0	4.0		4.0	4.0	4.0		4.0	4.0		4.0
Lanes:	1 (0 1		0 0		. 0		0 0
 Volume Module							1					
Base Vol:		1804	0	7	1725	290	251	0	37	0	0	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1804	0		1725	290	251		37	0	0	0
Added Vol:	0	0	0	0	0	0	0		0	0	0	0
PasserByVol:	0	0	0	0	0	0	0		0	0	0	0
Initial Fut:	10	1804	0	7	1725	290	251	0	37	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	10	1860	0		1778	299	259	0	38	0	0	0
Reduct Vol:	0	0	0	0	0	0	0		0	0	0	0
Reduced Vol:		1860	0		1778	299	259		38	0	0	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
		1.00	1.00		1.00	1.00 299	259	1.00	1.00	1.00	1.00	1.00
FinalVolume:		1860	-		1778	I			38 		0	U
Saturation Fl							1					
		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
		0.95	1.00		0.95	0.85		1.00	0.85		1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	2.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	3610	0	1805	3610	1615	1805	0	1615	0	0	0
Capacity Anal												
. ,	0.01	0.52	0.00		0.49	0.19		0.00	0.02	0.00	0.00	0.00
Crit Moves:	0 11	****	0 00	****	0 46	0.46	****		0 01	0 00	0 00	0 00
Green/Cycle: Volume/Cap:			0.00		0.46	0.46		0.00	0.31		0.00	0.00
Uniform Del:		1.25	0.00		24.5	16.4	24.9		21.9	0.00	0.00	0.00
IncremntDel:		120	0.0		47.8	0.4	0.6		0.1	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
	35.9	146	0.0		72.3	16.7	25.5	0.0	21.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
	35.9	146	0.0		72.3	16.7	25.5		21.9	0.0	0.0	0.0
LOS by Move:		F	A	С	E	В	C		C	A		A
HCM2kAvgQ:	0	53	0	0	33	5	6	0	1	0	0	0

Min. Green:	15	45	0	10	40	40	30	0	30	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 (3	0 0	1 (2	0 1	1 (1!	0 0	0 0	0 (0 0
Volume Module	e:											
Base Vol:	281	2178	0	3	1672	259	139	0	101	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	281	2178	0	3	1672	259	139	0	101	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	281	2178	0	3	1672	259	139	0	101	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	290	2245	0	3	1724	267	143	0	104	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	290	2245	0	3	1724	267	143	0	104	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290	2245	0	3	1724	267	143	0	104	0	0	0
Saturation F	low Mo	odule	:									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.56	1.00	0.88	0.88	0.43	0.81	1.00	0.74	1.00	1.00	1.00

1.00 3.00 0.00 1.00 2.00 1.00 1.39 0.00 0.61 0.00 0.00 0.00

Vol/Sat: 0.17 0.70 0.00 0.00 0.51 0.33 0.07 0.00 0.12 0.00 0.00 0.00

Green/Cycle: 0.15 0.50 0.00 0.10 0.45 0.45 0.30 0.00 0.30 0.00 0.00 0.00 Volume/Cap: 1.14 1.40 0.00 0.02 1.14 0.74 0.22 0.00 0.40 0.00 0.00 0.00 Uniform Del: 42.5 25.0 0.0 40.6 27.5 22.7 26.3 0.0 27.9 0.0 0.0 0.0

Capacity Analysis Module:

Crit Moves: **** ****

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2035 Cumulative Weekday AM Tue May 31, 2011 16:01:00 Pa

						Computa						
*****									ternati			
Intersection										^^^^		
******					****	****						*****
Cycle (sec):			90			Critic	cal Vo	l./Cap	p.(X):		1.	057
Loss Time (se	ec):		10			Averag	ge Del	ay (se	ec/veh)	:	15	7.0
Optimal Cycle		1:	80			Level						F
*****					****	*****	*****	****			****	*****
Street Name:			Embar			,	_	. 5	Folso		. 5	,
Approach:									ound			
Movement:												
									hase			
Rights:			ıde		Incl	ude	op.	Incl	nde	op.	Incl	nde
Min. Green:			49	32	32	32	31	31	ude 31	0	0	0
Y+R:				4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
						1 0			0 1			
Volume Module												
Base Vol:									153		0	
Growth Adj:									1.00		1.00	
Initial Bse:					1716			0		0		
Added Vol:			0		0		0		0	0	-	0
PasserByVol: Initial Fut:							0 477		0 153	0	0	-
User Adj:		1.00				1.00		1.00		1.00	-	-
			0.95			0.95		0.95		0.95		
PHF Volume:		2085			1806		502		161	0.55		
Reduct Vol:		0			0		0		0			0
Reduced Vol:					1806					0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:										0		
Saturation F												
Sat/Lane:			1900			1900					1900	
Adjustment:						0.87					1.00	
Lanes: Final Sat.:			0.00			0.07		0.00		0.00	0.00	
rinai Sat.:												
Capacity Anal				1 1			1 1		'	1		
Vol/Sat:				0.00	0.51	0.51	0.16	0.00	0.14	0.00	0.00	0.00
Crit Moves:							****					
Green/Cycle:				0.00	0.41	0.41	0.34	0.00	0.34	0.00	0.00	0.00
Volume/Cap:					1.24	1.24	0.46	0.00	0.42	0.00	0.00	0.00
Uniform Del:	36.6	20.5	0.0	0.0	26.5	26.5	23.0	0.0	22.6	0.0	0.0	0.0
<pre>IncremntDel:</pre>				0.0		116.0	0.3		0.7	0.0	0.0	0.0
InitQueuDel:				0.0		0.0		0.0	0.0	0.0	0.0	0.0
Delay Adj:						1.00					0.00	0.00
Delay/Veh:						142.5	23.3	0.0	23.3	0.0	0.0	0.0
User DelAdj:								1.00			1.00	1.00
AdjDel/Veh:								0.0		0.0 A		0.0
LOS by Move:		F.								A		

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HCM2kAvqQ: 3 69 0 0 49 44 6 0 4

Cumulative Conditions

Weekday PM Peak Hour

Level Of Service Computation Report 2000 HCM Unsignalized Method (Future Volume Alternative) ***********************************												
Intersection	#1 Be	each :	St/Colu	ımbus A	Ave							

Average Delay												
Street Name:			Columb	ous Ave	=				Bead	ch St		
Approach:	Noi	cth B	ound	Sot	uth Bo	ound	E	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
Control:	St	top S	ign	St	top S:	ign	Un	contr	olled	Un	contro	olled
Rights:		Incl			Incl			Incl			Incl	
Lanes:			0 0						1 0		L 0	
Volume Module												
Base Vol:	18	0	9	0	0	0	0	181	106	10	490	
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	18	0	9	0	0	0	0	181	106	10	490	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		0	. 9	0	0	0	0	181	106	10	490	0
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.94		0.94		0.94	0.94		0.94	0.94		0.94	0.94
PHF Volume:	19	0	10	0	0	0	0	193	113	11	521	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:		0	10	0	0	0	0	193	113	11	521	0
Critical Gap			<i>c</i> 2							4 1		
Critical Gp:									xxxxx			XXXXX
FollowUpTim:		4.0							xxxxx			xxxxx
Capacity Modu				1 1			1 1			11		
Cnflict Vol:	791	791	153	XXXX	xxxx	xxxxx	xxxx	xxxx	xxxxx	305	xxxx	xxxxx
Potent Cap.:	361	324	899	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	1267	xxxx	XXXXX
Move Cap.:	359	321	899	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	1267	xxxx	XXXXX
Volume/Cap:		0.00	0.01			xxxx			XXXX			XXXX
Level Of Serv	vice N	Module	€:									
2Way95thQ:	xxxx	XXXX	xxxxx	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	0.0	xxxx	XXXXX
Control Del:							XXXXX	xxxx	XXXXX	7.9		XXXXX
LOS by Move:		*	*	*			*	*	*	A		
Movement:			- RT			- RT		- LTR			- LTR	
Shared Cap.:									XXXXX	XXXX	xxxx	XXXXX
SharedQueue:												XXXXX
Shrd ConDel:												XXXXX
Shared LOS:	*	_	*		*	*		*	*	A	*	*
ApproachDel:		13.6		X	xxxxx		X	xxxxx		X	XXXX	
ApproachLOS:		В			*			*			*	
******									******	*****	****	*****
Note: Queue 1	report	ted i:	s the r	number	of ca	ars per	r lane					

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2035 Cumulative Weekday PM Tue May 31, 2011 16:06:45

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
************** Intersection **********	#2 N	orth E	Point S	St/Col	umbus	Ave						
Cycle (sec): Loss Time (s Optimal Cycl	ec): e:	ğ	9 9 90			Critic Average Level	cal Vo ge Del Of Se	l./Ca ay (s rvice	p.(X): ec/veh) :	:	0.1	227 3.8 B
Street Name: Approach: Movement:	No:	- T	ound - R	L	uth B	ound - R	L	ast B	North P ound - R	W L	est B	- R
Control: Rights: Min. Green: Y+R: Lanes:	28	Permit Inclu 28 4.0	ted ide 28	28 4.0	Permi Incl 28 4.0	tted ude 28	53 4.0	Permi Incl 53 4.0	tted ude 53	53	Permi Incl 53 4.0	tted ude 53
Volume Modul Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj:	 e: 64 1.00 64 0 64 1.00 0.87	39 1.00 39 0 0 39 1.00 0.87	23 1.00 23 0 0 23 1.00 0.87	23 1.00 23 0 0 23 1.00 0.87	78 1.00 78 0 0 78 1.00 0.87	60 1.00 60 0 60 1.00 0.87	23 1.00 23 0 0 23 1.00 0.87	144 1.00 144 0 0 144 1.00 0.87	48 1.00 48 0 0 48 1.00 0.87	29 1.00 29 0 0 29 1.00 0.87	304 1.00 304 0 0 304 1.00 0.87	30 1.00 30 0 30 1.00 0.87
PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	1.00 1.00 74	0 45 1.00 1.00 45	26 0 26 1.00 1.00 26	1.00 26		69	1.00 26	0 166 1.00 1.00 166	55	1.00	0 349 1.00 1.00 349	34 0 34 1.00 1.00 34
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 0.63 1.00 1205	1900 0.94 0.63 1128	1900 0.94 0.37 665	0.82 0.29 444	1900 0.82 0.97 1507	0.82 0.74 1160	0.91 0.11 185	1900 0.91 0.67 1157	0.91 0.22 386	0.86 0.16 261	1900 0.86 1.67 2733	0.86 0.17 270
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move:	1ysis 0.06 **** 0.31 0.20 22.7 1.2 0.0 1.00 23.9 1.00 23.9	Modul 0.04 0.31 0.13 22.2 0.5 0.0 1.00 22.7 1.00 22.7		0.06 0.31 0.19 22.7 0.4 0.0 1.00 23.1 1.00 23.1	0.06 0.31 0.19 22.7		0.14 0.59 0.24 8.9 0.6 0.0	0.14 **** 0.59 0.24 8.9 0.6 0.0 1.00 9.4 1.00 9.4	0.14 0.59 0.24 8.9 0.6 0.0 1.00 9.4 1.00 9.4	0.13 0.59 0.22 8.7 0.3 0.0 1.00 9.0	0.13 0.59 0.22 8.7 0.3 0.0 1.00 9.0 1.00 9.0	0.13 0.59 0.22 8.7 0.3 0.0 1.00 9.0 1.00 9.0
HCM2kAvgQ:	1	1	1	2	2	2	3	3	3	3	3	3

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)													

Intersection #3 North Point St/Stockton St													
Cycle (sec): 90 Critical Vol./Cap.(X Loss Time (sec): 8 Average Delay (sec/v Optimal Cycle: 90 Level Of Service: ************************************									ec/veh)	В			
Street Name:			Stockt	on St				N	North P	oint S	St.		
Approach:	No	rth B			ith Bo	ound	Ea		ound				
Movement:	L ·		- R				L -	- T	- R	L - T - R			
Control:		Permi	tted	·	Permit	ted	·	Permit	ted	E	ermit	ted	
Rights:		Incl	ude		Incl	ıde		Inclu	ıde		Inclu	ıde	
Min. Green:	25	25	25	25	25	25	57	57	57	57	57	57	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:	0 (0 1!	0 0	0 (1!	0 0	0 0	1!	0 0	0 1	. 0	1 0	
Volume Module	∋:												
Base Vol:	24	21	33	15	38	23	19	255	61	8	162	6	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	24	21	33	15	38	23	19	255	61	8	162	6	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	24	21	33	15	38	23	19	255	61	8	162	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	
PHF Volume:	27	24	37	17	43	26	21	287	69	9	182	7	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	27	24	37	17	43	26	21	287	69	9	182	7	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	27	24	37	17	43	26	21	287	69	9	182	7	
			,										
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane:		1900	1900	1900		1900		1900	1900	1900		1900	
Adjustment:		0.86	0.86	0.91		0.91		0.96	0.96	0.89		0.89	
Lanes:	501		0.42	341	0.50	0.30 523		1382	0.18	0.09	3108	115	
Final Sat.:													
Capacity Anal			,	1		1	1		1	1		1	
Vol/Sat:	-	0.05	0.05	0.05	0.05	0.05	0.21	0.21	0.21	0.06	0.06	0.06	
Crit Moves:		****						****					
Green/Cycle:	0.28	0.28	0.28	0.28	0.28	0.28	0.63	0.63	0.63	0.63	0.63	0.63	
Volume/Cap:		0.19	0.19	0.18		0.18		0.33	0.33	0.09		0.09	
Uniform Del:			24.8		24.7	24.7	7.6	7.6	7.6	6.4	6.4	6.4	
IncremntDel:	1.0	1.0	1.0	0.8	0.8	0.8	0.8	0.8	0.8	0.1	0.1	0.1	
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00	
Delay/Veh:		25.8	25.8	25.5		25.5	8.4	8.4	8.4	6.5	6.5	6.5	
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:		25.8	25.8	25.5		25.5	8.4	8.4	8.4	6.5	6.5	6.5	
LOS by Move:			С	С	С	С	A	A	A	A	A	A	
HCM2kAvgQ:	2	2	2	2	2	2	5	5	5	1	1	1	

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Level Of Service Computation Report

2035 Cumulative Weekday PM Tue May 31, 2011 16:06:45

	2000 н					Computa (Future				(av		
2000 HCM Operations Method (Future Volume Alternative)												*****
Intersection						*****	****	****	*****	****	****	*****
Cycle (sec):		9	90			Critic	al Vo	l./Ca	o.(X):		0.5	545
Loss Time (se			9						ec/veh)			
Optimal Cycle		ā	9 9 90			Level						С
******						*****	****	****			****	*****
Street Name: Approach:			Columb			aund	E.	act B	Bay ound		set B	ound
Movement:												
Control:				P	rotect	ted		Permi	tted		Permit	tted
Rights:			ıde		Incl	ude 19		Incl	ude		Incl	ude 50
Min. Green: Y+R:	8	31	31	19	19	19	47	47	47	50	50	50
Y+K: Lanes:							4.0	4.0	0 1	4.0	4.0	1 0
Volume Module												
Base Vol:									217		1154	
Growth Adj:												1.00
Initial Bse:					148			774	217		1154	35
Added Vol: PasserByVol:			0	0	0		0	0		0	0	
Initial Fut:						5		774		8		
User Adj:									1.00		1.00	
PHF Adj:						0.94			0.94			
PHF Volume:		94		0		5		823		9		37
Reduct Vol:					0			0			0	
Reduced Vol: PCE Adj:	1.00				157	1.00		823			1228	
MLF Adj:						1.00					1.00	
FinalVolume:						5					1228	37
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane: Adjustment:						1900		0.90			1900	
Lanes:			0.44			0.07		1.99			1.93	
Final Sat.:												100
Capacity Anal												
Vol/Sat: Crit Moves:				0.00 ****	0.05	0.05	0.24	0.24	0.14	0.37	0.37	0.37
Green/Cycle:					0.23	0.23	0.56	0.56	0.56	0 56	0.56	0.56
Volume/Cap:					0.20			0.43			0.67	
Uniform Del:				0.0				11.7			14.2	14.2
<pre>IncremntDel:</pre>	26.0	0.4	0.4	0.0	0.1	0.1	0.2	0.2	0.2	1.0	1.0	1.0
InitQueuDel:				0.0	0.0		0.0				0.0	
Delay Adj:				0.00			1.00				1.00	
Delay/Veh: User DelAdj:				0.0				11.9			15.2	15.2
AdjDel/Veh:				0.0				11.9			15.2	
LOS by Move:					C					В		
HCM2kAvgQ:				0		2	7	7	3			13

1490 / 1

						Computa		-				
*****									ternati			to all all all all all all all
					****	*****	*****	****	*****	****	*****	*****
Intersection												
	****		* * * * * * <i>*</i> 9 0							****	0.5	
Cycle (sec):			7			Critic				_		
Loss Time (se			90			Level			ec/veh)	:	2	9.6 A
Optimal Cycle				*****						*****	*****	
Street Name:			Stockt						Bav			
Approach:	No	rth Bo			ıth B	ound	Fa	ast Bo	_		est Bo	nund
Movement:		- T				– R			- R		- T	
Control:		Permi				tted			tted		ermit	
Rights:		Incl			Incl			Incl			Incli	
Min. Green:	20		20	20	20	20	63	63	63	63	63	63
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 0	0 1!	0 0	0 (1!	0 0	0 1	L 0	1 0	0 :	. 0	1 0
Volume Module	∋:											
Base Vol:	22	26	60	41	34	32	26	707	24	24	1210	31
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	26	60	41	34	32	26	707	24	24	1210	31
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	26	60	41	34	32	26	707	24	24	1210	31
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92		0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	24	28	65	45	37	35	28	768	26	26	1315	34
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	24	28	65	45	37	35	28	768	26		1315	34
PCE Adj:		1.00	1.00	1.00		1.00		1.00		1.00		1.00
MLF Adj:		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00
FinalVolume:	24	28	65	45	37	35	. 28	768	26		1315	34
Saturation F												
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.86		0.86		0.83	0.83	0.82		0.82	0.88		0.88
Lanes:		0.24	0.56		0.32	0.30		1.87		0.04		0.05
Final Sat.:	334		910	605		472		2925	99		3188	82
Capacity Anal	lysis	Modu.	le:									
Vol/Sat:	0.07	0.07	0.07	0.07	0.07	0.07	0.26	0.26	0.26	0.41	0.41	0.41
Crit Moves:					****						****	
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.70	0.70	0.70	0.70	0.70	0.70
Volume/Cap:	0.32	0.32	0.32	0.33	0.33	0.33	0.38	0.38	0.38	0.59	0.59	0.59
Uniform Del:	29.3	29.3	29.3	29.4	29.4	29.4	5.5	5.5	5.5	6.9	6.9	6.9
<pre>IncremntDel:</pre>	2.3	2.3	2.3	2.5	2.5	2.5	0.5	0.5	0.5	1.1	1.1	1.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	31.7	31.7	31.7	31.9	31.9	31.9	6.0	6.0	6.0	8.0	8.0	8.0
User DelAdj:			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.7		31.7	31.9		31.9	6.0	6.0	6.0	8.0	8.0	8.0
LOS by Move:	С	С	С	С	С	C	A	A	A	A	A	A
HCM2kAvgQ:	3	3	3	3	3	3	5	5	5	11	11	11

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												* * * * * *
Intersection	#6 Ba	ay St.	/Kearny	St								
Cycle (sec):			90			Critic	al Vo	1./Car	o.(X):		0.	596
Loss Time (se	ec):		9						ec/veh)			0.8
Optimal Cycle			90			Level						В
*****	****	****	*****	****	****	*****	*****	****	*****	****	****	*****
Street Name:			Kearn	y St					Bay	St		
Approach:	No	rth B	ound	Son	uth B	ound		ast B		W	est B	ound
Movement:			- R			- R			- R			- R
Control:			tted		Permit			Permit		1	Permi	
Rights:		Incl			Incl			Incl			Incl	
Min. Green:			20		20			61			61	61
Y+R:			4.0					4.0			4.0	4.0
Lanes:			0 0						1 0			
Volume Module												
Base Vol:	132	4	29	3	4	15	12	733	69	3.5	1119	20
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		4		3		15	12		69		1119	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	132	4	29	3	4	15	12	733	69	35	1119	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	147	4	32	3	4	17	13	814	77	39	1243	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			32	3	4		13		77		1243	22
PCE Adj:			1.00		1.00			1.00	1.00		1.00	1.00
MLF Adj:		1.00			1.00			1.00			1.00	1.00
FinalVolume:					4			814	77		1243	22
Saturation Fl Sat/Lane:				1000	1000	1900	1000	1900	1900	1000	1900	1900
Adjustment:			1900 0.72		1900		0.87				0.85	0.85
Lanes:		0.72			0.00			1.80			1.91	0.03
Final Sat.:		33			304		49				3087	55
Capacity Anal				1			' '		'	'		
Vol/Sat:		0.13		0.01	0.01	0.01	0.27	0.27	0.27	0.40	0.40	0.40
Crit Moves:		****									****	
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.68	0.68	0.68	0.68	0.68	0.68
Volume/Cap:	0.60	0.60	0.60	0.07	0.07	0.07	0.40	0.40	0.40	0.59	0.59	0.59
Uniform Del:	31.4	31.4	31.4	27.6	27.6	27.6	6.4	6.4	6.4	7.8	7.8	7.8
<pre>IncremntDel:</pre>			8.5		0.3	0.3	0.5		0.5	1.2	1.2	1.2
InitQueuDel:			0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Delay Adj:					1.00	1.00		1.00	1.00		1.00	1.00
		39.9	39.9		28.0	28.0	7.0		7.0	9.0	9.0	9.0
User DelAdj:					1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh: LOS by Move:		39.9 D	39.9 D	28.0 C	28.0	28.0 C	7.0 A		7.0 A	9.0 A	9.0 A	9.0 A
HCM2kAvqQ:	5		Б 5	0	0	0	A 6	A 6	A 6	11	11	11

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #7 Broadway St/Sansome St *****************

 Cycle (sec):
 80
 Critical Vol./Cap.(X):
 0.892

 Loss Time (sec):
 9
 Average Delay (sec/veh):
 40.8

 Optimal Cycle:
 89
 Level Of Service:
 D

 *********************** Street Name: Sansome St Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Split Phase Split Phase Permitted Permitted
 Rights:
 Include
 Include
 Include
 Include
 Include

 Min. Green:
 27
 27
 27
 0
 0
 44
 44
 0
 0
 44
 44

 Y+R:
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 0 1 0 1 0 0 0 0 0 0 1 0 1 0 0 0 0 1 0 Lanes: Volume Module: Base Vol: 280 301 40 0 0 0 104 720 0 0 950 110 Initial Bse: 280 301 40 0 0 104 720 0 950 110 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 295 317 42 0 0 0 109 758 0 0 1000 116 0 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 Reduced Vol: 295 317 42 0 0 109 758 0 0 1000 116 FinalVolume: 295 317 42 0 0 109 758 0 0 1000 116 Saturation Flow Module: Adjustment: 0.88 0.88 0.88 1.00 1.00 1.00 0.60 1.00 1.00 1.00 0.99 0.99 Final Sat.: 1502 1614 215 0 0 0 1142 1900 0 0 1679 194 _____| Capacity Analysis Module: Vol/Sat: 0.20 0.20 0.20 0.00 0.00 0.00 0.10 0.40 0.00 0.00 0.60 0.60 Crit Moves: **** Green/Cycle: 0.34 0.34 0.34 0.00 0.00 0.00 0.55 0.55 0.00 0.00 0.55 0.55 Volume/Cap: 0.58 0.58 0.58 0.00 0.00 0.00 0.17 0.73 0.00 0.00 1.08 1.08 Uniform Del: 21.8 21.8 21.8 0.0 0.0 0.0 9.0 13.5 0.0 0.0 18.0 18.0 IncremntDel: 0.8 0.8 0.8 0.0 0.0 0.0 0.1 2.6 0.0 0.0 53.3 53.3 Delay/Veh: 22.6 22.6 22.6 0.0 0.0 0.0 9.1 16.0 0.0 0.0 71.3 71.3 AdjDel/Veh: 22.6 22.6 22.6 0.0 0.0 0.0 9.1 16.0 0.0 0.0 71.3 71.3 LOS by Move: C C C A A A A B A E E

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8 0 0 0 1 15 0 0 36 36

HCM2kAvqQ: 8 8

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Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												

*********						*****	****	****	*****	****	****	*****
Cycle (sec):		8	0			Critic	al Vo	l./Cap	o.(X):		0.8	346
Loss Time (sec			9			_		4	ec/veh)	:	34	4.0
Optimal Cycle:			15	ale ale ale ale ale ale		Level				ate ate ate ate at	to also also also also as	C
Street Name:	****	****	Batte		****	*****	****	*****	Broadw		* * * * * *	*****
Approach:	Not	cth Bo			ıth Bo	und	E	ast Bo		-	est Bo	nund
Movement:		- T			- T			- T			- T	
Control:	Spl	lit Ph		Spi	lit Ph		1	Permit		1	Permit	
Rights:		Inclu			Inclu			Inclu			Incl	
Min. Green: Y+R:	0 4.0	0 4.0	0 4.0	34 4.0	34 4.0	34 4.0	0 4.0		27 4.0	27 4.0	27 4.0	27 4.0
Lanes:	0 (0 0	0 :		1 0		0 0		1		0 0
-												
Volume Module:												
Base Vol:	0	0	0	63	722	209	0	481	278	44	853	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	0	0	63	722	209	0	481	278	44	853	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol: Initial Fut:	0	0	0	0 63	0 722	0 209	0	0 481	0 278	0 44	0 853	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
		0.98	0.98		0.98	0.98	0.98		0.98		0.98	0.98
PHF Volume:	0	0	0	64	737	213	0	491	284	45	870	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	64	737	213	0	491	284	45	870	0
_		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	0	0	0	64	737	213	0	491	284	45	870	0
Saturation Flo												
		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
		1.00	1.00		0.91	0.91		0.95	0.95		1.00	1.00
Lanes: (0.00	0.00	0.00	0.13	1.45	0.42	0.00	0.63	0.37	1.00	1.00	0.00
Final Sat.:	0	0	0		2518	729	0	1145	662	1277	1900	0
Capacity Analy Vol/Sat: (Modul 0.00	e: 0.00	0 20	0.29	0.29	0 00	0.43	0.43	0 04	0.46	0.00
Crit Moves:	0.00	0.00	0.00	0.29	****	0.29	0.00	0.43	0.43	0.04	****	0.00
Green/Cycle: (0 0 0	0 00	0.00	0 43	0.43	0.43	0 00	0.46	0.46	0 46	0.46	0.00
		0.00	0.00		0.69	0.69		0.93	0.93		0.99	0.00
Uniform Del:	0.0	0.0	0.0	18.7	18.7	18.7	0.0	20.2	20.2	12.0	21.3	0.0
IncremntDel:	0.0	0.0	0.0	1.4	1.4	1.4	0.0	16.1	16.1	0.1	27.9	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4 -		0.00	0.00		1.00	1.00		1.00	1.00		1.00	0.00
Delay/Veh:	0.0	0.0	0.0		20.1	20.1		36.4	36.4		49.3	0.0
User DelAdj: 1 AdjDel/Veh:		0.0	0.0		1.00	20.1		36.4	36.4		49.3	0.0
LOS by Move:	0.0 A	0.0 A	0.0 A	20.1 C	20.1 C	20.1 C	0.0 A		J0.4 D	12.0 B	49.3 D	0.0 A
HCM2kAvgQ:	0	0	0	12	12	12	0	19	19	1	27	0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												

Intersection #9 Embarcadero/ Beach St / Grant St												
Cycle (sec): Loss Time (sec) Optimal Cycle	∋:	1	01	****		Critic Average Level	e Dela Of Se	ay (se rvice:	ec/veh)			7.5 E
Street Name:			Embarc						(EB)/			
Approach: Movement:		rth Bo		Sot	uth Bo		E		ound	W		ound
Control:		lit Pl	nase	Sp	lit Ph	nase		lit Ph	nase		lit Ph	nase
Rights:	17	Incl		20	Inclu		0		ıde	1.0	Inclu	
Min. Green: Y+R:	17	17 4.0	17 4.0	26	26 4.0	0 4.0		0 4.0	26 4.0	19	19 4.0	19 4.0
Lanes:			1 0	0 :		0 0			0 1	0		
Volume Module			'	1		1	1		'	1		1
Base Vol:	341	247	29	5	189	0	0	0	355	18	76	9
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	341	247	29	5	189	0	0	0	355	18	76	9
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	341	247	29	5	189	0	0	0	355	18	76	9
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.92	0.92		0.92	0.92		0.92	0.92		0.92	0.92
PHF Volume:	371	268	32	5	205	0	0	0	386	20	83	10
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	371	268	32	5	205	0	0	0	386	20	83	10
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	371	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 386	20	1.00	1.00
FinalVolume:					205			0			83	10
Saturation Fl				1		1	1		1	1		1
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.28	0.92	0.92		1.00	1.00	1.00	1.00	0.87	0.98	0.98	0.98
Lanes:		0.89	0.11		0.97	0.00		0.00	1.00		0.74	0.09
Final Sat.:		1561	183		1849	0	0	0	1644		1373	163
Capacity Anal												
Vol/Sat:		0.17	0.17	0.11	0.11	0.00	0.00	0.00	0.23	0.06	0.06	0.06
Crit Moves:		****		****					****		****	
Green/Cycle:	0.17	0.17	0.17	0.26	0.26	0.00	0.00	0.00	0.26	0.19	0.19	0.19
Volume/Cap:	0.90		1.02	0.43	0.43	0.00	0.00	0.00	0.91	0.32	0.32	0.32
Uniform Del:	41.2	42.0	42.0	31.3	31.3	0.0	0.0	0.0	36.4	35.4	35.4	35.4
IncremntDel:	14.3	40.8	40.8	0.6	0.6	0.0	0.0	0.0	23.7	0.5	0.5	0.5
<pre>InitQueuDel:</pre>		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	1.00	1.00		0.00		0.00	1.00		1.00	1.00
Delay/Veh:	55.5		82.8		31.9	0.0	0.0	0.0	60.1		36.0	36.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			82.8		31.9	0.0	0.0	0.0	60.1		36.0	36.0
		F	F	C	C	A	A		E	D 3	D	D
HCM2kAvgQ:	16	16	16	6	6	0	0	0	16	3	3	3

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
Intersection	#10 Emba	arcadero/	Nortl	n Poi	nt St /	Kearı	ny St					
Cycle (sec): Loss Time (s Optimal Cycl	ec):	96 16 100			Critic Averag Level	al Vo e Dela Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.7	746 5.8 D	
Street Name: Approach: Movement:	North L - '	Embaro Bound T - R	Son L	uth Bo	ound - R	E e	ast Bo - T	- R	We	est Bo - T	ound - R	
Control: Rights:	Prote	ected clude	Pi	rotect Incl	ide	Sp	lit Ph Inclu	iase ide	Sp	lit Ph Inclu	nase ide	
Min. Green: Y+R: Lanes:	1 0 :	.0 4.0 2 0 0	4.0	4.0 1 0	23 4.0 1 0	4.0	4.0	0 1	4.0	20 4.0 L 0		
Volume Modul Base Vol:			2		 63	21		14	22		11	
Growth Adj: Initial Bse: Added Vol:	1.00 1.0 197 5		1.00	1.00 496 0	1.00 63 0	1.00 21 0	1.00 269 0	1.00 14 0	1.00 22 0	1.00 26 0	1.00 11 0	
PasserByVol: Initial Fut: User Adj:	0	0 0 71 0	0 2	0 496 1.00	0 63 1.00	0 21	0 269 1.00	0 14 1.00	0 22	0 26 1.00	0 11 1.00	
PHF Adj: PHF Volume: Reduct Vol:	0.95 0.9	95 0.95 01 0		0.95 522 0	0.95		0.95 283	0.95 15		0.95 27 0	0.95 12 0	
Reduced Vol: PCE Adj: MLF Adj:		01 0 00 1.00	1.00	522 1.00 1.00	66 1.00 1.00	22 1.00	283 1.00 1.00	15 1.00 1.00	23 1.00	27 1.00 1.00	12 1.00 1.00	
FinalVolume: 	207 6	01 0 		522	66 	22	283	15	23		12	
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 190 0.95 0.7 1.00 2.0 1805 273	00 1900 72 1.00 00 0.00 36 0	0.93 0.01 10		1900 0.93 0.17 311	0.99 0.07 133	1900 0.99 0.91 1704	1900 0.99 1.02 1925	0.98 0.46 852	1900 0.98 0.54 1007	1900 0.85 1.00 1615	
Capacity Ana Vol/Sat: Crit Moves:	lysis Mod	dule: 22 0.00	•	0.21			0.17	0.01		0.03	0.01	
Green/Cycle: Volume/Cap: Uniform Del: IncremntDel:	0.61 0.5 37.3 20	50 0.00 .1 0.0	xxxx	0.25 0.84 35.5 9.2	0.25 0.84 35.5 9.2	0.83 38.4	0.20 0.83 38.4 14.1	0.20 0.04 32.2 0.0	0.14	0.20 0.14 32.9 0.2	0.20 0.04 32.2 0.0	
InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh:	0.0 0 1.00 1.0 40.7 20 1.00 1.0	.0 0.0 00 0.00 .4 0.0 00 1.00	0.0 0.00 0.0 1.00	0.0 1.00 44.6 1.00 44.6	0.0 1.00 44.6 1.00 44.6	0.0 1.00 52.5 1.00	0.0 1.00 52.5 1.00 52.5	0.0 1.00 32.2 1.00 32.2	0.0 1.00 33.1 1.00	0.0 1.00 33.1 1.00 33.1	0.0 1.00 32.3 1.00 32.3	
LOS by Move: HCM2kAvgQ:	D	C A 7 0	A 11	D	D 12	D 10	D 10	C 0	C 1	С	C 0	

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												

Intersection #11 Embarcadero / Bay St												
Cycle (sec): Loss Time (sec) Optimal Cycle	:	:	90 7 81	****	****	Critica Average Level (e Dela Of Ser	ay (se	ec/veh)		0.6	5.4 B
Street Name:			Embarc						Bay			
Approach: Movement:	No:	cth Bo		Sou		ound - R		ast Bo	ound	W∈	est Bo	
Control:	Pı	cotect	ted	Pı	cotect	ted	Spl	lit Ph	nase	Spl	lit Ph	nase
Rights:		Incl	ıde		Incl			Ovl			Inclu	ıde
Min. Green:	42		0	0		25		0	42	0	0	0
Y+R:	4.0		4.0	4.0		4.0	4.0		4.0	4.0		4.0
Lanes:	2 (0 0) 1			0 0		0 (0 0
Volume Module						0.5						
Base Vol:	1138	751		0	768	35	19	0	755	0	0	0
Growth Adj:	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Initial Bse:		751	0	0	768	35	19	0	755	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	1120	7.51	0	0	7.0	0	0 19	0	7.5.5	0	0	0
Initial Fut:		751	1 00	1 00	768	35		1 00	755	1 00	1 00	
User Adj:	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
PHF Adj:	0.92	816	0.92	0.92	835	0.92	0.92	0.92	0.92 821	0.92	0.92	0.92
PHF Volume: Reduct Vol:	1237	010	0	0	0 0	0	0	0	021	0	0	0
Reduced Vol:		816	0	0	835	38	21	0	821	0	0	0
PCE Adj:		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00
MLF Adj:		1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00
FinalVolume:			0	0	835	38	21	0	821	0	0	0
Saturation Fl	ow Mo	ndule	. '						'			'
Sat/Lane:	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:		0.87	1.00		0.87	0.87	0.95		0.69	1.00		1.00
Lanes:	2.00	2.00	0.00	0.00	1.91	0.09	1.00	0.00	2.00	0.00	0.00	0.00
Final Sat.:	3502	3321	0	0	3154	144	1805	0	2615	0	0	0
Capacity Anal	ysis	Modu.	le:									
Vol/Sat:	0.35	0.25	0.00	0.00		0.26		0.00	0.31	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.00	0.00		0.36	0.08		0.56	0.00		0.00
Volume/Cap:	0.73		0.00	0.00		0.73	0.15		0.56	0.00		0.00
Uniform Del:		1.4	0.0		24.9	24.9	38.7	0.0	12.7	0.0	0.0	0.0
IncremntDel:	1.7	0.1	0.0	0.0	2.4	2.4	0.5	0.0	0.5	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00		0.00	0.00		1.00	1.00		1.00	0.00		0.00
Delay/Veh:	20.3	1.5	0.0		27.3	27.3	39.2	0.0	13.2	0.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00
AdjDel/Veh:	20.3	1.5	0.0		27.3	27.3	39.2	0.0	13.2	0.0	0.0	0.0
LOS by Move:		A	A	A	C	C	D	A	В	A	A	A
HCM2kAvgQ:	13	2	0	0	11	11	1	0	8	0	0	0

2035 Cumulative Weekday PM Tue May 31, 2011 16:06:45

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												

Intersection # *******									*****	****	*****	*****
Cycle (sec): Loss Time (sec Optimal Cycle:	:	1	00 .3 79 *****	****		Level	e Del Of Se	ay (se rvice:	c/veh)			0.6 C
Street Name: Approach: Movement:	L -	th Bo	- R	Sou L -	uth Bo	- R	E L	ast Bo – T	- R	We	est Bo - T	- R
Control: Rights:	Pi	rotect Inclu	ed ide	Pı	rotect Inclu	ed ide	Sp	lit Ph Inclu	iase ide	Sp	lit Ph Inclu	nase ide
Min. Green: Y+R: Lanes:	10 4.0 1 () 2		1 (40 4.0 0 2			4.0		7 4.0 0 (4.0	7 4.0 0 0
Volume Module: Base Vol:	:	1558	0		1492	9	82	334	31	0	0	0
Growth Adj: 1 Initial Bse: Added Vol:		1.00 1558 0	1.00		1.00 1492 0	1.00	1.00 82 0	1.00 334 0	1.00 31 0	1.00	1.00	1.00
PasserByVol: Initial Fut:	0 46	0 1558	0	0 21	0 1492	0	0 82	0 334	0 31	0	0	0
	0.90	1.00 0.90 1731	1.00 0.90 0	0.90	1.00 0.90 1658	1.00 0.90 10		1.00 0.90 371	1.00 0.90 34		1.00 0.90 0	1.00 0.90 0
Reduct Vol: Reduced Vol: PCE Adj: 1		0 1731 1.00	0 0 1.00		0 1658 1.00	0 10 1.00	0 91 1.00	0 371 1.00	0 34 1.00	0 0 1.00	0 0 1.00	0 0 1.00
-	51	1.00 1731	1.00	23	1.00 1658	1.00	91	1.00 371	1.00	1.00	1.00	1.00
Saturation Flo Sat/Lane: 1	ow Mo 1900	dule: 1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lanes: 1 Final Sat.: 1	1.00	0.95 2.00 3610	1.00 0.00 0	1.00 1805	0.91 2.98 5151	0.91 0.02 31	0.37 638	0.92 1.49 2598	0.92 0.14 241	0.00	1.00 0.00 0	1.00 0.00 0
Capacity Analy Vol/Sat: C Crit Moves:	ysis				0.32	0.32		0.14	0.14		0.00	0.00
Green/Cycle: 0	0.21	0.57 0.85	0.00	0.11	0.54 0.59 13.9	0.54 0.59 13.9	0.80	0.18 0.80 35.5	0.18 0.80 35.5		0.00	0.00
<pre>IncremntDel: InitQueuDel:</pre>	0.4	3.5 0.0 1.00	0.0	0.3	0.3 0.0 1.00	0.3 0.0 1.00	7.5 0.0	7.5 0.0 1.00	7.5 0.0 1.00	0.0	0.0	0.0
Delay/Veh: 3 User DelAdj: 1	35.0 1.00	19.7	0.0 1.00 0.0	36.3 1.00	14.3 1.00 14.3	14.3 1.00 14.3	43.0 1.00	43.0 1.00 43.0	43.0 1.00 43.0	0.0	0.0 1.00 0.0	0.0 1.00 0.0
LOS by Move: HCM2kAvgQ:	D 1	B 19	A 0	D 1	B 11	B 11	D 9		D 9	A 0	A 0	A 0

rage 10 1

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
Intersection #13 Embarcadero / Lombard St / Battery St												
Cycle (sec): Loss Time (sec) Optimal Cycle	€:		90 11 76 *****			Critica Average Level (e Dela Of Sei	ay (se cvice:	c/veh)	:	0.5 54	1.0 D
Street Name: Approach: Movement:	No:	rth Bo	- R	Sou L -	uth Bo - T	- R	Ea L -	ast Bo - T	t (EB) und - R	We L -	est Bo - T	ound - R
Control: Rights: Min. Green: Y+R:	9 4.0	Incl 35 4.0	ted ude 35 4.0	9 4.0	Incl 35 4.0	ade 35 4.0	21 4.0	lit Ph Inclu 21 4.0	ase ide 21 4.0	Sp] 6 4.0	Inclu Inclu 6 4.0	nase ide 6 4.0
Lanes:			1 0			0 1			0 1) 1!	
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj:	171 1.00 171 0 0 171 1.00 0.92 186 1.00 1.00 186 1.00 1.00 186	1568 1.00 1568 0 0 1568 1.00 0.92 1704 1.00 1.704 1.00 1.704	1.00 0 0 0 0 1.00 0.92 0 0 1.00 1.00 1.00 0	11 1.00 11 0 0 11 1.00 0.92 12 0 1.00 1.00 12 1	1103 1.00 1103 0 0 1103 1.00 0.92 1199 0 1199 1.00 1.00	423 1.00 423 0 0 423 1.00 0.92 460 1.00 1.00 460 1.00 460 1.00 460 1.00	36 1.00 36 0 36 1.00 0.92 39 0 39 1.00 1.00 39 1	0 1.00 0 0 0 0 1.00 0.92 0 0 0 1.00 1.00	298 1.00 298 0 0 298 1.00 0.92 324 0 324 1.00 1.00	0 1.00 0 0 0 1.00 0.92 0 0 0 1.00 0 1.00 0	0 1.00 0 0 0 1.00 0.92 0 0 0 1.00 1.00 0	0 1.00 0 0 0 0 1.00 0.92 0 0 0 1.00 0
Capacity Anal												
Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh:	0.11 0.94 39.7 45.7 0.0 1.00 85.4 1.00 85.4	**** 0.43 1.11 25.8 58.7 0.0 1.00 84.6 1.00 84.6	0.00 0.00 0.0 0.0 0.0 0.0 0.00 0.0 1.00	0.07 36.7 0.2 0.0 1.00 36.8 1.00 36.8	0.42 0.80 23.0 3.1 0.0 1.00 26.1 1.00 26.1	0.42 0.68 21.5 2.9 0.0 1.00 24.4 1.00 24.4	**** 0.35 0.06 19.3 0.0 0.0 1.00 19.4 1.00 19.4	0.0 1.00 0.0	0.20 0.35 0.57 23.6 1.4 0.0 1.00 25.0 1.00 25.0	0.00 0.00 0.0 0.0 0.0 0.00 0.00	0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.0
LOS by Move: HCM2kAvgQ:	5	34	A 0	D 0		C 10	B 1	A 0	C 8	A 0	A 0	A 0

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2035 Cumulative Weekday PM Tue May 31, 2011 16:06:45

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************************************												
Intersection	#14 E	Embaro	adero	/ Gree	en St	/ Davi	s St					
Cycle (sec): Loss Time (sec Optimal Cycle	:	1	0 . 4 3 9 ******	****		Critica Average Level	e Del Of Se	ay (se rvice:	ec/veh)	:		. 4 C
Street Name:		Emba	ırcader	o-Dav	is St				Gree	n St		
Approach:	Noi	th Bo	ound	Sot	uth Bo	und	E	ast Bo	und	We	est Bo	und
Movement:		- T				- R		- T			- T	
-												
Control:	Pı	cotect		P:	rotect		_		ase	Sp.	lit Ph	
Rights:		Inclu		-	Inclu		0.4				Inclu	
Min. Green: Y+R:		44	0 4.0	7	41	0		0 4.0	24 4.0		0 4.0	0 4.0
Lanes:	4.0		0 0			4.0 1 0		0 1!		4.0		
Volume Module			1	1		1	1		'	1		1
Base Vol:		1700	0	13	1265	18	39	0	125	0	0	0
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	85	1700	0	13	1265	18	39	0	125	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		1700	0		1265	18	39	0	125	0	0	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
		0.94	0.94		0.94	0.94 19	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume: Reduct Vol:	0	1009	0	14	1346	0	41	0	133	0	0	0
Reduced Vol:		1809	0		1346	19	41	0	133	0	0	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
-		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	90	1809	0	14	1346	19	41	0	133	0	0	0
Saturation Flo												
		1900	1900		1900	1900		1900	1900		1900	1900
		0.95	1.00		0.95	0.95		1.00	0.89		1.00	1.00
		3610	0.00		3552	51	400	0.00	1283		1900	0.00
			-									-
Capacity Analy	vsis	Modul	.e:			'						'
Vol/Sat:			0.00	0.01	0.38	0.38	0.10	0.00	0.10	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle: (0.00		0.48	0.48		0.00	0.27		0.00	0.00
Volume/Cap: (0.00		0.78	0.78		0.00	0.39		0.00	0.00
Uniform Del: 3			0.0		19.3	19.3	27.0	0.0	27.0	0.0	0.0	0.0
IncremntDel: InitQueuDel:		21.6	0.0	0.3	2.4	2.4	0.6	0.0	0.6	0.0	0.0	0.0
		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
		44.1	0.0		21.7	21.7	27.6	0.0	27.6	0.0	0.00	0.00
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		21.7	21.7	27.6	0.0	27.6	0.0	0.0	0.0
LOS by Move:		D	A	D	С	С	С	A	С	A	A	A
HCM2kAvgQ:	2	27	0	0	16	16	4	0	4	0	0	0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #15 Embarcadero / Broadway St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.936 Loss Time (sec): 17 Average Delay (sec/veh):
Optimal Cycle: 124 Level Of Service: 151 5 *********************** Street Name: Embarcadero Broadway St East Bound West Bound Approach: North Bound South Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase 1 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 Lanes: -----|----|-----||-------| Volume Module: Base Vol: 573 1698 0 7 1294 104 91 0 422 Initial Bse: 573 1698 0 7 1294 104 91 0 422 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 573 1698 0 7 1294 104 91 0 422 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 573 1698 0 7 1294 104 91 0 422 0 0 0 91 0 422 0 0 FinalVolume: 573 1698 0 7 1294 104 91 0 422 0 0 Saturation Flow Module: Adjustment: 0.95 0.95 1.00 0.95 0.94 0.94 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 1.00 2.00 0.00 1.00 1.85 0.15 1.00 0.00 1.00 0.00 0.00 ______||___| Capacity Analysis Module: Vol/Sat: 0.32 0.47 0.00 0.00 0.39 0.39 0.05 0.00 0.26 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.18 0.41 0.00 0.08 0.31 0.31 0.32 0.00 0.32 0.00 0.00 0.00 Volume/Cap: 1.79 1.14 0.00 0.05 1.26 1.26 0.16 0.00 0.81 0.00 0.00 0.00 Uniform Del: 37.0 26.5 0.0 38.4 31.0 31.0 21.8 0.0 28.0 0.0 0.0 0.0 IncremntDel:365.9 73.4 0.0 0.1 124 123.8 0.1 0.0 9.3 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 402.9 99.9 0.0 38.6 155 154.8 21.9 0.0 37.3 0.0 0.0 0.0 AdjDel/Veh: 402.9 99.9 0.0 38.6 155 154.8 21.9 0.0 37.3 0.0 0.0 0.0 LOS by Move: F F A D F F C A D A A A

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HCM2kAvqQ: 46 37 0 0 38 38 2 0 10

2035 Cumulative Weekday PM Tue May 31, 2011 16:06:45

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
************* Intersection **********	#16 1	Embar	cadero	/ Wasl	hingt	on St						
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	!	90 17 94			Critic Average Level	cal Vo ge Del Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.8	840 3.1 F
Street Name: Approach: Movement:	No:	rth Bo	Embarc ound - R	adero So L	uth Bo	ound - R	E L	ast Bo - T	Washing ound - R	gton S W L	t est Bo - T	ound - R
Control: Rights:	P	rotect Incl	ted ude	P	rotect Incl	ted ude	Sp	lit Ph Incl	nase ide	Sp	lit Pl Incl	nase ude
Min. Green: Y+R: Lanes:	4.0	4.0	0 4.0 0 0	4.0	4.0	1 0	4.0	4.0 0 0	0 1	4.0	4.0 0 0	4.0 0 0
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	438 1.00 438 0 0 438 1.00 1.00 438 1.00 438 1.00 438	2101 1.00 2101 0 2101 1.00 2101 0 2101 1.00 2101 1.00 2101	0 1.00 0 0 0 0 1.00 1.00 0 0 0 0 0 1.00 1.00	10 1.00 0 0 10 1.00 1.00 1.00 1.00 1.00	1634 1.00 1634 0 0 1634 1.00 1634 1.00 1634 1.00	133 1.00 133 0 0 133 1.00 1.33 0 133 1.00 133	170 1.00 170 0 170 1.00 1.00 170 1.00 1.0	0 1.00 0 0 0 1.00 1.00 0 0 0 1.00	247 1.00 247 0 0 247 1.00 1.00 247 1.00 1.00 247	1.00 0 0 0 0 1.00 1.00 0 0 0 1.00	0 1.00 0 0 0 1.00 1.00 0 0 0 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	1900 0.95 1.00 1805	1900 0.91 3.00 5187	1900 1.00 0.00 0	0.95 1.00 1805	0.90 2.77 4744	0.23 386	0.95 1.00 1805	0.00	0.85 1.00 1615	1.00 0.00 0	0.00	1.00 0.00 0
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	lysis 0.24 **** 0.13 1.82 39.0 384.9 0.0 1.00 423.9 1.00 423.9 F	Modu 0.41 0.33 1.22 30.0 102 0.0 1.00 132 1.00 132 F	0.00 0.00 0.00 0.00 0.0 0.0 0.00 0.00 1.00 0.0	0.01 0.11 0.05 35.8 0.1 0.0 1.00 35.9 1.00 35.9	0.34 **** 0.31 1.11 31.0 57.9 0.0 1.00 88.9 1.00 88.9 F	0.34 0.31 1.11 31.0 57.9 0.0 1.00 88.9 1.00 88.9 F	0.09 **** 0.37 0.26 19.9 0.2 0.0 1.00 20.1 1.00 20.1	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0	0.15 0.37 0.42 21.3 0.5 0.0 1.00 21.8 1.00 21.8	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00 0	0.00 0.00 0.00 0.0 0.0 0.0 0.00 1.00 0.0	0.00 0.00 0.00 0.0 0.0 0.0 0.00 0.00

Level Of Service Computation Report												
						-		-				
2()00 F	ICM Op	eratio	ns Met	thod (Future	Volu	me Alt	ternati	ve)		
							****	*****	*****	*****	****	*****
Intersection #							****	*****	*****	*****	****	*****
Cycle (sec):		9	0			Critic					1.3	
Cycle (sec): Loss Time (sec Optimal Cycle:	:(:	1	. 0			Averag				:	12	7.6
Optimal Cycle:	;	18	0			Level						F
					*****	*****	****				****	******
Street Name:			Embarc	adero					MIssi			
Approach:												
						- R						
Control: Rights:	E	ermit	tea	1	ermit	ted ide	Sp	IIT Pr	nase ude 28 4.0	Sp.	IIT PI	lase
Min. Green:	0	THETE	ide ^	ΕO	INCIU	ide En	20	THET	ıde 28	0	THET	ide ^
Y+R:	4 0	1 0	4.0	4.0	1 0	52 4.0	4.0	4.0	4.0	4 0	4.0	4 0
Lanes:						1 0			0 0			0 0
-												
Volume Module:			'			'			'			'
Base Vol:		2453	0	0	1777	197	180	0	97	0	0	0
Growth Adj: 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	2453	0	0	1777	197	180	0	97	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:						197		0		0		0
User Adj: 1					1.00	1.00		1.00			1.00	1.00
		0.93		0.93		0.93		0.93			0.93	0.93
PHF Volume:			0		1911	212	194		104	0		0
Reduct Vol:		0	0		0	0	0		0	0		0
Reduced Vol:					1911	212	194		104			0
PCE Adj: 1		1.00			1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj: 1 FinalVolume:				1.00		212		1.00			1.00	1.00
rinalvolume:												-
Saturation Flo	ow Mo	dule:										'
Sat/Lane: 1									1900		1900	
Adjustment: (0.90					1.00	
Lanes: (0.21			0.35		0.00	
Final Sat.:						353			614		0	0
Capacity Analy												
Vol/Sat: (0.00	0.00	0.60	0.60	0.17	0.00	0.17	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle: 0	.58	0.58	0.00	0.00	0.58	0.58	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap: 1	L.40	1.40	0.00	0.00	1.04	1.04	0.55	0.00	0.55	0.00	0.00	0.00
Uniform Del: 1			0.0	0.0		19.0		0.0	25.7		0.0	0.0
IncremntDel:18			0.0		30.6	30.6	1.2		1.2	0.0	0.0	0.0
InitQueuDel:			0.0	0.0		0.0		0.0	0.0	0.0		0.0
Delay Adj: 1			0.00			1.00		0.00	1.00		0.00	0.00
Delay/Veh: 20			0.0	0.0		49.6	26.9		26.9	0.0		0.0
User DelAdj: 1			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh: 20				0.0		49.6		0.0	26.9		0.0	0.0
LOS by Move:		F.		A		D 35		A		A		A

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HCM2kAvgQ:

2035 Cumulative Weekday PM Tue May 31, 2011 16:06:45

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
Intersection #18 Embarcadero / Harrison St												
Cycle (sec): Loss Time (secoptimal Cycle	c):	10 1 18	00 L0 30			Critic Averag Level	al Vo e Del Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	1.0 153)59 3.7 F
			Embarc						Harris			
Street Name:	37	. t. b. D.			-+1- D			D.			t. D.	
Approach:			ound						ound		est Bo	
Movement:			- R			- R		- T			- T	
Control:		 Permit				ted		 lit Ph		 Sp:		
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Inclu	ıde
Min. Green:	0	63	0	0	63	63	27	0	27	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 (2	0 0	0 (0 1	1 0	1	0 0	0 1		0 0	
Volume Module												'
Base Vol:		1966	0	0	1661	380	201	0	178	0	0	0
		1.00			1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1966	0		1661	380	201	0	178	0.00	0.00	0
		1900		0				-		-	-	
Added Vol:	0	-	0	-	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		1966	0		1661	380	201	0	178	0	0	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
-		0.93	0.93		0.93	0.93		0.93	0.93		0.93	0.93
PHF Volume:		2114	0		1786	409	216	0	191	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		2114	0		1786	409	216	0	191	0	0	0
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
-		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		2114	0		1786	409	216	0	191	0	0	0
Saturation Fl												
		1900			1900	1900		1900	1900		1900	1900
		0.67	1.00		0.66	0.92		1.00	0.68		1.00	1.00
		2.00	0.00		1.72	0.28		0.00	1.00		0.00	0.00
		2563	0		2143	490	1805		1292		0	0
Capacity Anal												
	0.00	0.82	0.00	0.00	0.83	0.83		0.00	0.15	0.00	0.00	0.00
Crit Moves:					****		****					
Green/Cycle:	0.00	0.63	0.00	0.00	0.63	0.63	0.27	0.00	0.27	0.00	0.00	0.00
Volume/Cap:	0.00	1.31	0.00	0.00	1.32	1.32	0.44	0.00	0.55	0.00	0.00	0.00
Uniform Del:	0.0	18.5	0.0	0.0	18.5	18.5	30.3	0.0	31.3	0.0	0.0	0.0
IncremntDel:	0.0	144	0.0	0.0	150	149.6	0.6	0.0	1.9	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	0.0	162	0.0	0.0	168	168.1	30.9	0.0	33.1	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	162	0.0	0.0	168	168.1	30.9	0.0	33.1	0.0	0.0	0.0
LOS by Move:		F	A	A	F	F	С	A	С	A	A	A
HCM2kAvgQ:	0	64	0	0	64	90	6	0	6	0	0	0

			Level O			-		-				
*****			peratio								*****	******
Intersection												
*****	****			****	****					*****		
Cycle (sec):			00			Critic						088
Loss Time (se			10			Averag				:	12	5.7 F
Optimal Cycle			80 ******	****	****	Level				*****	****	-
Street Name:			Embarc						Bryar			
Approach:	No	rth B			ıth Bo	ound	E	ast Bo			est B	ound
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Control:	P	rotec		Pi	cotect]	Permit		I	Permi	
Rights:		Incl			Incl			Incl			Incl	
Min. Green:	21		41	16	36	36	28	28	28	28	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0
Lanes:		0 1) 2	0 1		1 0			1!	
Volume Module	1											
Base Vol:		1815	12	126	1642	70	75	98	162	242	111	83
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1815	12	126	1642	70	75	98	162	242	111	83
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		1815	12		1642	70	75	98	162	242	111	83
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.97	0.97		0.97	0.97	0.97		0.97		0.97	0.97
PHF Volume:		1871	12		1693	72	77	101	167	249	114	86
Reduct Vol: Reduced Vol:	0	0 1871	0 12	120	0 1693	0 72	0 77	0 101	0 167	0 249	114	0 86
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		1871	12		1693	72	77	101	167	249	114	86
Saturation F	low Mo	odule	:									
Sat/Lane:		1900	1900	1900		1900		1900	1900		1900	1900
Adjustment:		0.95	0.95		0.95	0.85		0.74	0.85		0.61	0.61
Lanes:		1.99	0.01		2.00	1.00		0.57	1.00		0.25	0.19
Final Sat.:		3583	24	1805		1615	609	795	1615	648	297	222
Capacity Anal												
Vol/Sat:		0.52	0.52	0.07	0.47	0.04	0.13	0.13	0.10	0.38	0.38	0.38
Crit Moves:	3.13	****	0.02	****	J	0.01	0.10	3.13	0.10	0.00	****	0.00
Green/Cycle:	0.21	0.43	0.43	0.16	0.38	0.38	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:		1.23	1.23	0.45	1.25	0.12	0.40	0.40	0.33	1.23	1.23	1.23
Uniform Del:	36.0	28.7	28.7	38.0	31.2	20.4	27.0	27.0	26.2	34.3	34.3	34.3
${\tt IncremntDel:}$	3.4		107.7	1.1	118	0.1	0.6	0.6		123.6	124	123.6
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
Delay/Veh:	39.4		136.4	39.1	149	20.5		27.6	26.6 1.00	157.9	158	157.9
User DelAdj: AdjDel/Veh:			1.00	39.1	1.00	20.5		27.6		1.00	1.00	1.00
LOS by Move:		130 F	130.4 F	39.I	149 F	20.5 C	27.0 C	27.6 C	20.0 C	137.9 F	100 F	137.9 F
HCM2kAvqQ:	6	51	51	3	47	1	5	5	4	27	27	27
					- '	-			-	- '		- '

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2000	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												
*********	******	******	******	******									
Intersection #20 *******		/ Brannan St ********	******	******									
Cycle (sec): Loss Time (sec): Optimal Cycle: ************************************	90	Averag	<pre>al Vol./Cap.(X): ge Delay (sec/veh) Of Service: ************************************</pre>	F									
Street Name:	Embaro		Brann										
		South Bound	East Bound	West Bound									
	- T - R	L - T - R	L - T - R	L - T - R									
	Protected	Protected	Split Phase										
Rights:	Include	Include	Include	Include									
Min. Green: 1	0 37 0	14 37 37	28 28 28	28 28 28									
Y+R: 4.	0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0	4.0 4.0 4.0									
Lanes: 1	0 2 0 0	1 0 2 0 1	1 0 0 0 1	0 0 0 0 0									
Volume Module:													
Base Vol: 6	2 1983 0	31 1646 381	204 0 16	0 0 0									
Growth Adj: 1.0	0 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00									
Initial Bse: 6	2 1983 0	31 1646 381	204 0 16	0 0 0									
Added Vol:	0 0 0	0 0 0	0 0 0	0 0 0									
PasserByVol:	0 0 0	0 0 0	0 0 0	0 0 0									
Initial Fut: 6	2 1983 0	31 1646 381	204 0 16	0 0 0									
	0 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00									
-	6 0.96 0.96	0.96 0.96 0.96	0.96 0.96 0.96	0.96 0.96 0.96									
	5 2066 0	32 1715 397	213 0 17	0 0 0									
	0 0 0	0 0 0	0 0 0	0 0 0									
	5 2066 0	32 1715 397	213 0 17	0 0 0									
	0 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00									
	0 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00									
	5 2066 0	32 1715 397	213 0 17	0 0 0									
Saturation Flow													
	0 1900 1900	1900 1900 1900	1900 1900 1900	1900 1900 1900									
	5 0.95 1.00	0.95 0.95 0.85	0.95 1.00 0.85	1.00 1.00 1.00									
-	0 2.00 0.00	1.00 2.00 1.00	1.00 0.00 1.00	0.00 0.00 0.00									
	5 3610 0	1805 3610 1615	1805 0 1615	0 0 0									
Capacity Analysi	s Module:												
Vol/Sat: 0.0	4 0.57 0.00	0.02 0.47 0.25	0.12 0.00 0.01	0.00 0.00 0.00									
Crit Moves:	****	****	****										
Green/Cycle: 0.1	1 0.41 0.00	0.16 0.46 0.46	0.31 0.00 0.31	0.00 0.00 0.00									
Volume/Cap: 0.3	2 1.39 0.00	0.12 1.04 0.54	0.38 0.00 0.03	0.00 0.00 0.00									
Uniform Del: 36.	9 26.5 0.0	32.7 24.5 17.7	24.2 0.0 21.6	0.0 0.0 0.0									
IncremntDel: 0.	9 181 0.0	0.2 34.2 0.8	0.4 0.0 0.0	0.0 0.0 0.0									
InitQueuDel: 0.	0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0	0.0 0.0 0.0									
Delay Adj: 1.0	0 1.00 0.00	1.00 1.00 1.00	1.00 0.00 1.00	0.00 0.00 0.00									
Delay/Veh: 37.		32.9 58.7 18.5	24.6 0.0 21.6	0.0 0.0 0.0									
User DelAdj: 1.0		1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00									
AdjDel/Veh: 37.		32.9 58.7 18.5	24.6 0.0 21.6	0.0 0.0 0.0									
LOS by Move:		C E B	C A C	A A A									
HCM2kAvgQ:	2 69 0	1 28 7	5 0 0	0 0 0									

._____

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #43 Embarcadero / Howard St ****************** Cost Time (sec): 10 Average Delay (sec/veh):
Optimal Cycle: 158 Level Of Service: 135 7 *********************** Street Name: Embarcadero Howard St East Bound West Bound North Bound South Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Protected Protected Split Phase Split Phase Include Include Include Include Rights: 1 0 3 0 0 1 0 2 0 1 1 0 1! 0 0 0 0 0 0 Lanes: -----||-----||-----| Volume Module: Base Vol: 162 2126 0 4 1507 362 323 0 217 Initial Bse: 162 2126 0 4 1507 362 323 0 217 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 162 2126 0 4 1507 362 323 0 217 PHF Volume: 174 2286 0 4 1620 389 347 0 233 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 174 2286 0 4 1620 389 347 0 233 0 0 0 0 233 Ω Ω Saturation Flow Module: Adjustment: 0.88 0.56 1.00 0.88 0.88 0.43 0.81 1.00 0.74 1.00 1.00 1.00 Lanes: 1.00 3.00 0.00 1.00 2.00 1.00 1.40 0.00 0.60 0.00 0.00 0.00 ______||___| Capacity Analysis Module: Vol/Sat: 0.10 0.71 0.00 0.00 0.48 0.48 0.16 0.00 0.28 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.15 0.50 0.00 0.10 0.45 0.45 0.30 0.00 0.30 0.00 0.00 0.00 Volume/Cap: 0.69 1.42 0.00 0.03 1.07 1.07 0.53 0.00 0.93 0.00 0.00 0.00 Uniform Del: 40.3 25.0 0.0 40.6 27.5 27.5 29.2 0.0 34.0 0.0 0.0 0.0 IncremntDel: 8.0 193 0.0 0.1 45.3 67.4 0.5 0.0 20.3 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 48.3 218 0.0 40.7 72.8 94.9 29.7 0.0 54.3 0.0 0.0 0.0 AdjDel/Veh: 48.3 218 0.0 40.7 72.8 94.9 29.7 0.0 54.3 0.0 0.0 0.0

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HCM2kAvqQ: 5 54

LOS by Move: D F A D E F C A D A A A

0 0 32 15 7 0 16

2035 Cumulative Weekday PM Tue May 31, 2011 16:06:45

20		CM Op	eratio	ns Met	hod	Computa (Future	Volu	me Alt	ernati			
Intersection #	‡44 E	mbarc	adero	/ Fols	som St	:						
Cycle (sec): Loss Time (sec Optimal Cycle:	:	1 18	0	****		Critic Average Level	e Del Of Se	ay (se rvice:	ec/veh)	:		1.3 F
Street Name:			Embarc						Folso			
	Nor	th Bo			ıth Bo	ound	E	ast Bo			est Bo	und
Movement:		Т				- R		- T		L ·	- T	- R
-												
Control:	Pr	otect	.ed	Pi	cotect	ed	Sp	lit Ph	nase	Sp.	lit Ph	ıase
Rights:		Inclu			Incl						Inclu	ıde
Min. Green:		49	49	32		32	31		31		0	0
Y+R:	4.0		4.0		4.0	4.0		4.0	4.0			4.0
Lanes:			0 0			1 0		0 0			0 0	
Volume Module:		1024	0	0	1670	48	252	0	224	0	0	0
Base Vol: Growth Adj: 1	235 L.00	1934	1.00		1678	1.00	353	1.00	334	1 00	1.00	1.00
Initial Bse:		1934	0		1678	48	353	0.00	334	0.00	0.00	0
Added Vol:	0	1004	0	0	0	0	0	0	0	0	0	0
PasserBvVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	235	1934	0	0	1678	48	353	0	334	0	0	0
User Adj: 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj: (0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	253	2080	0	0	1804	52	380	0	359	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		2080	0		1804	52	380	0	359	0	0	0
-	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		2080	0		1804	52	380	0	359	. 0	0	0
Saturation Flo												
		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
	0.88		1.00		0.97	0.87		1.00	0.59		1.00	1.00
	1.00		0.00		1.94	0.06		0.00	1.00		0.00	0.00
	L679		0		3555	102	3152	0	1114	0	0	0
-												
Capacity Analy	sis	Modul	e:									
Vol/Sat: (0.00		0.51	0.51		0.00	0.32	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle: (0.00		0.42	0.42		0.00	0.34		0.00	0.00
Volume/Cap: 1			0.00		1.21	1.21		0.00	0.94		0.00	0.00
Uniform Del: 3 IncremntDel:13		197	0.0	0.0	26.1	26.1	22.0	0.0	28.5	0.0	0.0	0.0
IncremntDel:13 InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
_	L.00		0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh: 16		218	0.0	0.0		126.4	22.2	0.0	58.6	0.0	0.0	0.0
User DelAdj: 1			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh: 16		218	0.0	0.0		126.4	22.2	0.0	58.6	0.0	0.0	0.0
LOS by Move:	F	F	A	A	F	F	С	A	E	A	A	A
HCM2kAvgQ:	12	69	0	0	46	41	4	0	14	0	0	0

Cumulative Conditions

Weekend Midday Peak Hour

Level Of Service Computation Report	
2000 HCM Unsignalized Method (Future Volume Alternative)	
*******************	* *
Intersection #1 Beach St/Columbus Ave	
*************************	* *
Average Delay (sec/veh): 1.2 Worst Case Level Of Service: C[18.5]	
******************	* *
Street Name: Columbus Ave Beach St	
Approach: North Bound South Bound East Bound West Bound	
Movement: L - T - R L - T - R L - T - R	
Control: Stop Sign Stop Sign Uncontrolled Uncontrolled	
Rights: Include Include Include Include	
Lanes: 0 0 1! 0 0 0 0 0 0 0 0 1 1 0 0 1 0 0 0	
	- 1
Volume Module: Base Vol: 40 0 24 0 0 0 0 310 110 15 578	_
	0
	-
	0
	0
-	-
	0
PHF Adj: 0.92 0.92 0.92 0.92 0.92 0.92 0.92 0.92	
	0
	0
FinalVolume: 43 0 26 0 0 0 0 337 120 16 628	-
	- 1
Critical Gap Module:	
Critical Gp: 6.4 6.5 6.2 xxxxx xxxxx xxxxx xxxxx xxxxx 4.1 xxxx xxxx	
FollowUpTim: 3.5 4.0 3.3 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 2.2 xxxx xxxxx	
Capacity Module:	- 1
Cnflict Vol: 1058 1058 228 xxxx xxxx xxxxx xxxx xxxx xxxx 457 xxxx xxxx	
Potent Cap.: 251 227 816 xxxx xxxx xxxx xxxx xxxx xxxx xxxx	
Move Cap.: 248 223 816 xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	
Volume/Cap: 0.18 0.00 0.03 xxxx xxxx xxxx xxxx xxxx xxxx	
Level Of Service Module:	- 1
2Way95thQ: xxxx xxxx xxxx xxxx xxxx xxxx xxxx x	
Control Del:xxxxx xxxx xxxxx xxxxx xxxx xxxx xxxx	
LOS by Move: * * * * * * * * A *	*
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT	
Shared Cap.: xxxx 336 xxxxx xxxx xxxx xxxx xxxx xxx	
SharedQueue:xxxxx 0.8 xxxxx xxxxx xxxx xxxxx xxxxx xxxxx 0.0 xxxx xxxx	
Shrd ConDel:xxxxx 18.5 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx	
Shared LOS: * C * * * * * * * A *	*
ApproachDel: 18.5 xxxxxx xxxxxx xxxxxx	
ApproachLos: C * * * *	
Approachuos:	**
Note: Queue reported is the number of cars per lane.	

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2035 Cumulative Weekend MIDTue May 31, 2011 16:10:25

******	2000 HCM		ons Me	thod	(Future	e Volu	me Alt	ernati		de ale ale ale ale	de ale ale ale ale ale
Intersection ******	#2 Nortl	h Point S	St/Col	umbus	Ave						
Cycle (sec): Loss Time (s Optimal Cycl	ec):	90 9 90			Critic Average Level	cal Vo ge Del Of Se	l./Cap ay (se rvice	o.(X): ec/veh)	:	0.1	301 4.8 B
Street Name: Approach: Movement:	North L - :	Columb Bound T - R	ous Av	e uth Bo - T	ound - R	E.	l ast Bo - T	North F ound - R	oint W	St est B - T	ound - R
Control: Rights: Min. Green: Y+R: Lanes:	Perr Inc 28 : 4.0 4 1 0	mitted clude 28 28 .0 4.0 0 1 0	28 4.0	Permit Inclu 28 4.0 1 0	28 4.0 1 0	53 4.0	Permit Inclu 53 4.0 0 1!	ted ade 53 4.0 0 0	53 4.0 0	Perminos Includes 53 4.0 1 0	tted ude 53 4.0 1 0
Volume Modul Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	43 1 1.00 1.1 43 1 0 0 43 1 1.00 1.1 0.88 0.1 0.88 0.1 49 1 1.00 1.1 1.00 1.1 49 1	05 34 00 1.00 05 34 0 0 0 05 34 00 1.00 05 34 00 1.00 088 0.88 19 39 0 0 19 39 00 1.00 00 1.00 1.00	32 1.00 32 0 0 32 1.00 0.88 36 0 0 36 1.00 1.00	77 1.00 77 0 0 77 1.00 0.88 88 0 88 1.00 1.00	51 1.000 51 0 0 51 1.000 0.88 58 0 58 1.000 1.000 58	30 1.00 30 0 0 30 1.00 0.88 34 0 0 34 1.00 1.00 34	198 1.00 198 0 0 198 1.00 0.88 225 0 225 1.00 1.00 225	54 1.00 54 0 0 54 1.00 0.88 61 0 61 1.00 1.00 61	42 1.00 42 0 0 42 1.00 0.88 48 0 48 1.00 1.00	207 1.00 207 0 0 207 1.00 0.88 235 0 235 1.00 1.00	45 1.000 45 1.000 0.888 511 1.000 1.000
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	low Modu 1900 19 0.64 0.9 1.00 0.7	le: 00 1900 96 0.96 76 0.24 82 448	1900 0.79 0.40 603	1900 0.79 0.96 1450	1900 0.79 0.64 961	1900 0.92 0.11 185	1900 0.92 0.70 1221	1900 0.92 0.19 333	1900 0.80 0.28 436	1900 0.80 1.41 2151	0.80 0.31 468
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	1ysis Moo 0.04 0.1 *** 0.31 0 0.13 0 22.3 23 0.7 1 0.0 0 1.00 1.1 23.0 24 1.00 1.1 23.0 24	dule: 09 0.09 ** 31 0.31 28 0.28 .4 23.4 .2 1.2 .0 0.0 00 1.00 .6 24.6 00 1.00	0.06 0.31 0.19 22.7 0.5 0.0 1.00 23.2 1.00 23.2	0.06 0.31 0.19 22.7 0.5 0.0 1.00 23.2 1.00 23.2 C	0.06	0.18 0.59 0.31 9.3 0.8 0.0 1.00 10.1 1.00	0.18 **** 0.59 0.31 9.3 0.8 0.0 1.00 10.1 1.00	0.18 0.59 0.31 9.3 0.8 0.0 1.00 10.1 1.00 10.1 B	0.11 0.59 0.19 8.5 0.2 0.0	0.11 0.59 0.19 8.5 0.2 0.0 1.00 8.8 1.00 8.8	0.11 0.59 0.19 8.5 0.2 0.0 1.00 8.8 1.00

			Level O									
*****			peratio								++++	
Intersection							^^^^	^^^^		^^^^		
******							****	****	*****	****	****	******
Cvcle (sec):			90			Critic					0.3	
Loss Time (se	ec).		8						ec/veh)			3.4
Optimal Cycle			90			Level				•		В
******				****	****					****	****	
Street Name:			Stockt	on St				1	North P	oint :	St	
Approach:	No	rth B	ound	Son	uth Bo	ound	E	ast B	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L ·	- T	- R	L	- T	- R	L ·	- T	- R
Control:]	Permi]	Permit		1	Permit		1	Permit	
Rights:		Incl			Incl			Incl			Incl	
Min. Green:	25	25	25	25	25	25	57		57	57		57
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lanes:	0 (0 (0 0			0 0		1 0	1 0
77 - 1 M l - 1												
Volume Module Base Vol:	e: 17	6.1	54	1.0	26	18	24	239	68	1.0	98	14
Growth Adi:		61	1.00	16	1.00	1.00		1.00	1.00	1 00	1.00	1.00
Initial Bse:	1.00	61	54	1.00	26	1.00	24		68	1.00	98	1.00
Added Vol:	0	0	0	0	0	0	0	233	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		61	54	16	26	18	24	239	68	18	98	14
User Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
PHF Volume:	20	70	62	18	30	21	28	275	78	21	113	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	70	62	18	30	21	28	275	78	21	113	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	20	70	62	18	30	21	28	275	78	21	113	16
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:		0.91	0.91		0.88	0.88		0.95	0.95		0.83	0.83
Lanes:		0.46	0.41		0.43	0.30		0.72	0.21		1.51	0.21
Final Sat.:	223		709		726	502		1301	370 l		2389	341
Capacity Ana												
Vol/Sat:		0.09	0.09	0 04	0.04	0.04	0 21	0.21	0.21	0.05	0.05	0.05
Crit Moves:	0.09	****	0.03	0.04	0.04	0.04	0.21	****	0.21	0.00	0.00	0.03
Green/Cycle:	0.28		0.28	0.28	0.28	0.28	0.63	0.63	0.63	0.63	0.63	0.63
Volume/Cap:		0.32	0.32		0.15	0.15		0.33	0.33		0.07	0.07
Uniform Del:			25.7	24.5	24.5	24.5	7.7	7.7	7.7	6.3	6.3	6.3
IncremntDel:	1.7	1.7	1.7	0.7	0.7	0.7	0.8	0.8	0.8	0.1	0.1	0.1
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:		27.4	27.4		25.2	25.2	8.5	8.5	8.5	6.4	6.4	6.4
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		27.4	27.4		25.2	25.2	8.5	8.5	8.5	6.4	6.4	6.4
LOS by Move:			С	С	С	С	A		A	A	A	A
HCM2kAvgQ:	3	3	3	1	1	1	5	5	5	1	1	1

2035 Cumulative Weekend MIDTue May 31, 2011 16:10:26

*****		CM Ope	eratio	ns Met	:hod (Computa Future	Volu	me Alt	ernati		* * * * * *	*****
Intersection	#4 Bay	y St/	Columb	us Ave	9							
Cycle (sec): Loss Time (sec) Optimal Cycle	€:	10	9 9	****		Critic Averag Level	e Del Of Se	ay (se rvice:	c/veh)			1.3 C
Street Name:			Columb			,	_		Bay			
Approach: Movement:		th Bot			ith Bo - T	und – R		ast Bo - T			est Bo - T	
Control:		otect		Pı	otect			Permit]	Permit	
Rights: Min. Green:	8	Inclu 31	ae 31	19	Inclu 19	19	47	Inclu 47	1ae 47	50	Inclu 50	1ae 50
Y+R:	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0
Lanes:	2 0				L 0			1 1	0 1	. 0 :		1 0
Volume Module												
Base Vol:	177	128	71	2	161	9	16	823	151	33	592	37
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00
Initial Bse:	177	128	71	2	161	9	16	823	151	33	592	37
Added Vol: PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		128	71	2	161	9	16	823	151	33	592	37
User Adi:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:	0.98 (0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	181	131	72	2	164	9	16	840	154	34	604	38
Reduct Vol:	0	0	0	0	0 164	0 9	0 16	0	0	0	0	0
Reduced Vol: PCE Adj:	181	131	72 1.00		1.00	1.00		840	154	1 00	604	38 1.00
MLF Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:	181	131	72	2	164	9	16	840	154	34	604	38
Saturation Fl Sat/Lane:	1900 1		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92		0.76		0.94	0.94		0.89	0.85		0.83	0.83
Lanes:	2.00 0	0.64	0.36	0.02	1.88	0.10	0.04	1.96	1.00	0.10	1.79	0.11
Final Sat.:	3502		513		3349	187		3322	1615		2809	176
Capacity Anal			'									
	0.05		0.14	0.05	0.05	0.05	0.25	0.25	0.10	0.22	0.22	0.22
Crit Moves:	7	****		****				****				
Green/Cycle:			0.28	0.17		0.32		0.46	0.46		0.46	0.46
Volume/Cap: Uniform Del:			0.50 32.5	0.28		0.15 26.3		0.55	0.21 17.7		0.47	0.47
IncremntDel:		1.0	1.0	0.2	0.1	0.1	0.4	0.4	0.1	0.2	0.2	0.2
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
Delay/Veh:	43.4 3		33.4	39.3		26.3		21.8	17.8		20.6	20.6
User DelAdj: AdjDel/Veh:			1.00	1.00		1.00		1.00	1.00 17.8		1.00	1.00
LOS by Move:		03.4 C	33.4 C	39.3 D	20.3 C	20.3 C	21.0 C	21.0 C	17.0 B	20.6 C	20.6 C	20.6 C
HCM2kAvgQ:	3	6	6	3	2	2	11		3	8	8	8

			Level O									
*****			peratio									
Intersection												
*********					****	*****	****	*****	*****	*****	*****	*****
Cycle (sec):			90			Critic	al Vo	l /Car	(X) ·		0.4	134
Loss Time (se	ec):		7						ec/veh)		10	
Optimal Cycle			90			Level						A
******		****	*****	****	****	*****	****	****	*****	****	*****	*****
Street Name:			Stockt	on St					Bay	St		
Approach:	Noi	cth B	ound	Sou	ath Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	I	Permi	tted	E	Permi	ted	I	Permit	ted	I	Permit	ted
Rights:		Incl	ude		Incl	ıde		Incl	ıde		Inclu	ıde
Min. Green:	20	20	20	20	20	20	63	63	63	63	63	63
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	0 (1!	0 0	0 (1!	0 0	0 :	1 0	1 0	0 1	L 0	1 0
Volume Module												
Base Vol:	57	43	61	25	50	39	43	827	39	30	682	48
Growth Adj:		1.00			1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	57	43	61	2.5	50	39	43	827	39	30	682	48
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	43	61	25	50	39	43	827	39	30	682	48
User Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.97	0.97		0.97	0.97		0.97	0.97		0.97	0.97
PHF Volume:	59	44	63	26	52	40	44	853	40	31	703	49
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	59	44	63	26	52	40	44	853	40	31	703	49
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:	. 59		63	. 26	52	40	44	853	40	. 31	703	49
Saturation Fl												
Sat/Lane:		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
	0.83			0.88		0.88		0.84	0.84	0.84		0.84
Lanes:		0.27			0.44	0.34		1.82	0.09		1.79	0.13
Final Sat.:		420	596		734	572		2889	136		2870	202
Capacity Anal	lysis	Modu	le:									
Vol/Sat:	0.11	0.11	0.11	0.07	0.07	0.07	0.30	0.30	0.30	0.24	0.24	0.24
Crit Moves:		****						****				
Green/Cycle:	0.22	0.22	0.22	0.22	0.22	0.22	0.70	0.70	0.70	0.70	0.70	0.70
Volume/Cap:	0.48	0.48	0.48	0.32		0.32		0.42	0.42	0.35	0.35	0.35
Uniform Del:	30.4	30.4	30.4		29.3	29.3	5.7	5.7	5.7	5.4	5.4	5.4
<pre>IncremntDel:</pre>			4.6	2.2	2.2	2.2	0.6	0.6	0.6	0.4	0.4	0.4
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00
Delay/Veh:	35.0		35.0	31.5		31.5	6.3	6.3	6.3	5.8	5.8	5.8
User DelAdj:			1.00	1.00		1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:			35.0	31.5		31.5	6.3	6.3	6.3	5.8	5.8	5.8
LOS by Move:		D		С	С	С	A	A	A	A	A	A
HCM2kAvgQ:	4	4	4	3	3	3	6	6	6	5	5	5

2035 Cumulative Weekend MIDTue May 31, 2011 16:10:26

	00 HCM Operation		tion Report Volume Alternati	
Intersection #6	Bay St/Kearny	St	*****	
Cycle (sec): Loss Time (sec) Optimal Cycle: ************************************	90	Averag Level	al Vol./Cap.(X): e Delay (sec/veh) Of Service: ************************************	В
Movement: L	Kearn North Bound - T - R	South Bound L - T - R	Bay East Bound L - T - R	West Bound L - T - R
Control: Rights: Min. Green:	Permitted Include 20 20 20 1.0 4.0 4.0	Permitted Include 20 20 20 4.0 4.0 4.0	Permitted Include 61 61 61 4.0 4.0 4.0	Permitted Include 61 61 61 4.0 4.0 4.0
	0 0 1! 0 0	$\begin{smallmatrix} 0 & 0 & 1 ! & 0 & 0 \\ & & & & & & & & & & & & & & & & & & $	$\begin{smallmatrix} 0 & 1 & 0 & 1 & 0 \\ & & & & & & & & & & & & & & &$	0 1 0 1 0 1 0
Growth Adj: 1. Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: 1. PHF Adj: 0. PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: 1.	65 8 25 00 1.00 1.00 65 8 25 0 0 0 0 0 0 5 8 25 00 1.00 1.00 89 0.89 0.89 73 9 28 0 0 0 0 73 9 28 00 1.00 1.00 00 1.00 1.00	8 12 31 1.00 1.00 1.00 8 12 31 0 0 0 0 0 0 8 12 31 1.00 1.00 1.00 0.89 0.89 0.89 9 13 35 0 0 0 9 13 35 1.00 1.00 1.00 1.00 1.00 1.00	24 805 82 1.00 1.00 1.00 24 805 82 0 0 0 0 24 805 82 1.00 1.00 1.00 0.89 0.89 0.89 27 904 92 0 0 0 27 904 92 1.00 1.00 1.00	95 671 86 1.00 1.00 1.00 95 671 86 0 0 0 0 95 671 86 1.00 1.00 1.00 0.89 0.89 0.89 107 754 97 0 0 0 107 754 97 1.00 1.00 1.00
	73 9 28	9 13 35	27 904 92	107 754 97
Adjustment: 0. Lanes: 0. Final Sat.: 9	900 1900 1900 .75 0.75 0.75 .66 0.08 0.26 941 116 362	1900 1900 1900 0.88 0.88 0.88 0.16 0.23 0.61 263 394 1018	1900 1900 1900 0.85 0.85 0.85 0.05 1.77 0.18 85 2865 292	1900 1900 1900 0.66 0.66 0.66 0.22 1.58 0.20 278 1960 251
Capacity Analys		0.03 0.03 0.03	0.32 0.32 0.32	0.38 0.38 0.38
InitQueuDel: 0 Delay Adj: 1. Delay/Veh: 32 User DelAdj: 1. AdjDel/Veh: 32	.35 0.35 0.35 .5 29.5 29.5 .8.0 3.0 3.0 .0 0.0 0.0 .00 1.00 1.00 .2.5 32.5 32.5	0.22 0.22 0.22 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	0.68 0.68 0.68 0.47 0.47 0.47 0.47 0.7 0.7 0.7 0.0 0.0 0.0 1.00 1.00 1.00	0.68 0.68 0.68 0.57 0.57 0.57 0.57 7.6 7.6 1.4 1.4 0.0 0.0 0.0 0.0 1.00 1.00 1.00

						Computa						
									ernati			
*******						*****	****	****	*****	****	****	*****
Intersection ******						*****	****	****	*****	****	****	*****
Cycle (sec):		8	0			Critic	al Vo	1./Car	o.(X):		0.5	548
Loss Time (se	c):		9			Averag	e Dela	ay (se	ec/veh)	:	15	5.2
Optimal Cycle	:	8	0			Level	Of Se	rvice	:			В
********	****	*****	*****	****	*****	*****	****	****	*****	****	****	*****
Street Name:			Sanso	me St					Broadw	ay St		
Approach:			und					ast Bo		W	est Bo	ound
Movement:									- R		- T	
Control:				Sp.					ted	1	Permit	ited
Rights:		Inclu			Inclu			Incl			Incl	
Min. Green:		27	27		0	0	44		0		44	44
Y+R:	4.0		4.0						4.0			
Lanes:			1 0			0 0			0 0		0 0	
 Volume Module												
	148	192	19	0	0	0	107	638	0	0	622	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	148	192	19	0	0	0	107	638	0	0	622	39
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	148	192	19	0	0	0	107	638	0	0	622	39
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
		0.94	0.94		0.94	0.94		0.94	0.94		0.94	0.94
	157	204	20	0	0	0	114	679	0	0	662	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	157	204	20	1 00	1 00	0	114	679	0	1 00	662	41
		1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj: FinalVolume:		1.00	1.00	1.00	1.00	1.00	114	1.00	1.00		662	41
rinalvolume:				-	-	-			-			
Saturation Fl				1		1	ı		'	1		1
		1900	1900	1900	1900	1900		1900	1900	1900	1900	1900
-		0.88	0.88		1.00	1.00		1.00	1.00			0.99
		1.07	0.11		0.00	0.00		1.00	0.00		0.94	0.06
		1797	178	0	0	0		1900	0		1774	111
 Capacity Anal												
Vol/Sat:			0.11	0.00	0.00	0.00	0.11	0.36	0.00	0.00	0.37	0.37
Crit Moves:		****									****	
Green/Cycle:	0.34	0.34	0.34	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.55	0.55
Volume/Cap:			0.34	0.00		0.00		0.65	0.00		0.68	0.68
Uniform Del:	19.8		19.8	0.0	0.0	0.0		12.6	0.0	0.0	12.9	12.9
IncremntDel:		0.2	0.2	0.0	0.0	0.0	0.2		0.0	0.0	1.8	1.8
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
4 3		1.00	1.00	0.00		0.00		1.00	0.00		1.00	1.00
4 '		20.0	20.0	0.0	0.0	0.0		14.1	0.0		14.7	14.7
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
_		20.0	20.0	0.0	0.0	0.0		14.1	0.0		14.7	14.7
LOS by Move:			В	A	A	A	A		A	A		B
HCM2kAvgQ:	4	4	4	0	0	0	2	12	0	0	12	12

						Computa						
******						(Future					****	*****
							^^^^			^^^^		
Intersection	#O DI	*****	1y 3c/c	****	y oc ****:	*****	****	****	*****	****	*****	*****
Cycle (sec):			30			Critic					0.6	
Loss Time (se	ec):		9						ec/veh)	:).5
Optimal Cycle	e:	-	70			Level						С
******	****	*****	*****	****	****	*****	****	****	*****	****	*****	*****
Street Name:			Batte	ry St					Broadw	ay St		
Approach:		rth Bo			uth Bo			ast Bo			est Bo	
Movement:		- T			- T			- T			_	- R
Control: Rights:	Sp.	lit Ph Inclu		Sp.	lit Pl Inclı		1	Permit Inclu		1	Permit Inclu	
Min. Green:	0	0	0	34	34	34	0		27	27	27	27
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lanes:		0 0	0 0			1 0			1 0			0 0
	-										. <u>.</u>	
Volume Module	e:											
Base Vol:	0	0	0	18	352	130	0	486	174	41	533	0
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	18	352	130	0	486	174	41	533	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	0	18	352	130	0	486	174	41	533	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj: PHF Volume:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93 187	0.93	0.93 573	0.93
Reduct Vol:	0	0	0	19	3/0	140	0	023	107	0	0 0	0
Reduced Vol:	0	0	0	19	378	140	0	523	187	44	573	0
PCE Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:	0	0	0	19	378	140	0	523	187	44	573	0
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:		1.00	1.00		0.91	0.91		0.96	0.96		1.00	1.00
Lanes:		0.00	0.00		1.41	0.52		0.74	0.26		1.00	0.00
Final Sat.:	0	0	0	124	2430	897	. 0	1349	483		1900	0
Capacity Ana												
Vol/Sat:		0.00	0.00	0 16	0.16	0.16	0 00	0.39	0.39	0 04	0.30	0.00
Crit Moves:	0.00	0.00	0.00	****	0.10	0.10	0.00	****	0.00	0.01	0.50	0.00
Green/Cvcle:	0.00	0.00	0.00	0.43	0.43	0.43	0.00	0.46	0.46	0.46	0.46	0.00
Volume/Cap:		0.00	0.00		0.37	0.37		0.84	0.84		0.65	0.00
Uniform Del:	0.0	0.0	0.0	15.7	15.7	15.7	0.0	18.9	18.9	12.0	16.5	0.0
<pre>IncremntDel:</pre>	0.0	0.0	0.0	0.2	0.2	0.2	0.0	7.4	7.4	0.1	1.8	0.0
<pre>InitQueuDel:</pre>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		0.00	0.00		1.00	1.00		1.00	1.00		1.00	0.00
Delay/Veh:	0.0	0.0	0.0		15.8	15.8		26.2	26.2		18.3	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0		15.8	15.8		26.2	26.2		18.3	0.0
LOS by Move:	A	A	A	В	В	В	A	C	C	B	B	A
HCM2kAvgQ:	0	0	0	5	5	5	0	16	16	1	11	0

,	2000 1					Computat						
*****	2000 1	TCM O	peratio	ns met	_110U	(Future	VOLUI	HE ALL	ernati.	ve) +++++		
Intersection								*****	*****	*****	*****	*****
Cycle (sec):			75			Critica					0.7	
Loss Time (se			13			Average					150	
Optimal Cycle			01			Level (•	100	/• / P
*********				*****	*****					*****		r *****
Street Name:			Embarc						(EB)/			
Approach:	No	cth B	nind	Son	ı+h Bo	ound	E:	ach Bo	und	Tale	est Bo	
Movement:			- R			- R				L -		
Control:						nase						
Rights:	~ [ude		Incl		~1-		ıde	-1-		
Min. Green:	17			26		0	0	0	26	19		19
Y+R:		4.0				4.0		4.0				4.0
Lanes:			1 0			0 0			0 1		1.0	
Volume Module			ı	1		1	ı		1	1		1
Base Vol:		296	49	0	185	0	0	0	363	10	61	10
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			49	0	185	0	0	0	363	10	61	10
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		296	49	0	185	0	0	0	363	10	61	10
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	0.95		0.95	0.95		0.95		0.95	0.95	0.95		0.95
PHF Volume:	598	312	52	0.93	195	0.93	0.93	0.93	382	11	64	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		312	52	0	195	0	0	0	382	11	64	11
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			52	0		0		0	382	11		11
					195	I	l =====		J0Z	1		
Saturation Fl				1		1			1	1		'
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.28	0.91	0.91	1.00	1.00	1.00	1.00	1.00	0.87	0.98	0.98	0.98
Lanes:		0.86	0.14		1.00	0.00		0.00	1.00	0.12	0.76	0.12
Final Sat.:		1490	247		1900	0		0	1644		1398	229
Capacity Anal	Lysis	Modu.	le:									
Vol/Sat:	0.25	0.21	0.21	0.00	0.10	0.00	0.00	0.00	0.23	0.05	0.05	0.05
Crit Moves:	****				****				****	****		
Green/Cycle:	0.17	0.17	0.17	0.00	0.26	0.00	0.00	0.00	0.26	0.19	0.19	0.19
Volume/Cap:	1.46	1.24	1.24	0.00	0.40	0.00	0.00	0.00	0.90	0.24	0.24	0.24
Uniform Del:			42.0		31.0	0.0	0.0	0.0	36.3	34.9	34.9	34.9
IncremntDel:2			119.9	0.0	0.5	0.0	0.0	0.0	22.2	0.4	0.4	0.4
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	1.00		1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00
Delay/Veh: 2			161.9		31.6	0.0	0.0	0.0	58.5	35.3		35.3
User DelAdi:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh: 2			161.9		31.6	0.0	0.0	0.0	58.5	35.3		35.3
LOS by Move:		F	F	A	С	A	A	A	E	D	D	D

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HCM2kAvgQ:

						Computa						
						(Future						
******									*****	****	*****	*****
Intersection ******									*****	****	*****	*****
Cycle (sec):		9	96			Critic	cal Vo	l./Car).(X):		1.3	366
Loss Time (s	ec):	1	16						ec/veh)	:	153	3.0
Optimal Cycl		18	30			Level						F
*****	****	****	*****	****	****	*****	****	*****	*****	****	*****	*****
Street Name:			Embaro	cadero			North	Point	St (E	B) / Ke	earny	St (W
Approach:	No	rth Bo	ound	Son		ound						
Movement:	L	- T	- R	L ·	- T	- R	L	- T	- R	L -	- T	- R
										1		
Control:		rotect		P					nase			
Rights:		Incl	ıde		Incl	ude		Inclu	ıde		Inclu	ıde
Min. Green:	17	44	0	0	23	23	20	20	20	20	20	20
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 2	0 0	0	1 0	1 0	0	0 1!	0 1	0 :	1 0	0 1
Volume Modul	e:											
Base Vol:	154	856	0	2	377	193	26	172	54	79	35	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	856	0	2	377	193	26	172	54	79	35	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	856	0	2	377	193	26	172	54	79	35	15
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.95	0.95		0.95	0.95		0.95	0.95		0.95	0.95
PHF Volume:	162	901	0	2	397	203	27	181	57	83	37	16
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		901	1 00	1 00	397	203	27	181	57	83	37	16
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00	1.00	1.00	1.00	27	1.00	1.00		1.00	1.00 16
FinalVolume:		901								83		
Saturation F			,									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.39	1.00	0.90	0.37	0.90	0.96	0.96	0.96	0.97	0.97	0.85
Lanes:	1.00	2.00	0.00	0.01	1.65	0.34	0.12	0.76	1.12	0.69	0.31	1.00
	1805		0		1157	592		1399	2050	1273		1615
Capacity Ana												
Vol/Sat:	0.09	0.61 ****	0.00	****	0.34	0.34	0.13 ****	0.13	0.03	****	0.07	0.01
Crit Moves:	0 17		0 00		0 07	0 07		0 00	0 00		0 00	0 00
Green/Cycle:			0.00		0.27	0.27		0.20	0.20		0.20	0.20
Volume/Cap: Uniform Del:			0.00		1.27	36.5		0.65	0.14		0.33	32.3
IncremntDel:			0.0	0.0		137.5	36.8	36.8	0.0	0.5		0.1
IncremntDel: InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Delay Adj:		1.00	0.00		1.00	1.00		1.00	1.00		1.00	1.00
Delay/Veh:	39.6		0.0	0.00		174.0		40.3	32.9		34.8	32.4
User DelAdi:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:		211	0.0	0.0		174.0		40.3	32.9		34.8	32.4
Adjuet/ven:	22.0	211	0.0	0.0	1/4	1/4.0	40.5	±0.5	22.9	24.0	24.0	JZ.4

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LOS by Move: D F A A F F D D C C C C HCM2kAvgQ: 4 31 0 17 15 35 7 7 1 3 3 0

						Computa						
******						(Future					+++++	
Intersection	#11	Embaro	adero	/ Bay	St							
Cycle (sec):	****					Critic					0.5	
Loss Time (se	ec):		7			Averag					13	
Optimal Cycle	e:	8	1			Level	Of Se	rvice:				В
******	****	*****	*****	****	*****	*****	****	*****	*****	****	*****	*****
Street Name:			Embarc							St		
Approach:			und						ound		est Bo	
Movement:			- R			- R					- T	
Control:			ed		rotect				nase			
Rights:		Inclu			Inclu		op	Ovl	iasc	Op.	Inclu	
Min. Green:	42	53	0	0	25	25	7		42	0	0	0
Y+R:		4.0			4.0	4.0	4.0				4.0	4.0
Lanes:			0 0			1 0			0 2		0 0	
Volume Module												
Base Vol:		973	0	0	624	42	42	0	797	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	864		0	0	624	42	42		797	0	0	0
Added Vol:	0		0	0	0	0	0		0	0	0	0
PasserByVol:			0	0	0	0	0		0	0	0	0
Initial Fut: User Adj:		1.00	1.00	1 00	624	42 1.00	1 00	1.00	797 1.00	1 00	1.00	1.00
PHF Adj:		0.92	0.92		0.92	0.92		0.92	0.92		0.92	0.92
PHF Volume:		1058	0.52	0.52		46	46		866	0.52		0.52
Reduct Vol:	0		0	0	0	0	0		0	0	0	0
Reduced Vol:	939	1058	0	0	678	46	46	0	866	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		1058	0		678	46	46	-	866	. 0	0	0
Saturation F												
Sat/Lane:		1900	1900	1900	1900	1900		1900	1900	1900	1900	1900
Adjustment:			1.00		0.87	0.87		1.00	0.69		1.00	1.00
Lanes:		2.00	0.00		1.87	0.13		0.00	2.00		0.00	0.00
Final Sat.:		3321	0		3084	208	1805		2615	0	0	0
Capacity Ana				1		'	1		'	1		1
Vol/Sat:		0.32	0.00	0.00	0.22	0.22		0.00	0.33	0.00	0.00	0.00
Crit Moves:					****		****					
Green/Cycle:			0.00		0.38	0.38		0.00	0.54		0.00	0.00
Volume/Cap: Uniform Del:		1.6	0.00		0.58	0.58	39.3	0.00	0.61	0.00	0.00	0.00
IncremntDel:		0.1	0.0	0.0	0.7	0.7	1.4		0.8	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
	1.00		0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:	18.0	1.7	0.0	0.0	23.0	23.0	40.6	0.0	14.7	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		23.0	23.0	40.6		14.7	0.0		0.0
LOS by Move:			A	A		C	D		В	A		A
HCM2kAvgQ:	9	3	0	0	8	8	1	0	9	0	0	0

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	0000					Computa				,		
******									ternati ******		****	*****
Intersection												
******									*****	****	****	*****
Cycle (sec):		9	90			Critic	al Vo	1./Ca	****** p.(X): ec/veh) :		0.	752
Loss Time (se		1	L3			Averag	e Del	av (s	ec/veh)	:		0.3
Optimal Cycle		-	79			Level	Of Se	rvice	:			С
******		*****	*****	****	****	*****	****	****	*****	****	****	*****
Street Name:			Embaro	adero			Ches	tnut	St (EB)	/ Sa	ansome	e (WB)
Approach:	No:	rth Bo	ound	So	uth Bo	ound	E	ast B	St (EB) ound	We	est B	ound
Movement:						- R						- R
Control:	P.					ed	Sp	lit P	hase			
Rights:		Inclu				ıde		Incl	ude		Incl	ıde
Min. Green:		40	0			0	16	16	16	7	7	7
Y+R:									4.0			
Lanes:			0 0			1 0			1 0			0 0
Volume Modul												
		1597			1357	20	89			0	0	0
Growth Adj:					1.00	1.00		1.00			1.00	1.00
Initial Bse:		1597	0		1357	20	89		91	0	0	0
Added Vol:	0		0	0		0	0		0	0	0	0
PasserByVol:			0	0	1257	0	0	0 241	0	0	0	0
Initial Fut:			1 00		1357	20	1 00				1.00	1 00
User Adj: PHF Adj:		0.92	1.00		1.00	1.00		1.00			0.92	1.00
PHF Volume:		1736	0.92		1475	22	97		99	0.92	0.92	0.92
Reduct Vol:		1730	0	0	14/3	0	0		0	0	0	0
Reduced Vol:			0	-	1475	22	97	-	-	0	0	0
		1.00				1.00		1.00			1.00	
MLF Adj:						1.00		1.00			1.00	
FinalVolume:				49				262		0		
										-	-	-
Saturation F.						'						'
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	1.00	0.95	0.91	0.91	0.89	0.89	0.89	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	1.00	2.96	0.04	0.42	1.15	0.43	0.00	0.00	0.00
Final Sat.:			0		5101	75		1936			0	0
Capacity Ana	lysis	Modul	Le:									
Vol/Sat:			0.00		0.29	0.29	0.14	0.14		0.00	0.00	0.00
Crit Moves:		****		****				****				
<pre>Green/Cycle:</pre>			0.00			0.54		0.18			0.00	0.00
Volume/Cap:			0.00		0.53	0.53		0.76			0.00	0.00
Uniform Del:			0.0		13.3	13.3		35.2	35.2	0.0		0.0
IncremntDel:			0.0		0.2	0.2		5.7		0.0		0.0
InitQueuDel:			0.0			0.0		0.0		0.0		0.0
Delay Adj:			0.00		1.00	1.00		1.00			0.00	0.00
Delay/Veh:			0.0		13.5	13.5		40.8	40.8	0.0		0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00

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Loss Time (sec): 11		Level Of Service Computation Report											
Cycle (sec): 90												****	*****
Loss Time (sec): 11													
Street Name: Subarcadero South Bound	Cycle (sec):			90			Critica	al Vol	l./Cap	o.(X):		0.6	533
Street Name: Embarcadero South Bound Movement: L - T - R L L - T - R L - T - R L L L - T - R L L L L L L L L L L L L L L L L L L											:	2	
Street Name: North Bound South Bound South Bound Companies Companies Control: Control: Protected													-
Approach: North Bound													
Movement:													
Control: Protected Frotected Split Phase Rights: Include Inclu													
Min. Green: 9 35 35 9 35 35 9 35 21 21 21 21 6 6 6 6 6 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0								I					
Min. Green: 9 35 35 9 35 35 9 35 21 21 21 21 6 6 6 6 6 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Control:	Pı	cotec	ted	Pı	cotect	ted	Sp.	lit Ph	nase	Sp.	lit Ph	nase
Y+R:						Incl	ıde		Incl	ıde		Incl	ıde
Lanes: 1 0 1 1 0 1 0 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 0 1! 0 0 0 0 0					4 0	35	35	21	21	21	4 0		
Volume Module: Base Vol: 60 1609 0 70 1150 266 48 0 165 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0								4.0	4.0	0 1	0 (
Volume Module: Base Vol: 60 1609 0 70 1150 266 48 0 165 0 0 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				'			'	'		'	'		'
Initial Bse: 60 1609 0 70 1150 266 48 0 165 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Base Vol:	60	1609	0	70	1150	266	48	0	165	0	0	0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Growth Adj:												1.00
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Initial Fut: 60 1609 0 70 1150 266 48 0 165 0 0 0 0 0 0 0 0 0 0 0 1 0													
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0											-		-
PHF Adj:													-
PHF Volume: 65 1749 0 76 1250 289 52 0 179 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_												
Reduced Vol: 65 1749 0 76 1250 289 52 0 179 0 0 0 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
FinalVolume: 65 1749 0 76 1250 289 52 0 179 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													1
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190					1		1	1		1	'		'
Lanes: 1.00 2.00 0.00 1.00 2.00 1.00 1.00 0.00 1.00 0.00 1.00 0.00 Final Sat.: 1805 3610 0 1805 3610 1615 1809 0 1615 0 1900 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Final Sat:: 1805 3610 0 1805 3610 1615 1809 0 1615 0 1900 0 1	Adjustment:												
Capacity Analysis Module: Vol/Sat:	Lanes:												
Capacity Analysis Module: Vol/Sat: 0.04 0.48 0.00 0.04 0.35 0.18 0.03 0.00 0.11 0.00 0.00 0.00 Crit Moves: **** *** **** Green/Cycle: 0.13 0.54 0.00 0.10 0.51 0.51 0.23 0.00 0.23 0.00 0.00 0.00 Volume/Cap: 0.27 0.89 0.00 0.42 0.68 0.35 0.12 0.00 0.48 0.00 0.00 0.00 Uniform Del: 35.2 18.1 0.0 38.1 16.4 13.0 27.2 0.0 29.8 0.0 0.0 0.0 IncremntDel: 0.6 5.5 0.0 1.6 1.0 0.3 0.1 0.0 1.0 1.0 0.0 0.0 InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.													
Vol/Sat: 0.04 0.48 0.00 0.04 0.35 0.18 0.03 0.00 0.11 0.00 0.00 0.00 Crit Moves: **** *** **** **** **** **** **** **													
Crit Moves:					0.04	0.35	0.18	0.03	0.00	0.11	0.00	0.00	0.00
Volume/Cap: 0.27 0.89 0.00 0.42 0.68 0.35 0.12 0.00 0.48 0.00 0.00 0.00 Uniform Del: 35.2 18.1 0.0 38.1 16.4 13.0 27.2 0.0 29.8 0.0 0.0 0.0 1ncremntDel: 0.6 5.5 0.0 1.6 1.0 0.3 0.1 0.0 1.0 0.0 0.0 0.0 InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Crit Moves:			0.00		0.00	0.10		0.00	0.11	0.00	0.00	0.00
Uniform Del: 35.2 18.1 0.0 38.1 16.4 13.0 27.2 0.0 29.8 0.0 0.0 0.0 IncremntDel: 0.6 5.5 0.0 1.6 1.0 0.3 0.1 0.0 1.0 0.0 0.0 0.0 InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Green/Cycle:	0.13	0.54	0.00	0.10	0.51	0.51	0.23	0.00	0.23	0.00	0.00	0.00
IncremntDel: 0.6 5.5 0.0 1.6 1.0 0.3 0.1 0.0 1.0 0.0 0.0 0.0 InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	Volume/Cap:	0.27	0.89	0.00	0.42	0.68	0.35	0.12	0.00	0.48	0.00	0.00	0.00
InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.													
Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 1.00 0.00													
Delay/Veh: 35.8 23.6 0.0 39.6 17.4 13.3 27.4 0.0 30.7 0.0 0.0 0.0 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
AdjDel/Veh: 35.8 23.6 0.0 39.6 17.4 13.3 27.4 0.0 30.7 0.0 0.0 0.0													
LOS by Move: D C A D B B C A C A A A HCM2kAvgO: 1 21 0 2 13 5 1 0 5 0 0													
HCM2kAvgO: 1 21 0 2 13 5 1 0 5 0 0	LOS by Move:	D	С	A									
32.	HCM2kAvgQ:	1	21	0	2	13	5	1	0	5	0	0	0

Level Of Service Computation Report

*******	2000 1	HCM O	peration	ons Me	thod	(Future	e Volu	me Alt	ternati	ve)	de els els els els els	de els els els els els els
Intersection	#14 1	Embar	cadero	/ Gre	en St	/ Dav	is St					
Cycle (sec): Loss Time (sec) Optimal Cycle	ec):	!	90 14 89			Critic Averac Level	cal Vo ge Del Of Se	l./Cap ay (se rvice	p.(X): ec/veh) :	:	0.0	665 9.1 C
Street Name: Approach: Movement:	No:	Emb th B	arcade ound - R	ro-Dav So L	is St uth B - T	ound - R	E.	ast Bo	Gree ound - R	en St We L	est Bo	ound - R
Control: Rights: Min. Green: Y+R:	P:	rotec Incl	ted ude 0	P. 7	rotec Incl	ted ude 0	Sp. 24	lit Pl Incl	hase ude 24	Sp. 0	lit Pl Incl	hase ude 0
Y+R: Lanes:	1 () 2	0 0	1	0 1	1 0	0	0 1!	0 0	0 :	1 0	0 0
Volume Module												
Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol:	1.00	1.00 1634	1.00	1.00	1.00	1.00 25	1.00	1.00	1.00 73	0	1.00	1.00
Initial Fut:	75	1634	0	14	1168	25	42	0	73	0	0	0
User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PCE Adj: MLF Adj: FinalVolume:	1.00 1.00 80	1.00 1.00 1738	1.00 1.00 0	1.00 1.00 15	1.00 1.00 1243	1.00 1.00 27	1.00 1.00 45	1.00 1.00 0	1.00 1.00 78	1.00 1.00 0	1.00 1.00 0	1.00 1.00 0
Saturation F	low M	odule	:									
Sat/Lane: Adjustment: Lanes: Final Sat.:	0.95 1.00 1805	0.95 2.00 3610	1.00 0.00 0	0.95 1.00 1805	0.95 1.96 3524	0.95 0.04 75	0.90 0.37 623	1.00 0.00 0	0.90 0.63 1083	1.00 0.00 0	1.00 1.00 1900	1.00 0.00 0
Capacity Anal Vol/Sat: Crit Moves:	lysis 0.04	Modu 0.48	le: 0.00	0.01	0.35							
Green/Cycle: Volume/Cap: Uniform Del:	0.09 0.47 38.6	0.50 0.96 21.7	0.00 0.00 0.0	0.08 0.11 38.6	0.73 18.5	0.73 18.5	0.27 26.1	0.00	0.27 26.1	0.00	0.00	0.00
<pre>IncremntDel: InitQueuDel: Delay Adj: Delay/Veh:</pre>	0.0 1.00 40.7	0.0 1.00 35.2	0.0 0.00 0.0	0.0 1.00 38.9	0.0 1.00 20.1	1.00	0.0 1.00 26.4	0.0	1.00 26.4	0.0	0.0	0.0
User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	1.00	1.00 35.2	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)											
******	********************											
Intersection *********							****	*****	*****	****	****	*****
Cycle (sec): Loss Time (sec) Optimal Cycle	€:		90 17 91 ******	****		Critic Average Level	e Dela Of Sei	ay (se	ec/veh)	:		2.1 F
Street Name:			Embarc						Broadw			
Approach: Movement:			ound - R	Sou		ound - R			und - R	₩e	est Bo	
Control:		cotect	ted		cotect	ted	Sp:	lit Ph	ase		lit Ph	
Rights:		Incl		_	Incl						Ovl	
Min. Green:		37	0	7		28		0	29	0	0	0
Y+R:		4.0	4.0		4.0			4.0			4.0	4.0
Lanes:			0 0			1 0			0 1			
Volume Module												
Base Vol:		1628	0	7	1153	91	116	0	340	0	0	0
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			0		1153	91	116	0	340	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	469	1628	0	7	1153	91	116	0	340	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	469	1628	0	7	1153	91	116	0	340	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		1628	0		1153	91	116	0	340	0	. 0	
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:		1628	0 l		1153	91	116	0	340	0	0	0
Saturation Fl			,									
Sat/Lane:	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95		1.00		0.94	0.94		1.00	0.85	1.00		1.00
Lanes:	1.00	2.00	0.00		1.85	0.15	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	1805	3610	0	1805	3309	261	1805	0	1615	0	0	0
Capacity Anal												
Vol/Sat: Crit Moves:	0.26	0.45	0.00	0.00	0.35	0.35	0.06	0.00	0.21	0.00	0.00	0.00
Green/Cycle:		0 41	0.00	0 00	0.31	0.31		0.00	0.32	0.00	0 00	0.00
Volume/Cap:	1.46		0.00	0.05		1.12		0.00	0.65	0.00		0.00
Uniform Del:			0.0	38.4		31.0	22.1	0.0	26.2	0.0	0.0	0.0
IncremntDel:2			0.0		66.3	66.3	0.2	0.0	3.0	0.0	0.0	0.0
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
_	1.00		0.00	1.00		1.00	1.00	0.00	1.00	0.00		0.00
	261.2		0.0	38.6	97.3	97.3	22.3	0.0	29.2	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh: 2			0.0		97.3	97.3	22.3	0.0	29.2	0.0	0.0	0.0
LOS by Move:		F	A	D	F	F	С	A	С	A	A	A
HCM2kAvgQ:	30	31	0	0	27	27	2	0	8	0	0	0

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2035 Cumulative Weekend MIDTue May 31, 2011 16:10:26

	Level Of Service Computation Report											
	2000 HCM Operations Method (Future Volume Alternative)											
Intersection	Intersection #16 Embarcadero / Washington St											
Cvcle (sec):			90			Critic					0.5	
Loss Time (s						Averag					88	
Optimal Cvcl			17 90			Level				-		F
******										****	*****	*****
Street Name:			Embaro	adero				V	Washing	ton St	Ē.	
Approach:						ound					est Bo	
Movement:						- R					- T	
Control:						 :ed :de	Sn	lit Ph	nase .	Sp		
Rights:		Incl	ıde		Incl	ıde		Inclu	ıde			
Min. Green:			0		28		33	0	33	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		
Lanes:			0 0	1 (0 2	1 0	. 1 (0 0	0 1	. 0 (0 0
Volume Modul				1			1					
Base Vol:		2025	0	1.3	1432	131	102	0	133	0	0	0
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	302	2025	0	13	1432	131	102	0	133	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:				0		0	0	-	0	0	0	0
Initial Fut:			0		1432	131	102		133	0	0	0
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj: PHF Volume:		1.00	0.11		1432	1.00	102	1.00	1.00	1.00	1.00	1.00
Reduct Vol:		0	0		0	0	0		0	0	0	0
Reduced Vol:			0		1432	131	102		133	0		0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:					1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			0		1432	131		0	133		0	0
Saturation F												
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			1.00		0.90	0.90		1.00	0.85		1.00	1.00
Lanes:			0.00		2.75	0.25		0.00	1.00		0.00	0.00
Final Sat.:			0		4690	429		0	1615		0	0
Capacity Ana				0 01	0 21	0 21	0 00	0 00	0 00	0 00	0 00	0 00
Vol/Sat: Crit Moves:		****	0.00	****	0.31	0.31	****	0.00	0.08	0.00	0.00	0.00
Green/Cycle:			0.00		0.31	0.31		0.00	0.37	0 00	0.00	0.00
Volume/Cap:			0.00		0.98	0.98		0.00	0.22		0.00	0.00
Uniform Del:			0.0		30.7	30.7	19.1	0.0	19.7	0.0	0.0	0.0
IncremntDel:	144.0	83.6	0.0	0.1	18.2	18.2	0.1	0.0	0.2	0.0	0.0	0.0
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:			0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:			0.0		48.9	48.9	19.2	0.0	19.9	0.0	0.0	0.0
User DelAdj: AdjDel/Veh:			1.00		1.00	1.00 48.9		1.00	1.00	0.0	1.00	1.00
LOS by Move:			0.0 A	36.U		48.9 D	19.2 B		19.9 B	0.0 A		0.0 A
HCM2kAvqQ:			0			15	2		3	0		0
2=-												

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ***************** Intersection #17 Embarcadero / Mission St ******************* Cycle (sec): 90 Critical Vol./Cap.(X): 0.983
Loss Time (sec): 10 Average Delay (sec/veh): 56.9
Optimal Cycle: 159 Level Of Service: E *********************** Street Name: Embarcadero MIssion St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Permitted Permitted Split Phase Split Phase 0 0 3 0 0 0 0 2 1 0 0 0 1! 0 0 0 0 0 0 Lanes. Volume Module: Base Vol: 0 2133 0 0 1461 207 296 0 59 0 0 Initial Bse: 0 2133 0 0 1461 207 296 0 59 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 2133 PHF Volume: 0 2294 0 0 1571 223 318 0 63 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 2294 0 0 1571 223 318 0 63 0 0 FinalVolume: 0 2294 0 0 1571 223 318 0 63 0 0 Saturation Flow Module: Adjustment: 1.00 0.61 1.00 1.00 0.60 0.89 0.94 1.00 0.94 1.00 1.00 1.00 Lanes: 0.00 3.00 0.00 0.00 2.74 0.26 0.83 0.00 0.17 0.00 0.00 0.00 Final Sat.: 0 3475 0 0 3113 441 1487 0 296 0 0 ______||___| Capacity Analysis Module: Vol/Sat: 0.00 0.66 0.00 0.00 0.50 0.50 0.21 0.00 0.21 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.00 0.58 0.00 0.00 0.58 0.58 0.31 0.00 0.31 0.00 0.00 0.00 Volume/Cap: 0.00 1.14 0.00 0.00 0.87 0.87 0.69 0.00 0.69 0.00 0.00 0.00 Uniform Del: 0.0 19.0 0.0 0.0 16.2 16.2 27.2 0.0 27.2 0.0 0.0 0.0 IncremntDel: 0.0 70.6 0.0 0.0 4.5 4.5 3.6 0.0 3.6 0.0 0.0 0.0

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HCM2kAvqQ: 0 34 0 0 14 21 10 0 10

Delay Adj: 0.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00

Delay/Veh: 0.0 89.6 0.0 0.0 20.7 20.7 30.8 0.0 30.8 0.0 0.0 0.0

AdjDel/Veh: 0.0 89.6 0.0 0.0 20.7 20.7 30.8 0.0 30.8 0.0 0.0 0.0

LOS by Move: A F A A C C C A C A A A

2035 Cumulative Weekend MIDTue May 31, 2011 16:10:26

2000 HCM Operations Method (Future Volume Alternative) ****************** Intersection #18 Embarcadero / Harrison St ***************** Cycle (sec): 100 Critical Vol./Cap.(X): 0.855 Loss Time (sec): 10 Average Delay (sec/veh): 36.8 Optimal Cycle: 100 Level Of Service: D ************************* Street Name: Embarcadero Harrison St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R _____| Control: Permitted Permitted Split Phase Split Phase Rights: Include Include Include Include 0 0 2 0 0 0 0 1 1 0 1 0 0 0 1 0 0 0 0 -----|----|-----|------| Volume Module: Base Vol: 0 1416 0 0 1244 335 214 0 78 Initial Bse: 0 1416 0 0 1244 335 214 0 78 0 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 0 1416 0 0 1244 335 214 0 78 0 PHF Volume: 0 1523 0 0 1338 360 230 0 84 0 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1523 0 0 1338 360 230 0 84 0 0 0 0 _____|___|___| Saturation Flow Module: Adjustment: 1.00 0.67 1.00 1.00 0.65 0.92 0.95 1.00 0.68 1.00 1.00 1.00 Lanes: 0.00 2.00 0.00 0.00 1.68 0.32 1.00 0.00 1.00 0.00 0.00 0.00 Final Sat.: 0 2563 0 0 2083 561 1805 0 1292 0 0 ______||___| Capacity Analysis Module: Vol/Sat: 0.00 0.59 0.00 0.00 0.64 0.64 0.13 0.00 0.06 0.00 0.00 0.00 Crit Moves: **** Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.00 0.94 0.00 0.00 1.02 1.02 0.47 0.00 0.24 0.00 0.00 0.00 Uniform Del: 0.0 16.9 0.0 0.0 18.5 18.5 30.5 0.0 28.5 0.0 0.0 0.0 IncremntDel: 0.0 11.5 0.0 0.0 27.1 27.1 0.7 0.0 0.4 0.0 0.0 0.0 Delay Adj: 0.00 1.00 0.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 Delay/Veh: 0.0 28.4 0.0 0.0 45.6 45.6 31.3 0.0 28.9 0.0 0.0 0.0 AdjDel/Veh: 0.0 28.4 0.0 0.0 45.6 45.6 31.3 0.0 28.9 0.0 0.0 0.0 LOS by Move: A C A A D D C A C A A A HCM2kAvqQ: 0 22 0 0 27 38 6 0 2 0 0 0

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #19 Embarcadero / Bryant St *****************

 Cycle (sec):
 100
 Critical Vol./Cap.(X):
 0.933

 Loss Time (sec):
 10
 Average Delay (sec/veh):
 51.3

 Optimal Cycle:
 125
 Level Of Service:
 D

 ************************ Street Name: Embarcadero Bryant St North Bound South Bound East Bound West Bound Approach: Movement: L - T - R L - T - R L - T - R Control: Protected Protected Permitted Permitted Include Include Include Rights: Include 1 0 1 1 0 1 0 2 0 1 0 1 0 0 1 0 0 1! 0 0 Lanes: Volume Module: Base Vol: 148 1274 18 105 1096 119 52 97 58 242 111 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 161 1385 20 114 1191 129 57 105 63 263 121 90 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 Ω Reduced Vol: 161 1385 20 114 1191 129 57 105 63 263 121 FinalVolume: 161 1385 20 114 1191 129 57 105 63 263 121 90 -----||-----||------| Saturation Flow Module: Adjustment: 0.95 0.95 0.95 0.95 0.95 0.85 0.79 0.79 0.85 0.64 0.64 0.64 Lanes: 1.00 1.97 0.03 1.00 2.00 1.00 0.35 0.65 1.00 0.56 0.25 0.19 Final Sat.: 1805 3553 50 1805 3610 1615 523 976 1615 680 312 233 _____| Capacity Analysis Module: Vol/Sat: 0.09 0.39 0.39 0.06 0.33 0.08 0.11 0.11 0.04 0.39 0.39 0.39 Crit Moves: **** **** Volume/Cap: 0.42 0.95 0.95 0.40 0.92 0.22 0.33 0.33 0.12 1.17 1.17 1.17 Uniform Del: 34.3 28.5 28.5 37.7 30.6 22.3 25.2 25.2 23.4 33.5 33.5 33.5 IncremntDel: 0.8 13.5 13.5 0.9 10.3 0.2 0.4 0.4 0.1 100.8 101 100.8 Delay/Veh: 35.0 42.0 42.0 38.6 40.9 22.5 25.6 25.6 23.5 134.3 134 134.3 AdjDel/Veh: 35.0 42.0 42.0 38.6 40.9 22.5 25.6 25.6 23.5 134.3 134 134.3 LOS by Move: D D D D D C C C F F F

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HCM2kAvq0: 4 22 22 3 17 3 4 4 1 26 26 26

2035 Cumulative Weekend MIDFri Jun 24, 2011 15:12:47 _____

*****		HCM O		ons Me	thod	(Future	e Volu	me Alt	ernati			
Intersection *******	#20	Embar	cadero	/ Bra	nnan	St						
Cycle (sec): Loss Time (s Optimal Cycl	ec): e:		90 11 90			Critic Averac Level	cal Vo ge Del Of Se	l./Cap ay (se rvice:	o.(X): ec/veh)	:	0.	568 1.1 C
Street Name: Approach: Movement:	No:	rth B	Embaro ound - R	cadero So L	uth B	ound - R	E.	ast Bo	Branr ound - R	an St W	est Bo	ound - R
Control: Rights:	P:	rotec [*] Incl	ted ude	P	rotec Incl	ted ude	Sp	lit Pl Incl	nase ude	Sp	lit Pl Incl	hase ude
Min. Green: Y+R: Lanes:	4.0		4.0 0 0	4.0	4.0 0 2	37 4.0 0 1	4.0	0 0	4.0 0 1	0	4.0 0 0	0 0
Volume Modul Base Vol: Growth Adj:	e: 42	1326	0	30	1180	214	144		44	. 0	0	0
Initial Bse: Added Vol: PasserByVol:	42 0	1326	0 0		1180 0	214	144	0	44	0 0	0 0	0 0
Initial Fut: User Adj: PHF Adj:	42 1.00 0.93	1326 1.00 0.93	0 1.00 0.93	30 1.00 0.93	1180 1.00 0.93	214 1.00 0.93	144 1.00 0.93	0 1.00 0.93	44 1.00 0.93	0.93	0 1.00 0.93	0 1.00 0.93
PHF Volume: Reduct Vol: Reduced Vol:	0 45	1426	0 0 0	0 32	1269 0 1269			0	47 0 47	0 0	0	0 0 0
PCE Adj: MLF Adj: FinalVolume:	1.00 45		1.00	1.00	1.00 1.00 1269	1.00 230	1.00 155	1.00	1.00 1.00 47	1.00	-	1.00 1.00 0
Saturation F Sat/Lane:	low M		:		1900			1900			1900	1900
Adjustment: Lanes: Final Sat.:	1.00 1805	0.95 2.00 3610	0.00	1.00 1805	0.95 2.00 3610	1.00 1615	1.00 1805	1.00 0.00 0	1.00 1615	0.00		1.00 0.00 0
Capacity Ana Vol/Sat: Crit Moves:	lysis	Modu	le:		0.35			0.00			0.00	0.00
Green/Cycle: Volume/Cap: Uniform Del: IncremntDel:	0.21 35.7	0.96 25.8	0.00 0.00 0.0	0.11	0.45 0.79 21.3 2.7	0.45 0.32 16.1 0.3			0.31 0.09 22.0 0.1		0.00	0.00 0.00 0.0
<pre>InitQueuDel: Delay Adj: Delay/Veh:</pre>	0.0 1.00 36.2	0.0 1.00 40.8	0.0 0.00 0.0	0.0 1.00 32.9	0.0 1.00 24.0	0.0 1.00 16.4	0.0 1.00 23.6	0.0 0.00 0.0	0.0 1.00 22.1	0.0 0.00 0.0	0.0 0.00 0.0	0.0 0.00 0.0
User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	36.2	40.8 D	1.00 0.0 A 0	32.9		1.00 16.4 B 4	23.6 C	A		1.00 0.0 A 0	A	1.00 0.0 A 0

1 agc 25 1

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)											
											*****	******

*******							****	*****	*****	****	*****	******
Cycle (sec):			00			Critic					0.8	
Loss Time (s	00).		10			Averag					100	
Optimal Cvcl			95			Level				•	100	F
******				****	*****					****	*****	-
Street Name:			Embarc	adero					Howar	d St		
Approach:		rth B			uth Bo	ound	E	ast Bo	und	W	est Bo	ound
Movement:			- R			- R			- R		- T	
Control:	P:	rotect	ted	P:	rotect	ed	Sp.	lit Ph	ase	Sp.	lit Ph	ıase
Rights:		Incl			Inclu		-		ıde	-	Incl	
Min. Green:	15	45	0	10	40	40	30	0	30	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1	0 3	0 0	1 (0 2	0 1	1	0 1!	0 0	0	0 0	0 0
Volume Modul	e:											
Base Vol:	163	1944	0	7	1316	195	189	0	111	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	163	1944	0	7	1316	195	189	0	111	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	163	1944	0	7	1316	195	189	0	111	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.93	0.93		0.93	0.93		0.93	0.93		0.93	0.93
PHF Volume:		2090	0		1415	210	203	0	119	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		2090	0		1415	210	203	0	119	0	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		2090	0		1415	210	203	0	119	0	0	0
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane: Adjustment:		1900	1900		1900	1900		1900	1900		1900	1900
Lanes:		3.00	0.00		2.00	1.00		0.00	0.74		0.00	0.00
Final Sat.:		3216	0.00		3357	808	2224	0.00	794	0.00	0.00	0.00
Capacity Ana				1		'	1		'	1		'
Vol/Sat:		0.65	0.00	0 00	0.42	0.26	n na	0.00	0.15	0 00	0.00	0.00
Crit Moves:	0.10	****	0.00	****	0.42	0.20	****	0.00	0.13	0.00	0.00	0.00
Green/Cycle:	0 16		0.00	0 10	0.44	0.44	0 30	0.00	0.30	0 00	0.00	0.00
Volume/Cap:			0.00		0.95	0.59		0.00	0.50		0.00	0.00
Uniform Del:			0.0		26.9	21.0	27.0	0.0	28.8	0.0	0.0	0.0
IncremntDel:		140	0.0		13.7	2.5	0.2	0.0	0.6	0.0	0.0	0.0
InitOueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00		0.00	0.00
Delay/Veh:		165	0.0		40.5	23.5	27.1	0.0	29.5	0.0	0.0	0.0
User DelAdi:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		165	0.0		40.5	23.5	27.1	0.0	29.5	0.0	0.0	0.0
LOS by Move:			A	D	D	С	C	A	С	A	A	A
HCM2kAvqQ:	5	44	0	0	23	5	3	0	6	0	0	0
J =												

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Level Of Service Computation Report

2035 Cumulative Weekend MIDTue May 31, 2011 16:10:26

******	2000	HCM O	peration	ons Me	thod	(Future	e Volu	me Al	ternati	ve)		
Intersection	#44	Embar	cadero	/ Fol	som S	t						
Cycle (sec): Loss Time (sec) Optimal Cycle	ec): e:	1	90 10 09			Critic Averac Level	cal Vo ge Del Of Se	l./Ca ay (s rvice	p.(X): ec/veh) :	:	0.9	918 5.9 E
Street Name:			Embaro	radero					Folso	m St		
Approach: Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L ·	- T	- R
Control: Rights: Min. Green: Y+R:	P:	rotec Incl	ted ude	P. 32	rotec Incl	ted ude	Sp.	lit Pl	hase ude	Sp.	lit Pl Incl	nase ide
Lanes:	1	0 2	0 0	0	0 1	1 0	2	0 0	0 1	0	0 0	0 0
Volume Modul												
Base Vol: Growth Adj: Initial Bse:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj:	186	1603	0	0	1374	74	500	0	172	0	0	0
	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PCE Adj: MLF Adj: FinalVolume:	1.00 1.00 200	1.00 1.00 1724	1.00 1.00 0	1.00 1.00 0	1.00 1.00 1477	1.00 1.00 80	1.00 1.00 538	1.00 1.00 0	1.00 1.00 185	1.00 1.00 0	1.00 1.00 0	1.00 1.00 0
Saturation F												
Sat/Lane: Adjustment: Lanes: Final Sat.:	0.88 1.00 1679	0.70 2.00 2671	1.00 0.00 0	1.00 0.00 0	0.96 1.89 3447	0.87 0.11 186	0.83 2.00 3152	1.00 0.00 0	0.59 1.00 1114	1.00 0.00 0	1.00 0.00 0	1.00
Capacity Ana Vol/Sat: Crit Moves:	lysis 0.12	Modu 0.65	le: 0.00	0.00	0.43			0.00				
Green/Cycle: Volume/Cap:	0.13	0.54	0.00	0.00	0.41	0.41	0.50	0.00	0.48	0.00	0.00	0.00
Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh:	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HOMZKAVYV:	3	-7.1	U	U	21	24	О	U	3	U	U	U

Mitigated Conditions

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Mitigated Existing plus AC34 2012 Project Conditions

Weekday PM Peak Hour

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative) ***************** Intersection #32 Lombard St/Lvon St *********************
 Cycle (sec):
 0
 Critical Vol./Cap.(X):
 0.804

 Loss Time (sec):
 0
 Average Delay (sec/veh):
 25.4

 Optimal Cycle:
 0
 Level Of Service:
 D
 Street Name: Lyon St Lombard St
Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 0 0 0 1! 0 0 0 1 0 1 0 0 0 1! 0 0 Volume Module: Base Vol: 146 22 7 22 56 200 164 480 94 5 328 19 Initial Bse: 146 22 7 22 56 200 164 480 94 5 328 19 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 159 24 8 24 61 217 178 522 102 5 357 21 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 159 24 8 24 61 217 178 522 102 5 357 21 FinalVolume: 159 24 8 24 61 217 178 522 102 5 357 21 -----| Saturation Flow Module: Lanes: 0.83 0.13 0.04 0.08 0.20 0.72 0.44 1.31 0.25 0.01 0.94 0.05 Final Sat.: 357 54 17 39 100 358 222 671 135 7 477 28 ------| Capacity Analysis Module: Vol/Sat: 0.44 0.44 0.44 0.61 0.61 0.61 0.80 0.78 0.76 0.75 0.75 Crit Moves: **** **** **** Delay/Veh: 15.9 15.9 15.9 18.7 18.7 18.7 32.6 29.6 27.3 26.0 26.0 26.0 AdjDel/Veh: 15.9 15.9 15.9 18.7 18.7 18.7 32.6 29.6 27.3 26.0 26.0 26.0 LOS by Move: C C C C C D D D D ApproachDel: 15.9 18.7 30.0 Delay Adj: 1.00 1.00 1.00 ApprAdjDel: 15.9 18.7 30.0 LOS by Appr: C C D 26.0 1.00 26.0

Note: Queue reported is the number of cars per lane.

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AllWayAvgo: 0.6 0.6 0.6 1.2 1.2 1.2 3.2 2.6 2.6 2.3 2.3 2.3

Mitigated Existing plus AC34 2012 Project Conditions

Weekend Midday Peak Hour

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

	Intersection #27 Lincoln Blvd/25th St/El Camino del Mar									
Cycle (sec): Loss Time (sec) Optimal Cycle ************************************	e:			Averaç Level	al Vol./Caj e Delay (so Of Service	ec/veh):		0.4 C		
Street Name:	North B L - T	25th ound - R	St South Bo L - T	ound – R	El Camino (East B L - T	del Mar ound - R	(eb) / Lir West Bo L - T	ncoln ound - R		
Control: Rights: Min. Green: Lanes:	Stop S Incl 0 0 0 0 1!	ign ude 0 0 1	Stop S: Incl 0 0 0 0 1!	ign ude 0	Stop S. Incl. 0 0 0 0 0 1!	ign ude 0	Stop Sinclu 0 0 1 0 0	ign ide 0 1 0		
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume: 	20 22 1.00 1.00 20 22 0 0 0 0 20 22 1.00 1.00 0.98 0.98 20 22 0 0 0 20 1.00 1.00 1.00 20 22 1.00 1.00 1.00 1.00 0.05 0.06	701 1.00 701 1.00 0 701 1.00 0.98 715 0 715 1.00 1.00 715	25 16 1.00 1.00 25 16 0 0 0 0 25 16 1.00 1.00 0.98 0.98 26 16 0 0 26 16 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	1.00 2 0 0 2 1.00 0.98 2 1.00 1.00 2 1.00 2 1.00	1 239 1.00 1.00 1 239 0 0 0 1 239 1.00 1.00 0.98 0.98 1 244 0 0 1 244 1.00 1.00 1.00 1.00 1 244 1.00 1.00 1.00 1.00 0.01 0.00	27 1.00 27 0 0 27 1.00 0.98 28 0 28 1.00 1.00 28	361 166 1.00 1.00 361 166 0 0 0 361 166 1.00 1.00 0.98 0.98 368 169 0 0 368 169 1.00 1.00 1.00 1.00 368 169 1.00 1.00 1.00 1.00	13 1.00 0 0 13 1.00 0.98 13 0 13 1.00 1.00		
Capacity Ana Vol/Sat: Crit Moves: Delay/Veh: Delay Adj: AdjDel/Veh: LOS by Move: ApproachDel: Delay Adj: ApprAdjDel: LOS by Appr:	lysis Modu 0.61-0.04 **** 16.5 16.5 1.00 1.00 16.5 16.5 C C 18.4 1.00 18.4	17.8 1.00 17.8 1.00	0.11 0.11 **** 12.1 12.1 1.00 1.00 12.1 12.1 B B 12.1 1.00 12.1 B	0.11 12.1 1.00 12.1 B	0.55 0.55 **** 18.2 18.2 1.00 1.00 18.2 18.2 C C 18.2 1.00 18.2 C C	0.55 18.2 1.00 18.2	0.77 0.36 **** 30.5 13.3 1.00 1.00 30.5 13.3 D B 24.8 1.00 24.8 C			
Initial Fut: User Adj: PHF Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	20 22 1.00 1.00 0.98 0.98 20 22 0 0 0 20 22 1.00 1.00 1.00 1.00 20 22 low Module 1.00 1.00 34 -586 lysis Modu 0.61-0.04 **** 16.5 16.5 1.00 1.00 16.5 16.5 1.00 1.00 18.4 1.00 18.4 1.14	701 1.00 0.98 715 0 715 1.00 1.00 1.00 1.89 1741 1e: 0.41 17.8 1.00 17.8 C	25 16 1.00 1.00 0.98 0.98 26 16 0 0 26 16 1.00 1.00 1.00 1.00 0.58 0.37 232 148 0.11 0.11 **** 12.1 12.1 1.00 1.00 12.1 12.1 1.00 1.00 12.1 12.1 1.00 1.00 12.1 12.1 1.00 1.00	2 1.00 0.98 2 0 2 1.00 1.00 0.05 19 0.11 12.1 1.00 12.1 B	1 239 1.00 1.00 0.98 0.98 1 244 0 0 1 244 1.00 1.00 1.00 1.00 0.01 0.89 2 441 0.55 0.55 **** 18.2 18.2 1.00 1.00 18.2 18.2 1.00 1.00 18.2 18.2 1.01 1.00 18.2 1.01 1.01	27 1.00 0.98 28 0 28 1.00 1.00 28 0.10 50 0.55 18.2 1.00 18.2 C	361 166 1.00 1.00 0.98 0.98 368 169 0 0 368 169 1.00 1.00 1.00 1.00 1.00 1.00 368 169 1.00 1.00 1.00 368 169 1.00 1.00 368 169 1.00 1.00 30.5 13.3 1.00 1.00 30.5 13.3 D B 24.8 1.00 24.8 C 2.7 0.5	0 1 1 1 0 0 0 1 1 1		

Note: Queue reported is the number of cars per lane.

Mitigated Existing plus AC34 2013 Project Conditions

Weekday PM Peak Hour

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report

2000 HCM 4-Way Stop Method (Future Volume Alternative)

******									ternati ******		*****	*****
Intersection												
******						*****	****	****	*****	****	****	*****
Cycle (sec):			0			Critic	al Vol	L./Car	o.(X):		0.8	346
Loss Time (se	ec):		0						ec/veh)	:	28	
Optimal Cycle	,		0			Level						D
*****		****		****	*****					****	****	
Street Name:			Lyon	St					Lomba	rd St		
Approach:	Noi	cth B	ound	Sou	ıth Bo	ound	Εa	ast Bo	ound	We	est Bo	ound
Movement:	L -	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Control:	St	op S	ign	St	op Si	lgn	St	op S	ign	St	op Si	Lgn
Rights:		Incl	ıde		Incl	ıde		Incl	ıde		Incl	ıde
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 (1!	0 0	0 (1!	0 0	0 1	1 0	1 0	0 (1!	0 0
Volume Module	∋:											
Base Vol:	146	22	7	22	56	200	164	515	94	5	340	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	146	22	7	22	56	200	164	515	94	5	340	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	146	22	7	22	56	200	164	515	94	5	340	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	159	24	8	24	61	217	178	560	102	5	370	21
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	159	24	8	24	61	217	178	560	102	5	370	21
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	159	24	8	24	61	217	178	560	102	5	370	21
	•											
Saturation Fl	low Mo	odule	:									
Adjustment:	1.00	1.00	1.00				1.00	1.00			1.00	1.00
Lanes:			0.04		0.20			1.34			0.94	
Final Sat.:			17		99	355		682		7		27
	'											
Capacity Anal	-											
		0.45	0.45	0.61	0.61	0.61		0.82	0.80	0.78	0.78	0.78
Crit Moves:	****				****		***				****	
4 '	16.2		16.2		19.1	19.1		34.0	31.3		28.3	28.3
	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			16.2		19.1	19.1		34.0	31.3		28.3	28.3
LOS by Move:			С	С	С	С	Ε	_	D	D	_	D
ApproachDel:		16.2			19.1			34.5			28.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:					19.1			34.5			28.3	
LOS by Appr:		С			С			D			D	
AllWayAvgQ:			0.6									2.6
*****	****	****	*****	****	*****	*****	*****	****	*****	****	*****	*****

Note: Queue reported is the number of cars per lane.

Mitigated Existing plus AC34 2013 Project Conditions

Weekend Midday Peak Hour

34th America's Cup Races Transportation Impact Analysis

Level Of Service Computation Report 2000 HCM 4-Way Stop Method (Future Volume Alternative)

***************** Intersection #27 Lincoln Blvd/25th St/El Camino del Mar ************************** Cycle (sec): 1 Critical Vol./Cap.(X): 0.793
Loss Time (sec): 0 Average Delay (sec/veh): 21.5
Optimal Cycle: 0 Level Of Service: C **************************
 Street Name:
 25th St
 El Camino del Mar (eb) / Lincoln

 Approach:
 North Bound
 South Bound
 East Bound
 West Bound

 Movement:
 L - T - R
 L - T - R
 L - T - R
 Control: Stop Sign Stop Sign Stop Sign Stop Sign Rights: Include Include Include Include Min. Green: 0 0 0 0 0 0 0 0 0 0 0 Lanes: 0 0 1! 0 1 0 0 1! 0 0 0 1! 0 0 1 0 0 1 0 Volume Module: Base Vol: 20 22 728 25 16 2 1 239 27 368 166 13 Initial Bse: 20 22 728 25 16 2 1 239 27 368 166 13 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 20 22 743 26 16 2 1 244 28 376 169 13 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 20 22 743 26 16 2 1 244 28 376 169 13 FinalVolume: 20 22 743 26 16 2 1 244 28 376 169 13 _____|__|__| Saturation Flow Module: Lanes: 0.05 0.06 1.89 0.58 0.37 0.05 0.01 0.89 0.10 1.00 0.93 0.07 Final Sat.: 32 -586 1739 230 147 18 2 438 49 473 471 37 ------| Capacity Analysis Module: Vol/Sat: 0.63-0.04 0.43 0.11 0.11 0.11 0.56 0.56 0.56 0.79 0.36 0.36 Crit Moves: **** **** **** Delay/Veh: 17.4 17.4 18.9 12.2 12.2 12.2 18.5 18.5 18.5 32.6 13.5 13.5 AdjDel/Veh: 17.4 17.4 18.9 12.2 12.2 12.2 18.5 18.5 18.5 32.6 13.5 13.5 LOS by Move: C C C B B B C C C D B B 26.3 ApproachDel: 19.5 12.2 18.5
Delay Adj: 1.00 1.00 1.00
ApprAdjDel: 19.5 12.2 18.5
LOS by Appr: C B C 1.00 26.3 AllWayAvgo: 1.5 1.5 1.5 0.1 0.1 0.1 1.1 1.1 2.9 0.5 0.5 *************************************

Note: Queue reported is the number of cars per lane.

Mitigated 2035 Cumulative Conditions

Weekday AM Peak Hour

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #15 Embarcadero / Broadway St ******************

 Cycle (sec):
 90
 Critical Vol./Cap.(X):
 0.793

 Loss Time (sec):
 15
 Average Delay (sec/veh):
 53.7

 Optimal Cycle:
 90
 Level Of Service:
 D

 ************************ Street Name: Embarcadero Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Protected Protected
 Rights:
 Include
 Include
 Include
 OV1

 Min. Green:
 19
 47
 0
 7
 33
 33
 21
 0
 21
 0
 0
 0

 Y+R:
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 2 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 Lanes: Volume Module: Base Vol: 715 1302 0 3 1289 51 110 0 482 Initial Bse: 715 1302 0 3 1289 51 110 0 482 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 715 1302 0 3 1289 51 110 0 482 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 715 1302 0 3 1289 51 110 0 482 0 0 0 0 482 0 0 FinalVolume: 715 1302 0 3 1289 51 110 0 482 0 0 Saturation Flow Module: Adjustment: 0.92 0.95 1.00 0.95 0.94 0.94 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 1.00 1.92 0.08 1.00 0.00 1.00 0.00 0.00 ______||___| Capacity Analysis Module: Vol/Sat: 0.20 0.36 0.00 0.00 0.37 0.37 0.06 0.00 0.30 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.22 0.52 0.00 0.08 0.38 0.38 0.23 0.00 0.23 0.00 0.00 0.00 Volume/Cap: 0.94 0.69 0.00 0.02 0.97 0.97 0.26 0.00 1.28 0.00 0.00 0.00 Uniform Del: 34.7 16.1 0.0 38.3 27.3 27.3 28.2 0.0 34.5 0.0 0.0 0.0 IncremntDel: 19.9 1.1 0.0 0.1 18.4 18.4 0.3 0.0 144.6 0.0 0.0 0.0

HCM2kAvqQ: 10 13 0 0 20 20 2 0 25 0 0 Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to ESA, SAN FRANCISCO

Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 54.6 17.2 0.0 38.4 45.7 45.7 28.5 0.0 179.1 0.0 0.0 0.0 AdjDel/Veh: 54.6 17.2 0.0 38.4 45.7 45.7 28.5 0.0 179.1 0.0 0.0 0.0 LOS by Move: D B A D D D C A F A A A 2035 Cumulative Weekday AM Mon Jun 6, 2011 15:08:41 _____

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)											
Intersection	#16 E	Embaro	cadero	/ Wasl	hingt	on St						
Cycle (sec): Loss Time (s Optimal Cycl	ec): e:	(- - (90 17 91	++++		Critic Averaç Level	cal Vo ge Del Of Se	l./Car ay (se rvice:	o.(X): ec/veh)	:	0. ⁷	7.1 D
Street Name: Approach: Movement:	Noi L -	th Bo	Embarc ound - R	adero So L	uth Bo	ound – R	E L	V ast Bo - T	Vashing ound - R	ton St We L	t est Bo - T	ound - R
Control: Rights: Min. Green: Y+R: Lanes:	11 4.0 2 (Inclu 35 4.0	0 4.0 0 0	9 4.0	Included Andrews 100 and 100 a	ted ude 0 4.0	30 4.0 1	rotect Inclu 0 4.0 0 0	30 4.0 0 1	0 4.0 0	Inclu O 4.0	ted ude 0 4.0 0 0
Volume Modul Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol: PCE Adj: MLF Adj: FinalVolume:	e: 455 1.00 455 0 0 455 1.00 1.00 455 1.00 455 1.00 455 1.00 455	1943 1.00 1943 0 0 1943 1.00 1.00 1943 1.00 1.00 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00	7 1.00 7 0 0 7 1.00 1.00 7	1715 1.00 1715 0 0 1715 1.00 1.00 1715 1.00 1715 1.00 1.00	80 1.00 80 0 0 80 1.00 1.00 80 1.00 1.00	71 1.000 71 0 0 71 1.000 71 1.000 71 1.000 71	0 1.00 0 0 0 1.00 1.00 0 0 0 1.00	175 1.00 175 0 0 175 1.00 1.75 0 1.75 1.00 1.75 1.00 1.75	0 1.00 0 0 0 1.00 1.00 0 0 0 1.00	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00 1.0	0 1.00 0 0 0 0 1.00 1.00 0 0 0 1.00
Saturation F Sat/Lane: Adjustment: Lanes: Final Sat.:	low Mo 1900 0.92 2.00 3502	1900 0.91 3.00 5187	1900 1.00 0.00	1900 0.95 1.00 1805	1900 0.90 2.87 4921	1900 0.90 0.13 230	1900 0.95 1.00 1805	1900 1.00 0.00 0	1900 0.85 1.00 1615	1900 1.00 0.00	1900 1.00 0.00 0	1900 1.00 0.00
Capacity Ana Vol/Sat: Crit Moves: Green/Cycle: Volume/Cap: Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj: AdjDel/Veh: LOS by Move: HCM2kAvgQ:	0.13 **** 0.12 1.07 40.0 65.2 0.0 1.00 105.2 1.00 105.2 F	0.37 0.38 0.97 27.6 14.5 0.0 1.00 42.0 1.00 42.0	0.00 0.00 0.00 0.0 0.0 0.0 0.00 1.00 0.0	0.10 0.04 37.1 0.1 0.0 1.00 37.2 1.00 37.2	**** 0.36 0.96 28.4 12.9 0.0 1.00 41.2 1.00 41.2	0.36 0.96 28.4 12.9 0.0 1.00 41.2 1.00	0.33 0.12 21.3 0.1 0.0 1.00 21.4 1.00 21.4	0.00 0.00 0.0 0.0 0.0 0.0 0.00 1.00 0.0	**** 0.33 0.33 22.9 0.4 0.0 1.00 23.3 1.00 23.3 C	0.00 0.00 0.0 0.0 0.0 0.00 0.00 1.00 0.0	0.00 0.00 0.0 0.0 0.0 0.0 0.0 1.00 0.0	

Mitigated 2035 Cumulative Conditions

Weekday PM Peak Hour

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #15 Embarcadero / Broadway St ****************** Cycle (sec): 90 Critical Vol./Cap.(X): 0.980 Loss Time (sec): 15 Average Delay (sec/veh): Optimal Cycle: 147 Level Of Service: 50.7 ************************ Street Name: Embarcadero Broadway St East Bound West Bound Approach: North Bound South Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Protected Protected
 Rights:
 Include
 Include
 Include
 OV1

 Min. Green:
 15
 43
 0
 7
 33
 33
 25
 0
 25
 0
 0
 0

 Y+R:
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 2 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 Lanes: -----||-----||-----| Volume Module: Base Vol: 573 1698 0 7 1294 104 91 0 422 Initial Bse: 573 1698 0 7 1294 104 91 0 422 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 573 1698 0 7 1294 104 91 0 422 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 573 1698 0 7 1294 104 91 0 422 0 0 91 0 422 Ω Ω FinalVolume: 573 1698 0 7 1294 104 91 0 422 0 0 Saturation Flow Module: Adjustment: 0.92 0.95 1.00 0.95 0.94 0.94 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 1.00 1.85 0.15 1.00 0.00 1.00 0.00 0.00 _____| Capacity Analysis Module: Vol/Sat: 0.16 0.47 0.00 0.00 0.39 0.39 0.05 0.00 0.26 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.17 0.48 0.00 0.08 0.39 0.39 0.28 0.00 0.28 0.00 0.00 0.00 Volume/Cap: 0.98 0.98 0.00 0.05 1.01 1.01 0.18 0.00 0.94 0.00 0.00 0.00 Uniform Del: 37.4 23.2 0.0 38.4 27.5 27.5 24.7 0.0 31.8 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 69.9 41.2 0.0 38.6 53.3 53.3 24.9 0.0 59.8 0.0 0.0 0.0 AdjDel/Veh: 69.9 41.2 0.0 38.6 53.3 53.3 24.9 0.0 59.8 0.0 0.0 0.0

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HCM2kAvgQ: 8 24

LOS by Move: E D A D D D C A E A A A

0 0 24 24 2 0 12

2035 Cumulative Weekday PM Mon Jun 6, 2011 15:07:00

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************************************										
Intersection	#16 Embarcadero										
Cycle (sec): Loss Time (sec) Optimal Cycle	e: 91	Averag	al Vol./Cap.(X): me Delay (sec/veh) Of Service: ************************************	D							
Street Name: Approach: Movement:	Embard North Bound L - T - R		Washing East Bound L - T - R	ton St West Bound L - T - R							
Control: Rights: Min. Green: Y+R: Lanes:	Protected Include 11 35 0 4.0 4.0 4.0 2 0 3 0 0	Protected Include 9 33 0 4.0 4.0 4.0	Protected Include 30 0 30 4.0 4.0 4.0 1 0 0 1	Protected Include 0 0 0 0 4.0 4.0 4.0 4.0 0 0 0							
Volume Module Base Vol: Growth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduct Vol: Reduct Vol: FCE Adj: MLF Adj: FinalVolume:	438 2101 0 1.00 1.00 1.00 438 2101 0 0 0 0 0 0 0 0 0 438 2101 0 1.00 1.00 1.00 1.00 1.00 1.00 438 2101 0 0 438 2101 0 438 2101 0 1.00 1.00 1.00 438 2101 0 438 2101 0	10 1634 133 1.00 1.00 1.00 10 1634 133 0 0 0 0 10 1634 133 1.00 1.00 1.00 1.00 1.00 1.00 1.01 1634 133 0 0 0 0 10 1634 133 0 0 0 1 10 1634 133 1.00 1.00 1.00 1.01 1634 133 1.00 1.00 1.00 1.01 1634 133	170 0 247 1.00 1.00 1.00 170 0 247 0 0 0 0 170 0 247 1.00 1.00 1.00 170 0 247 1.00 1.00 1.00 170 0 247 0 0 0 0 170 0 247 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	0 0 0 0 1.00 1.00 0 0 0 0 0 0 0 0 0 0 0							
Saturation Fi Sat/Lane: Adjustment: Lanes: Final Sat.:	low Module: 1900 1900 1900 0.92 0.91 1.00 2.00 3.00 0.00 3502 5187 0	1900 1900 1900 0.95 0.90 0.90 1.00 2.77 0.23 1805 4744 386	1900 1900 1900 0.95 1.00 0.85 1.00 0.00 1.00 1805 0 1615	1900 1900 1900 1.00 1.00 1.00 0.00 0.00 0.00 0 0 0							
	1ysis Module: 0.13 0.41 0.00 **** 0.12 0.38 0.00 1.03 1.05 0.00 40.0 28.0 0.0 53.0 35.8 0.0 0.0 0.0 0.0 1.00 1.00 0.00 93.0 63.8 0.0 93.0 63.8 0.0	0.01 0.34 0.34 **** 0.10 0.36 0.36 0.06 0.95 0.95 37.2 28.2 28.2 0.1 11.2 11.2 0.0 0.0 0.0 1.00 1.00 1.00 37.3 39.4 39.4 1.00 1.00 1.00 37.3 39.4 39.4 D D D 0 17 17	0.09 0.00 0.15 **** 0.33 0.00 0.33 0.29 0.00 0.46 22.6 0.0 24.1 0.3 0.0 0.6 0.0 0.0 0.0 1.00 0.00 1.00 22.8 0.0 24.8 C A C 4 0 6	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00							

Mitigated 2035 Cumulative Conditions

Weekend Midday Peak Hour

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) ************* Intersection #15 Embarcadero / Broadway St ******************

 Cycle (sec):
 90
 Critical Vol./Cap.(X):
 0.798

 Loss Time (sec):
 15
 Average Delay (sec/veh):
 35.3

 Optimal Cycle:
 90
 Level Of Service:
 D

 ************************ Street Name: Embarcadero Broadway St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R Control: Protected Protected Protected Protected
 Rights:
 Include
 Include
 Include
 Include
 OV1

 Min. Green:
 15
 43
 0
 7
 33
 33
 25
 0
 25
 0
 0
 0

 Y+R:
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 4.0
 2 0 2 0 0 1 0 1 1 0 1 0 0 0 1 0 0 0 0 Lanes: Volume Module: Base Vol: 469 1628 0 7 1153 91 116 0 340 Initial Bse: 469 1628 0 7 1153 91 116 0 340 0 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 PHF Volume: 469 1628 0 7 1153 91 116 0 340 0 0 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 469 1628 0 7 1153 91 116 0 340 0 0 0 0 340 0 0 FinalVolume: 469 1628 0 7 1153 91 116 0 340 0 0 Saturation Flow Module: Adjustment: 0.92 0.95 1.00 0.95 0.94 0.94 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 2.00 2.00 0.00 1.00 1.85 0.15 1.00 0.00 1.00 0.00 0.00 ______||___| Capacity Analysis Module: Vol/Sat: 0.13 0.45 0.00 0.00 0.35 0.35 0.06 0.00 0.21 0.00 0.00 0.00 Crit Moves: **** **** Green/Cycle: 0.17 0.48 0.00 0.08 0.38 0.38 0.28 0.00 0.28 0.00 0.00 0.00 Volume/Cap: 0.77 0.94 0.00 0.05 0.91 0.91 0.23 0.00 0.76 0.00 0.00 0.00 Uniform Del: 35.5 22.4 0.0 38.4 26.4 26.4 25.1 0.0 29.7 0.0 0.0 0.0 IncremntDel: 6.0 11.1 0.0 0.1 9.5 9.5 0.2 0.0 7.3 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 0.00 0.00 0.00 Delay/Veh: 41.5 33.5 0.0 38.6 35.9 35.9 25.3 0.0 37.0 0.0 0.0 0.0 AdjDel/Veh: 41.5 33.5 0.0 38.6 35.9 35.9 25.3 0.0 37.0 0.0 0.0 0.0 LOS by Move: D C A D D D C A D A A A

HCM2kAvgQ: 6 21 0 0 18 18 2 0 8 0 0

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2035 Cumulative Weekend MIDMon Jun 6, 2011 15:07:52

	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)												

Intersection #16 Embarcadero / Washington St													
Cycle (sec):	90	Critical Vol./Cap.(X):						0.590					
Loss Time (sec): 17				Average Delay (sec/veh					ec/veh)	: 41.5			
Optimal Cycl			91			Level						D	

Street Name:						,	Washington St						
Approach: Movement:	North Bound L - T - R			South Bound L - T - R			East Bound L - T - R			West Bound L - T - R			
Control:		otect		Protected			Protected			Protected			
Rights:	Include			Include			Include			Include			
Min. Green:	11 35 0			9 33 0			30 0 30			0 0 0			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lanes:		3			0 2			0 0			0 0	0 0	
Volume Module Base Vol:		2025	0	12	1432	131	102	0	133	0	0	0	
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:		2025	0		1432	131	102	0	133	0	0	0	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	302	2025	0	13	1432	131	102	0	133	0	0	0	
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:		2025	0	13	1432	131	102	0	133	0	0	0	
Reduct Vol: Reduced Vol:	302	0 2025	0		0 1432	131	102	0	0 133	0	0	0	
PCE Adi:	1.00		1.00		1.00	1.00		1.00	1.00	-	1.00	1.00	
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:	302	2025	0	13	1432	131	102	0	133	0	0	0	
Saturation F.				1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane: Adjustment:	1900		1900		1900	1900		1900	1900		1900	1900	
Lanes:	2.00		0.00		2.75	0.30		0.00	1.00		0.00	0.00	
Final Sat.:	3502		0.00		4690	429	1805	0.00	1615	0.00	0.00	0.00	
Capacity Ana													
Vol/Sat:			0.00		0.31	0.31	0.06	0.00	0.08	0.00	0.00	0.00	
Crit Moves:		****		****					****				
Green/Cycle:			0.00		0.36	0.36		0.00	0.33		0.00	0.00	
Volume/Cap: Uniform Del:			0.00		0.84	0.84	21.7	0.00	0.25	0.00	0.00	0.00	
IncremntDel:		24.0	0.0	0.2	3.7	3.7	0.1	0.0	0.2	0.0	0.0	0.0	
InitQueuDel:		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	
Delay/Veh:	44.2		0.0		30.3	30.3	21.8	0.0	22.5	0.0	0.0	0.0	
User DelAdj:			1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
AdjDel/Veh:			0.0		30.3	30.3	21.8	0.0	22.5	0.0	0.0	0.0	
LOS by Move: HCM2kAvqQ:	D 4	D 22	A 0	D 0	C 14	C 14	C 2		C 3	A 0	A 0	A 0	
moniennygy.	-1	22	U	U	1.4	1.4		U	3	U	U	J	

Project's Contribution to 2035 Cumulative

The Proposed Project contribution to Existing plus Project and 2035 Cumulative traffic volumes at the critical movements at intersections operating at LOS E or LOS F was examined.

Existing plus Cruise Terminal Project - Saturday Midday Peak Hour

- At the intersection of **The Embarcadero/Beach/Grant**, the Cruise Terminal project would add 13 vehicle trips during the Saturday midday peak hour. At this intersection, the northbound left turn movement would continue to operate at LOS F conditions. The project would add 13 vehicle trips to the northbound approach, which would represent approximately 3.6 percent of the total Saturday midday peak hour northbound approach volume of 362 vehicles. The project contribution to this poorly-operating approach would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- At the intersection of **The Embarcadero/North Point/Kearny**, the Cruise Terminal project would add 145 vehicle trips during the Saturday midday peak hour. At this intersection, the critical movement operating poorly is the northbound through (LOS F), and also the southbound movement (LOS F). The project would add 13 vehicle trips to the northbound through and 13 vehicles to the southbound approach, which would represent approximately 1.5 percent of the total Saturday midday peak hour northbound through, and 2.6 percent of the southbound approach volumes. The project contribution to these poorly-operating movements would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

2035 Cumulative Conditions – Cruise Terminal Project Contributions

Broadway/Battery (Weekday AM)

O The Cruise Terminal would add 38 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the eastbound and westbound approaches would operate at LOS F conditions. The project would add 15 vehicle trips to the eastbound approach (1.2 percent contribution) and 13 vehicles to the westbound through movement (2.0 percent contribution). The project contributions to these poorly-operating approaches would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

• The Embarcadero/Beach/Grant (Weekday PM, Saturday Midday)

The Cruise Terminal would add 2 net-new vehicle trips during the <u>Weekday PM</u> peak hour. During the weekday PM peak hour, the northbound and eastbound approaches would operate at LOS E or LOS F

- conditions. The project would not add vehicle trips to critical movements, and therefore, the contribution to the overall intersection LOS E conditions would not be considered significant.
- O The Cruise Terminal would add 13 vehicle trips during the <u>Saturday Midday</u> peak hour. During the Saturday Midday peak hour, the northbound and eastbound approaches would operate at LOS F conditions. The project would add 13 vehicle trips to the northbound approach, which would represent 2.3 percent of the northbound left turn peak hour volumes. The project contribution to this poorly-operating movement would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

The Embarcadero/North Point/Kearny (Saturday Midday)

O The Cruise Terminal would add 145 net-new vehicle trips during the <u>Saturday Midday</u> peak hour. During the Saturday Midday peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 13 vehicle trips to the northbound through (1.5 percent contribution) and 13 vehicles to the southbound approach (2.3 percent contribution). The project contributions to these poorly-operating approaches would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

• The Embarcadero/Broadway (Weekday AM and PM, Saturday Midday)

- O The Cruise Terminal would add 59 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the northbound left turn and southbound approach would operate at LOS F conditions. The project would add 63 vehicles to the southbound approach, which would represent 4.7 percent of the total AM peak hour approach volumes. The project contributions to this poorly-operating approach would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- O The Cruise Terminal would add 7 net-new vehicle trips during the <u>Weekday PM</u> peak hour. During the weekday PM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 9 vehicle trips to the northbound and 6 vehicles to the eastbound approaches, which would represent less than 1.0 percent of the total PM peak hour approach volumes. The project contributions to these poorly-operating approaches would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

O The Cruise Terminal would add 343 net-new vehicle trips during the <u>Saturday Midday</u> peak hour. During the Saturday Midday peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 127 vehicle trips to the northbound through (7.8 percent contribution) and 175 vehicles to the southbound through/right (14.1 percent contribution). The project contributions to these poorly-operating movements would be considerable, and therefore the contribution to the overall intersection LOS F conditions would be considered a significant impact.

• The Embarcadero/Washington (Weekday AM and PM, Saturday Midday)

- O The Cruise Terminal would add 31 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 50 vehicle trips to the southbound approach, which would represent 2.8 percent of the southbound approach volumes. The project contributions to this poorly-operating approach would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- The Cruise Terminal would result in a decrease of 4 vehicle trips during the <u>Weekday PM</u> peak hour. During the weekday PM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 9 vehicle trips to the northbound through, which would represent less than 1.0 percent of the northbound through volumes. The project contribution would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- O The Cruise Terminal would add 263 net-new vehicle trips during the <u>Saturday Midday</u> peak hour. During the Saturday Midday peak hour, the northbound approach would operate at LOS F conditions. The project would add 127 vehicle trips to the northbound through, which would represent 6.3 percent of the northbound through volumes. The project contributions to this poorly-operating approach would be considerable, and therefore the contribution to the overall intersection LOS F conditions would be considered a significant impact.

The Embarcadero/Mission (Weekday AM and PM, Saturday Midday)

o The Cruise Terminal would add 31 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the northbound approach would operate at LOS F conditions. The project would not add any vehicle trips to the approach volumes. The project

- contributions to the poorly-operating approach would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- O The Cruise Terminal would result in a net decrease of 4 vehicle trips during the <u>Weekday PM</u> peak hour. During the weekday PM peak hour, the northbound approach would operate at LOS F conditions. The project would add 9 vehicle trips to the northbound approach, which would represent less than 1.0 percent of the northbound approach. The project contributions to this poorly-operating approach would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- The Cruise Terminal would add 263 net-new vehicle trips during the <u>Saturday Midday</u> peak hour. During the Saturday Midday peak hour, the northbound approach would operate at LOS F conditions. The project would add 127 vehicle trips to the northbound approach, which would represent 6.0 percent of the northbound approach peak hour volumes. The project contributions to this poorly-operating approach would be considerable, and therefore the contribution to the overall intersection LOS E conditions would be considered a significant impact.

The Embarcadero/Harrison (Weekday AM and PM)

- O The Cruise Terminal would add 23 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 32 vehicle trips to the southbound approach, which would represent 1.7 percent of the total AM peak hour approach volume. The project contributions to this poorly-operating approach would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- o The Cruise Terminal would result in a reduction of 23 vehicle trips during the <u>Weekday PM</u> peak hour, and would not add trips to any movements operating poorly. The project contributions would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

The Embarcadero/Bryant (Weekday AM and PM)

The Cruise Terminal would add 6 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, movements within all four approaches would operate at LOS F conditions. The project would add 15 vehicle trips to the southbound through, which

would represent 1.0 percent of the southbound through volume. The project contributions would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

O The Cruise Terminal would result in a net reduction of 32 vehicle trips during the <u>Weekday PM</u> peak hour, and would not add vehicles to any movements operating poorly. Therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

• The Embarcadero/Brannan (Weekday AM and PM)

- O The Cruise Terminal would add 6 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 15 vehicle trips to the southbound approach, which would represent less than 1.0 percent of the southbound approach volume. The project contributions would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- O The Cruise Terminal would result in a net reduction of 32 vehicle trips during the <u>Weekday PM</u> peak hour, and would not add vehicles to any movements operating poorly. Therefore the contribution to the overall intersection LOS F conditions would not be considered significant.

The Embarcadero/Howard (Weekday AM and PM, Saturday Midday)

- O The Cruise Terminal would add 31 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 50 vehicle trips to the southbound through, which would represent 3.0 percent of the southbound through volume. The project contributions would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- The Cruise Terminal would result in a net decrease of 4 vehicle trips during the <u>Weekday PM</u> peak hour. During the weekday PM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 9 vehicle trips to the northbound through movement, which would represent less than 1.0 percent of the northbound through volumes. The project contributions to this poorly-operating approach would not be considerable, and therefore the

- contribution to the overall intersection LOS F conditions would not be considered significant.
- O The Cruise Terminal would add 263 net-new vehicle trips during the <u>Saturday Midday</u> peak hour. During the Saturday Midday peak hour, the northbound approach would operate at LOS F conditions. The project would add 127 vehicle trips to the northbound through, which would represent 6.5 percent of the northbound through volumes. The project contributions to this poorly-operating approach would be considerable, and therefore the contribution to the overall intersection LOS F conditions would be considered a significant impact.

The Embarcadero/Folsom (Weekday AM and PM, Saturday Midday)

- O The Cruise Terminal would add 31 net-new vehicle trips during the <u>Weekday AM</u> peak hour. During the weekday AM peak hour, the northbound and southbound approaches would operate at LOS F conditions. The project would add 50 vehicle trips to the southbound approach, which would represent 2.8 percent of the southbound approach volume. The project contribution to this poorly-operating approach would not be considerable, and therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- The Cruise Terminal would result in a net decrease of 4 vehicle trips during the <u>Weekday PM</u> peak hour, and would not add vehicles to any critical movements operating poorly. Therefore the contribution to the overall intersection LOS F conditions would not be considered significant.
- O The Cruise Terminal would add 263 vehicle trips during the <u>Saturday Midday</u> peak hour. During the Saturday Midday peak hour, the movements within the northbound and southbound approaches would operate at LOS E or LOS F conditions. The project would add 49 vehicle trips to the northbound through (3.1 percent contribution) and 136 vehicles to the southbound approach (9.4 percent contribution). The project contributions to the southbound approach would be considerable, and therefore the contribution to the overall intersection LOS E conditions would be considered a significant impact.

Cruise Terminal and Northeast Wharf Plaza Contributions to 2035 Cumulative Conditions

		Wee	kday		Satu	rday
	Al	M	PI	VI	Mid	day
	LOS	?	LOS	?	LOS	?
8 Broadway/Battery	F	No				
9 The Embarcadero/Beach/Grant			Ε	No	F	No
10 The Embarcadero/North Point/Kearny					F	No
15 The Embarcadero/Broadway	F	No	F	No	F	Yes
16 The Embarcadero/Washington	F	No	F	No	F	Yes
17 The Embarcadero/Mission	F	No	F	No	F	Yes
18 The Embarcadero/Harrison	F	No	F	No		
19 The Embarcadero/Bryant	F	No	F	No		
20 The Embaracdero/Brannan	F	No	F	No		
43 The Embarcadero/Howard	F	No	F	No	F	Yes
44 The Embarcadero/Folsom	F	No	F	No	Ε	Yes

less than significant

Existing+Cru	150 1	ermin.	il weru	е мау	31, 4	2011 09	:49:20				age	
			evel C	f Serv	rice C	computa	tion F	Report				
	2000 1					Future				ve1		
											****	***
Intersection	#9 Er	mbarca	dero/	Beach	St /	Grant	St					
Cycle (sec):			15			Critic	al Vol	. /Cas	. (X) :		n.	563
Cycle (sec): Loss Time (s Optimal Cycl	ec):		3			Averag	e Dela	v (s	c/veh)	•		500 500
Optimal Cycl	e:	16	1			Level :	Of Ser	vice				F
*********				*****		*****	*****		*****			
Street Name:			Embaro	adero			Bea	sch S	(EB)/	Grant	St [WB)
Approach:	No	rth Bo	ound	Sou	th Bo	ound	E	ast B	band	We	est B	ound
Movement:		- т	- R	L.	- т	- R	L ·	- r	- R	L -	т т	- R
				1			1					
Control:						ase						
Rights:	100.00		ide			de	5505.0	Inch	ıda		Incl	
Min. Green:	17		, 17			0	0	26	26	19		
Y+R:	4.0	4.0	4.0			4.0	4.0	4.0	4.0		4.0	
Lanes:	0	1 0	1 0			0 0			0 1		1!	
Volume Modul	e:		35	100						15		
Base Vol:		484	48	0	155	0	0	0	315	9	59	
Growth Adj:	1.00	1.00		1.00			1.00			1.00		1.0
Initial Bse:						0	0			9		
Added Vol:		0	0	0	0	0	0	ō	0	0	0	
PasserByVol:			0	. 0					ñ	õ	Ð	
Initial Fut:	362	484	4.8	τ .	155	0	0	ō	315	9	59	
User Adi:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
PHF Adj:		0.95		0.95				0.95			0.95	
PHF Volume:	381	509	51	0	163	0	0	0	332	9	62	
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	381	509	51	0	163	0	0	0	332	9	62	
PCE Adj:	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
MLF Adj:	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.0
FinalVolume:	381	509	51	0	163	0	0	0	332	9	62	-
	-1		1	J		1	1		!	1		
Saturation F	low M	odule										
Sat/Lane:			1900			1900		1900			1900	
						1.00			0.87			0.9
Lanes:			0.14		1.00			0.00		0.12		
Final Sat.:				0		0		0			1424	
				1		1			1	1		
Capacity Ana												
Vol/Sat:		0.20	0.20	0.00		0.00	0.00	0.00			0.04	0.0
	****	State Assessed	15.000000000000000000000000000000000000	10.00.000000000000000000000000000000000	****	0.0 0.000 APR	294 San 200 San 200 San 200 San 200 San 200 San 200 San 200 San 200 San 200 San 200 San 200 San 200 San 200 Sa	200 - 1000-1	****			231 -40
Green/Cycle:					0.26	0.00		0.00	0.26		0.19	
Volume/Cap:				0.00		0.00		0.00	0.78		0.23	
Uniform Del:			42.0	0.0		0.0	0.0	0.0	34.9		34.8	34.
IncremntDel:			96.6		0.1	0.0	0.0	0.0	9.3		0.3	
InitQueuDel:			0.0		0.0	O.D	0.0	0.0	200	0.0	0.0	100
Delay Adj:			1.00			0.00			1.00	1.00		
Delay/Veh:			138.6			0.0	0.0	0.0	44.1		35.1	
User DelAdj:			1.00			1.00		1.00			1.00	
AdjDel/Veh:						0.0	0.0				35.1	
LOS by Move:					c	A	A				Ð	
HCM2kAvgQ:	22	38	22	0	4	D	0	0	12	2	2	

Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to ESA, SAN FRANCISCO

only 362 = 3.6%

No significant contribution

Existing + Cruise Terminal - Saturdan Midday

Existing+Cru											Page	
						Computa						
									ternati			
			*****		****	*****	****	****	*****	*****	****	*****
Intersection	#10 1	Embaro	adero	North	Pol	nt St /	Keari	y St				
Cycle (sec):		9	0			Critic	al Vol	L./Car	p. (X):		0.	788
Loss Time (s	ec):	1	4						ec/veh)		9	7.4
Optimal Cycle		18				Level					-	F

Street Name:			Embaro	adero			North	Poin	t St (E	B1 / K	earny	St (W
Approach:	No	cth Bo	und	Sou	uth B	bund	E	st B	bnuo	We	est B	ound
Movement:		- T				- R		- т	- R	L ·	- т	- R
										1		
Control:		rotect			Permit				hase		lit P	
Rights:		Inclu			Incl		597.535		ude	8,500	Incl	
Min. Green:	15	36	0	0	17	17	20	20	20	20	20	20
Y+R:		4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lanes:	1 (0 0		1 0				0 1	0		
Volume Module	e:											
Base Vol:	148	839	0	1	326	166	24	158	50	77	34	14
Growth Adj:		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Initial Bse:	14B	839	0	1	326	166	24	158	50	77	34	14
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	D.	. 0	0	0	Ď	0	ō	0	ā	0	a
Initial Fut:		839	0	T	326	166	24	158	50	77	34	14
User Adj:		1.00			1.00	1.00		1.00	1.00	1.00	1.00	1.00
PHF Adi:		0.95			0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	156	883	0	1		175	25	166	53	81	36	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	C
Reduced Vol:	156	883	0	1	343	175	25	166	53	18	36	15
PCE Ad1:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1,00	1.00	1.00	1.00
FinalVolume:	156	883	0	1	343	175	25	166	53	81	36	15
	1			11		1	1		1	1		
Saturation F	low Me	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.48	1.00	0.86	0.44	0.86	0.96	0.96	0.96	0.97	0.97	0.85
Lanes:	1.00	2.00	0.00	0.01	1.58	0.41	0.12	0.76	1.12	0.69	0.31	1.00
Final Sat.:	1805	1830	0	4	1317	671	212	1397	2051	1273	562	1615
	1			11		1	1		1	·		
Capacity Ana	lysis	Modu1	e:									
Vol/Sat:	0.09	0.48	0.00	0.26	0.26	0.26	0.12	0.12	0.03	0.06	0.06	0.01
Crit Moves:		****					****				****	
Green/Cycle:	0.16	0.40	0.00	0.24	0.24	0.24	0.22	0.22	0.22	0.22	0.22	0.22
Volume/Cap:	0.53	1.21	0.00	1.10	1.10	1.10	0.54	0.54	0.12	0.29	0.29	0.04
Uniform Del:	34.6	27.0	0.0	34.3	34.3	34.3	30.9	30.9	27.9	29.1	29.1	27.5
IncremntDel:	1.9	105	0.0	70.1	70.1	70.1	1.3	1.3	0.0	0.4	0.4	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	36.4	132		104.4		104.4		32.2		29.5	29.5	27.5
User DelAdj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			0.0	104.4	104	104.4	32.2	32.2	28.0	29.5	29.5	27.5
LOS by Move:			A	F	F	F	C	C	c	C	C	(
HCM2kAvgO:		23	0	19	10	19	5	5	1	3	3	C

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No significant contribution

10F5 2035 Cumulative - Weekday AM

2035 Cumulat	ive We	ekda	AM Tu	e May	31,	2011 10	:12:53				Page	9-1
			Level C	of Serv	rice (Computa			 t			
	2000 F	ICM O	peratio	ns Met	hod	(Future	Volum	e Al	ternati	ve)		
********	****	****	******	****	****		+++++	****	*****	*****	*****	
Intersection							*****	****	*****	*****	****	
Cycle (sec):		1	80			Critic	al Vol	./Ca	p.(X):		ð.E	169
Loss Time (s	ec):		9			Averag	e Dela	y (s	ec/veh)	:	5	. 0
Optimal Cycl	e:		81			Level	Of Ser	vice	;			Ð
*********	****			*****	****	*****	****	****	*****	*****	*****	*****
Street Name:			Sanso	me St					Broadw	ay St		
Approach:		rth B				ound		st B	ound	We	est Bo	ound
Movement;	L -	- т	- R	. և -		– R		Т	- R	L ·	- T	- R
 Control:			hase			nase	E	ermi	hett		Permit	
Rights:			ude		Incl	ude		Incl	ude		Inch	ıde
Min. Green:			27		0		44	44	O		44	
Y+R:		4.0							4.0			
Lanes:			1 0			0 0			0 0			1 0
Volume Modul					VATGEG1/398		,			1		
Base Vol:	118	266	65	0	0	0	262	1185	0	0	608	159
Growth Adj:	1.00	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		266	65	0	0	0	262	1185	0	0	608	159
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:				0			0	Ð	0	0	0	(
Initial Fut:				0			262					159
			1.00						1.00		1.00	
	0.98					0.96					0.98	
PHF Volume:		271		0				1209		0		162
Reduct Vol:		0		0	-			0		0		(
Reduced Vol:				0				1209			620	
			1.00						1.00			
MLF Adj: FinalVolume:			1.00	1.00		1.00	267		1.00		626	1.00
elnalvolume:												
Saturation F										1		
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Adjustment:												
Lanes:									0.00		0.79	
Final Sat.:						0			0	0	1464	383
	(1			1		1	1		
Capacity Ana												
Vol/Sat:				0.00	0.00	0,00	0.25		0.00	0.00	0.42	0.43
Crit Moves:		****					60 <u>2</u> 00	****			101 12500	22 3000
Green/Cycle:											0.55	
Volume/Cap:										0.00		
Uniform Del:										0.0		
IncremntDel:						0.0				0.0		3.
InitQueuDel:					0.0		0.0			0.0		0.0

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A 0

AdjDel/Veh: 20.5 20.5 20.5 0.0 0.0

LOS by Move:

BCM2kAvgO:

0.0 11.3 99.7

4 53

2035 Cumulat	ive W	eekday	AM Tu	e May	31, 2	2011 10	:12:53	3			,ade	10-1
						computa						
									ternati			
*******						*****	*****	****	*****	*****	****	*****
Intersection												

Cycle (sec):		100	0). (X):		0.000	069
Loss Time (s			9						ec/veh)	1	26	7.5
Optimal Cycl	6;	18	0			Level	Of Sei	.vice	:			F
Street Name:				ry St					Broadw			
Approach:		rth Bo			ith Bo	bauc	Ea	st B	ound		st B	ound
Movement:		- т			- т				- R			- R
	1		1	1		1	1					
Control:	Sp.	lit Ph		Sp.		ase		ermi!	ted	I	ermi	tted
Rights:		Inclu			Inclu				ade		Incl	
Min. Green:	0	0						17		17	17	
Y+R:	4.0								4.0	4.0		
Lanes;			0 0	0 :		1 0			1 0			0 0
Volume Modul)	11		I	I					
Volume Modbl Base Vol:	e: 0	0	0	61	626	106	0	776	474	27	662	3
Growth Add:					1.00	1.00			1.00	1.00		
Growth Adj: Initial Bse:		1.00	1.00		526	106	1.00		474	27	662	
Added Vol:	0		0			100	0	116	9/4	27	0 0	
ndded vol: PasserBvVol:			0		0	0	0		0	0	0	
rasserbyvol: Initial Fut:			0		626	106	0	776	474	27	662	
		1.00										
User Adj: PHF Ad1:		0.97	1.00	0.97		0.97	1.00	0.97	0.97	0.97		
PHF Volume;			0.97		645	109	0.97		489	28	682	0.5
Reduct Vol:		0		0.3		103	0	0		20	002	
Reduced Vol:					645		0	800		28	682	
PCE Adi:						1.00						
		1.00		1.00		1.00		1.00			1.00	
FinalVolume:			0	63		100		800			682	
ETHSTACIONS:												
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Adjustment:	1.00	1.00	1.00	0.92	0.92	0.92	1.00	0.95	0.95	1.00	1.00	1.0
Lanes:	0.00	0.00	0.00	0.15	1.58	0.27	0.00	0.62	0.38	1.00	1.00	0.0
Final Sat.:	0	0	0	269	2759	467	0	1119	6 B 4	1900	1900	
						1	1			1		
Capacity Ana				81 6181	FS 1430	10500000040	55 8335		7000 EUR	60 0000	10 (272)	0.000
Vol/Sat:	0.00	0.00	0.00	0.23	0.23	0.23	0.00	0.71	0.71	0.01	0.36	0.0
Crit Moves:							27 202			2 27		
Green/Cycle:						0.55			0.34		0.34	
Volume/Cap:					0.43	0.43		2.12	2.12	0.04		0.0
Uniform Del:			0.0			10.6		26.5	26.5	17.8		0.
IncremntDel:			0.0	0.2	0.2	0.2	0.0		508.5		53.9	0.
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Delay Adj:						1,00						
Delay/Veh:	0.0	0.0	0.0		10.7	10.7	0.0		535.0	17.8		0.
User DelAdj:				1.00		1.00			1.00	1.00		
AdjDel/Veh:						10.7	0.0		535.0	17.8		0.
LOS by Move:			A			В	A			В	F	
HCM2kAvgQ:	0	О	0	6	6	6	0	114	114	0	25	()

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2035 1250 662 =1.2% = 2.0% No significant containation

2035 Cumulative - Weekday AM

2035 Cumulati											age :	
						Computa						
									ternativ			
Intersection												

Cycle (sec):			90						p.(X):		1.0	
Loss Time (se Optimal Cycle	ec):		L 7						ec/veh):		169	
Optimal Cycle	;	1	76			Level						F
Street Name:			Embaro						Broadwa			
Approach:	No	th B	ound			ound	E.	ant B	ound		st Bo	sund
Movement;			- R			- R			- R		- T	
				1								
Control:		otect	ed :	P	rotect	ed			hase			
Rights:		Incl			Inclu			Incl			Ovl	
Min. Green:		37			28			0	29		0	
Y+R:		4.0			4.0		4.0		4.0			4.
Lanes:			0 0			1 0			0 1		0	
Volume Module		A		l				Ammio (a)	1		Ship In Colory	101223 COA
Base Vol:		1302	0	3	1289	51	110	0	482	0	6	
Growth Adj:						1.00		1.00		1.00		1.0
Initial Bse:		1302			1289	51	110		482	0	0	1.0
Added Vol:	0		o	0		0	270		0	0	0	
PasserBvVol:	ū	0	٥	ō		ŏ	ŏ		0	0	0	
Initial Fut:		1302	0		1289		1110		482	0	0	
User Adj:			1.00		1.00		1.00		1.00	1.00		1.0
PHF Ad:		1.00			1.00		1.00		1.00		1.00	1.0
PHF Volume:			0		1289	51	110	1.00	482	2.00	0	1.0
Reduct Vol:		0	ō	0		0	0		- 0	0	0	
Reduced Vol:		1302	ō		1289	51	110		482	0	0	
PCE Ad1:			1.00				1.00				1.00	
MLF Adi:		1.00			1.00	1.00		1.00	1.00		1.00	1.0
FinalVolume:			0		1289	51		0			0	1.0
Saturation F												
Sat/Lane:		1900		1900		1900		1900			1900	
Adjustment:						0.94			0.85		1.00	
			0.00				1.00					
Final Sat.:						137			1615		0	
Capacity Anal												
Vol/Sat:				0.00	0.37	0.37	0.06	0.00	0.30	0.00	0.00	0.0
Crit Moves:	****				****		****					
Green/Cycle:	0.18	0.41	0.00	0.08	0.31	0.31	0.32	0.00	0.32	0.00	0.00	0.0
Volume/Cap:	2.23	0.88	0.00	0.02	1.20	1.20	0.19	0.00	0.93	0.00	0.00	0.0
Uniform Del:			0.0	38.3	31.0	31.0	22.0	0.0	29.5	0.0	0.0	0.
IncremntDel:	62.7	6.3	0.0	0.1	98.9	98.9	0.2	0.0	22.7	0.0	0.0	0.
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.0
Delay/Veh: 5						129.9	22.2	0.0	52.2	0.0	0.0	0.
User DelAdj:			1.00			1.00		1.00		1.00		1.0
AdjDel/Veh:						129.9		0.0		0.0		0.
LOS by Move:			A	D			C			A		-
	67		0					0	12			

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2035 Cumulat											Page 1	
		1	evel C	f Ser	vice (Computa	tion E					
									ternati			
*********							****	****	*****	*****	****	****
Intersection												

Cycle (sec):		5	10			Critic	al Vol	L./Cap	p.(X): ec/veh) :		0.7	
Loss Time (s	ec):	1	.7			Averag	e Dela	sy (se	c/veh)	:	126	
Optimal Cycl	e:	9	0			Level	Of Ser	vice	:			F
*********		*****			*****		*****					****
Street Name:									Washing			
Approach:	NO.			Soi	oth Bo	ound	E		ound_		st Bo	
Movement:	L.	- т		L.	- т	- R	L.		- R		T	
		rotect		P					hase	SpJ	it Pi	ase
Rights:		Incl			Incl				ude	_	Inclu	ide
Min. Green:						0			33	. 0	Incl 0 4.0	
Y+R:						4.0			4.0			
Lanes:			0 0			1 0			0 1		0	
Volume Modul				1						1		
Volume Modul: Base Vol:		1043	0	7	1715	80	71	0	175	0	0	7
Growth Adi:					1.00	1.00	11-02-02/02/02/02/02	1.00		000 000	1.00	1.0
Initial Bse:			1.00		1715	80	71			1.00		1.0
Added Vol:					1/13	0	0			0		,
							Č			ő		
PasserByVol: Initial Fut:	455	1043	0		1715	80	71			۵		
User Adi:	1 00	1 00	1 00			1.00		1.00			1.00	
			1.00						1.00		1.00	
PHF Volume:					1715	80	71			0		
Reduct Vol:		0			0	ā	ō			ō		- 6
Reduced Vol:					1715	80	71			ō	0	- 1
PCE Adj:									1.00		1.00	1.0
MLF Adj:									1.00		1.00	
FinalVolume:					1715	80		0	175	a	0	
	1			1		1	1		1	1		
Saturation F	low M	odule										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Adjustment:	0.95	0.91	1.00	0.95	0.90	0.90	0.95	1.00	0.65	1.00	1.00	1.0
Lanes:					2.87			0.00	1.00	0.00	0.00	0.0
Final Sat.:					4921	230		0			0	
						I	1			1		
Capacity Ana												
Vol/Sat:		0.37	0.00	0.00		0.35		0.00	0.11	0.00	0.00	0.0
Crit Moves:		ter 9:00			****		****		30000000000			
Green/Cycle:					0.31	0.31		0.00	0.37	0.00		0.0
Volume/Cap:				0.03		1.12		0.00		0.00		0.0
Uniform Del:					31.0		18.8				0.0	0.
IncremntDel:					63.1	63.1	0.1	0.0	0.3	0.0		0.
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
Delay Adj:					1.00		1.00				0.00	0.0
Delay/Veh:			0.0		94.1	94.1	18.9			0.0	0.0	0.
User DelAdj:					1.00	1.00		1.00			1.00	
AdjDel/Veh:						94.1				0.0	0.0	0.
LOS by Move:			A O	0	P	£	В			A	A	
HCM2kAvgQ:	38	28	0	0	26	26	1	0	4	0	0	3

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$$\frac{cT = -19}{2035 = \times} = \frac{50}{14179}$$

No significant contribution

2035 Cumulative - Weekday AM

2035 Cumulati	Lve We	ekday	AM Tu	е Мау	31, 2	2011 10	:12:53				age l	19-1
			evel 0	f Serv	rice (Computa	tion F	leport				
1	2000 F								ernati	vel		
**********	*****	****	*****	****		*****	*****	****	*****	****		****
Intersection								****		****	****	****
Cycle (sec):		9	0			Critic	al Vol	/Car	. (X):		0.9	88
Loss Time (se	ec):	3	0			Averag	e Dela	y (se	c/veh)	:	82	2.4
Optimal Cycle	9:	16	15									F
		****	Embarc		****		*****	****	MIssi		*****	*****
Street Name:		B.			n.			n-			7.	
Approach: Movement:			ound - R			ound - R			ound - R		st Bo	- R
MOVEMENT:												
Control:						ted			nase		lit Ph	
Rights:		Inclu			Incl			Incl	ıde	-	Inclu	ıde
Min. Green:		52	O.			52			28		0	
Y+R:		4.0	4.0		4.0			4.0		4.0		
Lanes:		3				1 0			0 0			0 0
Volume Module				1		!	1		1	1		
Volume module Base Vol:		2321	0	D	1762	167	99	0	172	0	0	
Growth Adj:					1.00	1.00		1.00	1.00	200 0000000	2000 0 FF	1.00
Initial Bae:		2221	0		1762	167	99			1.00		1.00
Added Vol:	0	2321	0		0	0	0		0	0	0	
PasserRyVol -	0	0	0			ŏ	ő			0	0	
Initial Fut:	a	2321	á		1762	167	99			ō	0	100
User Adj:	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.0
PHF Adj:					0.93	0.93			0.93		0.93	
PHF Volume:					1895	180	106	0	185	0	0	- 1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	- 1
Reduced Vol:		2496			1895	180	106	0	185	0	0	
PCE Adj:									1.00			1.00
MLF Adj:		1.00			1.00	1.00			1.00		1.00	
FinalVolume:		2496	0		1895	180	106		185	. 0		
Saturation F												
Saturation r. Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				1.00				1.00			1.00	
Lanes:		3.00				0.18		0.00			0.00	
	0			0			623			0		
							1		1	1		
Capacity Ana:						N 400	NAME OF		0.00	121110000	WER 1980	1000 01
Vol/Sat:		0.71	0.00	0.00	0.58	0.58	0.17	0.00	0.17	0.00	0.00	0.0
Crit Moves:			0.00		0 5-	0 50		0 00	0.31	0.00	0.00	
Green/Cycle:			0.00		0.58	0.58		0.00	0.31		0.00	50 50
Volume/Cap:			0.00		1.00	1.00	25.6	0.00		0.00	0.00	0.0
Uniform Del: IncremntDel:			0.0		20.4	20.4	1.2		1.2	0.0		0.
InitQueuDel:				0.0		0.0	0.0				0.0	0.
Delay Adj:		1.00			1.00	1.00		0.00			0.00	
Delay/Veh:		125			39.4	39.4				0.00	0.0	0.0
User DelAdj:						1.00		1.00			1.00	
AdjDel/Veh:				0.0		39.4		0.0		0.0		
LOS by Move:			A.O			D		Α.		A. A		
HCM2kAvqQ:	ô					30	7		7	D		

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cT= -19

No significant contribution

2035 Cumulats				e nay							Page 2	
						Computa						
	2000	ICM Op	eratio	ns Met	hod	(Future	Volum	ne Alt	ernati	ve)		
	****	****	*****	*****	****	*****	****	****	*****	****	*****	
Intersection	#18 F	Embaro	adero	/ Hari	ison	St						
Cycle (sec):		10). (X):		1.0	
		10000	0						c/veh)			
Doss Time (se Optimal Cycle	ru i	1.0	10			Level				•	11.	F
obermar chere		10				rever	*****	. VILE	*****	*****	****	
Street Name:			Embaro						Harris			
Approach:	No	eth Bo	und		ith Br	ound	F.	st Bo			est Bo	nund.
Movement:		- T				- R			- R		- T	
Control:		Permit				ted			nase		lit Pi	
Rights:		Inclu			Incl		ψP1	Incl		J.	Inch	
Kights: Min, Green:		63	TOTE D		63		27			0		
Y+R:		4.0			4.0	4.0		4.0			4.0	
i+k: Lanes:			0 0		1 1				0 1		0 0	
banes:			· · · · ·	J								
Volume Module												4 4 4 4 4
Base Vol:		1872	D		1527	350	230	0	159	0	0	a
Growth Adj:		1.00			1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1872	0,00		1527	350	230	1.00	159	1.00	0	1.00
Added Vol:	0			0		330	230	1051	139	0	0	0
PasserByVol:		0			<u>`</u>		. 0		o	ŏ	ō	0
Initial Fut;		1872	0	7	1527		230		159	0	0	0
			1.00	1 02	1.00		1.00				1.00	1.00
PEF Adj:		0.93			0.93		0.93		0.93		0.93	0.93
PHF Volume:		2013			1642	376	247		171	0.93	0.93	0.93
Reduct Vol:		2013			0	3,0	247	0	171	a	ō	0
Reduced Vol:		2013			1642		247			0		0
PCE Ad1:			1.00		1.00				1.00			1.00
MLF Adj:		1.00			1.00		1.00				1.00	
FinalVolume:		2013	0		1642	376	247		171	0	0	0
ernaryordine.												
Saturation F.							19/1/2009/2005		oracli continua	or recessions		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.67	1.00	1.00	0.66	0.92	0.95	1.00	0.68	1.00	1,00	1.00
Lanes:			0.00	0.00	1.72	0.28	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:	0	2563	0	0	2143	491	1805	0	1292	0	0	0
				11		1	1		1	1		
Capacity Ana.	lysis	Modul	le:									
Vol/Sat:	0.00	0.79	0.00	0.00	0.77	0.77	0.14	0.00	0.13	0.00	0.00	0.00
Crit Moves:		****					****					
Green/Cycle:	0.00	0.63	0.00	0.00	0.63	0.63	0.27	0.00	0.27	0.00	0.00	0.00
Volume/Cap:				0.00	1.22	1.22	0.51	0.00	0.49	0.00	0.00	0.00
Uniform Del:	0.0	18.5	0.0	0.0	18.5	18.5	30.9	0.0	30.7	0.0	0.0	0.0
IncremntDel:	0.0	116	0.0	0.0	103	103.1	0.9	0.0	1.1	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:		135	0.0			121.6	31.8	0.0	31.8	0.0	0.0	0.0
User DelAdj:					1.00	1.00	1.00		1.00	1.00	1.00	1.00
AdjDel/Veh;		135				121.6		0.0	31.8	0.0		0.0
LOS by Move:			A			F		A	C	A		A
HCM2kAvgQ:	0		0		51	71	7	0	5	0	0	0

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$$\frac{(\Gamma = -10)}{2035} = \times \frac{15H7 = 32}{1877}$$
$$= 1.7\%$$

No significant contribution

2035 Cumulative - Weekel cay Aty

2035 Cumulat:											age 2	
		I	evel C	f Serv	rice C	omputa	tion F	Report				
	2000 H	ICM OF	eratio	ns Met	hod (Volum			ve)		
Intersection	#19 F	mbaro	adero	/ Brus	int St							
**********	*****	****	*****	*****	*****	****	*****	****	*****			****
Cycle (sec):		10	00			Critic	al Vol	./Cap	.(X):		1.9	18
Cycle (sec): Loss Time (se Optimal Cycle	ec):		0			Averag	e Dela	y (se	c/veh)	:	189	.4
optimal Cycle	e: *****	11	*****									
Street Name: Approach: Movement:	Non	th Bo	bund	Sou	th Bo	ound	Eé	st Bo	und	We	st Bo	ound
Movement:	L -	T	- R	L -	- Т	- R	L -	- Т	- R	L -	- т	- R
Control:	P:	ntect	J	P.		ed .	1	Pormit	ted		ermit	tod
Rights:	-	Inch	ide		Inclu	de		Inclu	de	÷.	Inch	ide
Control: Rights: Min. Green: Y+R: Lanes:	21	41	41	16	36	36	28	28	28	28	28	28
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes;	1 () 1	1 0	1 (2	0 1 .	. 0 1	. 0	0 1	, 0 (1!	0 0
Calina Badil			CONTRACTOR OF THE			10201A0000000000						
Base Vol:	144	1584	100	158	1487	42	256	240	327	199	90	63
Base Vol: Growth Adj: Initial Bse:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	144	1584	100	158	1487	42	256	240	327	199	90	63
Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduced Vol:	0	0	0	0	0	42 0	0	n D	n	n 0	a	
Initial Fut:	144	1584	100	158	1467	1 42	256	240	327	199	90	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	148	1633	103	163	1533	43	264	247	337	205	93	65
Reduct Vol:	148	1637	103	143	1522	47	264	242	227	205	0.7	
PCE Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PCE Adj; MLF Adj: FinalVolume:	148	1633	103	163	1533	43	264	247	337	205	93	65
							1			1		
Saturation F. Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:												
Lanes: Final Sat.:	1.00	1.88	0.12	1.00	2.00	1.00	0.52	0.48	1.00	0.56	0.26	0.18
Final Sat.:	1805	3365	212	1805	3610	1615	669	627	1615	178	81	56
Capacity Ana.				1			1			1		
Vol/Sat: Crit Moves:	0.08	0.49	0.49	0.09	0.42	0.03	0.39	0.39	0.21	1.15	1.15	1.15
Crit Moves:		****		***							****	
Green/Cycle:	0.21	0.41	0.41	0.16	0.36	0.36	0.33	0.33	0.33	0.33	0.33	0.33
Volume/Cap:	0.39	1.18	1.18	0.56	1.18	0.07	1.20	1.20	0.63	3.49	3.49	3.49
Uniform Del: IncremntDel: InitQueuDel: Delay Adj: Delay/Veh: User DelAdj:	0.7	29.5	29.5	38.8	32.0	0.1	100 0	109	28.4	1143	1147	1143
InitOueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Delay/Veh:	34.7	119	119.4	41.3	121	21.1	142.4	142	30.8	1177	1177	1177
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	34.1	119	119.4 F	91.3	121 F	21.1	142.4 F	142	30.B	11// F	1177	11/
LOS by Move: RCM2kAvgQ:	4	43	43	D 4	38		29	F 29	10		44	
Traffix 8.	0.0715	(c)	2008 0	owling	g Asso	c. Lic	ensed	to ES	A, SAN	FRANC	CISCO	
(1	ン・	-1C	, _		15	>	•	-			-	
	2,787											
<u>c</u> T	•				148	37						
					1 3/	1						
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1	Jo	51	gn!	Y(ON	U (.0.0		, .		- 4,730	.
		4	ノ									

Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)	
Intersection #20 Embarcadero / Brannan St	
Cycle (sec): 90	
Cycle (sec): 90	
Loss Time (sec): 11	
Street Name: Embarcadero South Bound East Bound West	14.2
Street Name: Embarcadero Brannan St Approach: North Bound South Bound East Bound West Movement: L - T - R	
Approach: North Bound	
Control: Protected Split Phase Split Rights: Include I	dound
Control: Protected Rights: Include Inc	- P
Volume Module: Base Vol: 10 1804 0 7 1725 290 251 0 37 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	hase
Volume Module: Base Vol: 10 1804 0 7 1725 290 251 0 37 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	lude
Volume Module: Base Vol: 10 1804 0 7 1725 290 251 0 37 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	3 2
Volume Module: Base Vol: 10 1804 0 7 1725 290 251 0 37 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	4.
Volume Module: Base Vol: 10 1804 0 7 1725 290 251 0 37 0 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	
Initial Bse: 10 1804 0 7 1725 290 251 0 37 0 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 PasserByVol: 10 1804 0 7 1725 290 251 0 37 0 Initial Fut: 10 1804 0 7 1725 290 251 0 37 0 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	1.0
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	,
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190)
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	1
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Saturation Flow Module: Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	1 1.0
Sat/Lane: 1900 1000 0.00 0.00 0.00 1100 0.00 1100 0.00 1100 1100 1900 <td></td>	
Capacity Analysis Module: Vol/Sat: 0.01 0.52 0.00 0.00 0.59 0.59 0.14 0.00 0.02 0.00 0.0 Crit Moves: *** Green/Cycle: 0.11 0.41 0.00 0.16 0.46 0.46 0.31 0.00 0.31 0.00 0.0 Volume/Cap: 0.05 1.25 0.00 0.03 1.29 1.29 0.46 0.00 0.08 0.00 0.0	1 101
Capacity Analysis Module: Vol/Sat: 0.01 0.52 0.00 0.00 0.59 0.59 0.14 0.00 0.02 0.00 0.0 Crit Moves: *** Green/Cycle: 0.11 0.41 0.00 0.16 0.46 0.46 0.31 0.00 0.31 0.00 0.0 Volume/Cap: 0.05 1.25 0.00 0.03 1.29 1.29 0.46 0.00 0.08 0.00 0.0	1.0
Capacity Analysis Module: Vol/Sat: 0.01 0.52 0.00 0.00 0.59 0.59 0.14 0.00 0.02 0.00 0.0 Crit Moves: *** Green/Cycle: 0.11 0.41 0.00 0.16 0.46 0.46 0.31 0.00 0.31 0.00 0.0 Volume/Cap: 0.05 1.25 0.00 0.03 1.29 1.29 0.46 0.00 0.08 0.00 0.0	0.0
Capacity Analysis Module: Vol/Sat: 0.01 0.52 0.00 0.00 0.59 0.59 0.14 0.00 0.02 0.00 0.0 Crit Moves: *** Green/Cycle: 0.11 0.41 0.00 0.16 0.46 0.46 0.31 0.00 0.31 0.00 0.0 Volume/Cap: 0.05 1.25 0.00 0.03 1.29 1.29 0.46 0.00 0.08 0.00 0.0	0
Vol/Sat: 0.01 0.52 0.00 0.00 0.59 0.59 0.14 0.00 0.02 0.00 0.0 0.00 0.00 0.00 0.00	
Green/Cycle: 0.11 0.41 0.00 0.16 0.46 0.46 0.31 0.00 0.31 0.00 0.0 Volume/Cap: 0.05 1.25 0.00 0.03 1.29 1.29 0.46 0.00 0.08 0.00 0.0	0.0
Volume/Cap: 0.05 1.25 0.00 0.03 1.29 1.29 0.46 0.00 0.08 0.00 0.0	-
IncremntDel: 0.1 120 0.0 0.0 136 136.0 0.6 0.0 0.1 0.0 0.	
	. o.
InitQueuDel: 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0.
Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 0.00 1.00 0.00 0.0	0.0
Delay/ven; 35.9 146 0.0 32.3 160 160.5 25.5 0.0 21.9 0.0 0.	J 0.
Adipel/Veh: 35.9 146 0.0 32.3 160 160.5 25.5 0.0 21.9 0.0 0.) 0.
LOS by Move: D F A C F F C A C A	X
LOS by Move: D F A C F F C A C A HCM2kAvgQ: 0 53 0 0 58 58 6 0 1 0)
Traffix 8.0.0715 (c) 2008 Dowling Assoc. Licensed to ESA, SAN FRANCISC	
(T= -10 15	
2013	
70A\ =	
0.4%	
No significant contribution	
in a to the antibution	
No SIGNIFICANT CONTINUE	
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2035 Cumulative Weekday AM

2035 Cumulat	ive Weekda									Page 2	3-1
											
	2000 HCM 0	Level 0 peratio							ve)		
*********			*****	****							****
Intersection											
Cycle (sec):					Critic						
Loss Time (s	ec):	10			Averag						
Loss Time (s Optimal Cycl	e:	95			Level	Of Ser	vice:				F
Street Name:											****
Approach:	North B	ound	Sou	th Bo	ound	Ea	st Bo	Howar ound - R	W	est Bo	und
Approach: Movement:	L - T	- R	L -	- T	- R			300		- T	
C	Drotos		I			J			[lie Di	
Control: Rights:	toted	ude	PI	Incl	ide	Spi	Incl	ide ide	Sp.	Inch	idse
Min. Green:		0	10	40	40	30	0	30	0	Inclu	0
Y+R:	4.0 4.0	4.0	4.D	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 0 3	0 0	1 (2	0 1	1 (1!	u D	0 1	0	0 0
Volume Modul	e:										
Base Vol:	281 2178		3	1672	259		0		0		
Growth Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: Added Vol:	281 21/6	0	0	16 /2	259	139	0	101	٥	^	
PasserByVol:		ō	ō	قحر	n ŏ	o	ō	0	ō	0	
Initial Fut:	281 2178	0	*	1672	259	139	0	101	0	U	
User Adj:	0.00 1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00 n 97	0.97	1.00
PHF Volume:	290 2245	0.57	3	1724	267	143	0.57	104	0.51	0.5	0.5
PHF Adj: PHF Volume: Reduct Vol: Reduced Vol:	0 0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	290 2245	0	3	1724	267	143	0	104	0		
Reduct Vol: Reduced Vol: PCE Adj: MLF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	290 2245	0	3	1724	267	143	0	104	0	0	
					1			1	1		
Saturation F Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88 0.56	1.00	0.88	0.88	0.43	0.81	1.00	0.74	1.00	1.00	1.0
Lanes:	1.00 3.00	0.00	1.00	2.00	1.00	1.39	0.00	0.61	0.00	0.00	0.00
Final Sat.:											
Capacity Ana						,			1		
Vol/Sat:	0.17 0.70	0.00			0.33			0.12	0.00	0.00	0.00
Crit Moves:			****			****					
Green/Cycle: Volume/Cap:											
Uniform Del:					22.7				0.0	0.0	0.
IncremntDel:				72.9		0.1		0.4	0.0	0.0	0.
InitQueuDel:			1.00			0.0		1.00	0.0		0.0
Delay Adj: Delay/Veh:	143.2 207	0.0	40.6					28.3		0.0	
User DelAdj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
AdjDel/Veh:			40.6					28.3			
LOS by Move: BCM2kAvgQ:						2		C 4	A 0		
Traffix 8.	0.0715 (c)	2008 0	owling	J Asso	oc. Lic	ensed	to E	SA, SAN	FRAN	CISCO	
(T=	- 10	l		56	١.						
		_	ì		<u>ー</u> こ						
2035	=										
			•	3.0	7.						

3.0%. No significant contribution

						2011 10						
						Computa						
	2000	HCM O	peratio	ons Met	hod i	Future	Volum	ne Alt	ernati	ve)		
******	****		*****	*****	****	*****	*****	****	*****	*****	****	*****
Intersection												
Cycle (sec):			90). (X):		1.	
Loss Time (se	201.		10						c/veh)		15	
Optimal Cycle		1	80						e, ven,			F
continut Cycle	****			****	****		*****	****				
Street Name;			Embaro						Folso			
Approach:			ound			ound			ound		est B	
Movement:		- T				- R			- R			- R
									1	1		
Control:		rotec			otect				lase			
Rights:		Incl			Inclu			Inclu			Incl	
Min. Green:		49			32						0	
Y+R:		4.0			4.0			4.0			4.0	
Lanes;			0 0			1 0			0 1	0 (
				I I :)	1		1	1		
Volume Module			120			22		-		020	-	
Base Vol:					1716	100 50000	477	0	153	0	0	
Growth Adj:								1.00	1.00		1,00	
Initial Bse:					1716	59	477		153	0	0	1.5
Added Vol:		0		0		0	0	0	0	0	0	0
PasserByVol:				0		- 0	0		0	0	0	
Initial Fut:					1716	59	477		153	1 00	1 00	
			1.00		1.00		1.00				0.95	1.00
PHF Adj:		0.95			0.95	0.95	0.95		0.95	0.95	0.95	
PRF Volume:		2085			1806	62	502 0	0	161	a	0	
Reduct Vol: Reduced Vol:					1806		502		161	0	ő	
						1.00			1.00		1.00	
PCE Adj: MLF Adj:			1.00				1.00		1.00		1.00	
		2085				62	502		161	0	0.00	
rinalvolume:												
Saturation F									•	N. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
	0.88	0.70	1.00	1.00	0.96	0.87	0.83	1.00	0.59	1.00	1.00	1.00
Lanes:	1.00	2.00	0.00	0.00	1.93	0.07	2.00	0.00	1.00	0.00	0.00	0.00
		2671		0		121	3152		1114	0		
				[]		I	I					
Capacity Ana					DV 05/41	We only	VII. (1970)	(0) 98777	en 1007/200	20.700.000.00	5: 10:10	1000000
Vol/Sat:	0.08		0.00		0.51	0.51		0.00	0.14	0.00	0.00	0.00
Crit Moves:		****		****			****	W 1990	60 300000	10/10/10/10/10	90 0000	8000000
Green/Cycle:					0.41			0.00	0.34		0.00	
Volume/Cap:		1.43			1.24	1.24		0.00	0.42		0.00	
Uniform Del:					26.5	26.5		0.0	22.6	0.0	0.0	
IncremntDel:						116.0			0.7	0.0	0.0	1000000
InitQueuDel:					0.0		0.0		0.0	0.0		
		1.00		0.00			1.00		1.00		0.00	
Delay/Veh:						142.5			23.3	0.0		
User DelAdj:						1.00	1.00		1,00		1.00	
AdjDel/Veh:			0.0	0.0		142.5		0.0	23.3		0.0	
LOS by Move:	D	F		A		F		A	C	A		
HCM2kAvgQ:	3	69	0	0	49	44	6	0	4	0	0	C

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$$\frac{CT = -10}{2035 = \frac{33+17 = 50}{1775}}$$

No Significant contribution

2035 Cumulative Weekday PM Tue May 31, 2011 10:40:16

Page 9-1

16						Computa				904		
	2000 F	HCM Op	eratio	ns Met	hod	(Future	Volum	ne Ali	ternativ	(e)		
Intersection	* / BI	*****	*****	ansome						****		
Cycle (sec):			0			Critic					0.8	
Loss Time (se			9						ec/veh):		40	
Optimal Cycle	e:		9			Level	Of Sea	rvice				D
*********	*****	*****			****	******	****	****			*****	*****
Street Name:	1400404	77774 1577		me St		10.00	200		Broadwa			o constant
Approach:		rth Bo				ound			bund		est Bo	
Movement:		- T				- R			- R		- T	
Control:	Sp.	lit Ph		Sp.		hase		Permi			Permit	
Rights:		Inclu		1/2	Incl			Incl			Incl	
Min. Green:	27			0				4.0	4.0	4.0		44
Y+R: Lanes:		4.0	1 0		4.0	0 0					0 0	
Lanes:		1 0							0 0			
Volume Module				1			1					
Base Vol:		301	40	0	0	0	104	720	o	n	950	110
Growth Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		301	40	1.00		1.00	104	720	0	0	950	110
Added Vol:	0		0	ő	Ď		204		ő	0	0	110
PasserByVol:		0	0		Ö		0		0		Ö	0
Initial Fut:		301	40	0	o	o	104			0	950	110
User Adj:		1.00			- 23	1.00		1.00				
PHF Ad1:		0.95	0.95		0.95	0.95		0.95				0.95
PHF Volume:	295	317	42	0			109	758	0		1000	116
Reduct Vol:	0		0	ō	ō	ō	0	0		ō	0	0
Reduced Vol:	295	317	42	0	0	0	109	758	0	0	1000	116
PCE Ad1:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	295	317	42	0	0	0	109	758	0	0	1000	116
Saturation F				1			t		I			
Sat/Lane:		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				1.00				1.00			0.99	
Lanes:		0.97			0.00			1.00			0.90	
Final Sat.:			215	0				1900		0	1679	194
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.20	0.20	0.20	0.00	0.00	0.00	0.10	0.40	0.00	0.00	0.60	0.60
Crit Moves:		****									****	
Green/Cycle:	0.34	0.34	0.34	0.00	0.00	0.00	0.55	0.55	0.00	0.00	0.55	0.55
Volume/Cap:	0.58	0,58	0.58	0.00	0,00	0.00		0.73			1.08	
Uniform Del:			21.8	0.0				13.5	0.0		18.0	18.0
IncremntDel:			0.8	0.0	0.0	0.0	0.1		0.0		53.3	
InitQueuDel:			0.0	0.0		0.0	0.0			0.0		0.0
Delay Adj:				0.00		0.00		1.00			1,00	
	22.6		22,6	0.0	0.0	0.0		16.0	0.0		71.3	
User DelAdj:			1.00	1,00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		22.6	22.6	0.0				16.0	0.0		71.3	71.3
LOS by Move:		C	C				A		A	A		E
BCM2kAvaO:	A	8	R	0	0	0	1	15	0	0	36	36

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2035 Cumulative - Weekday PM

2035 Cumulati												
						Comput-						
:	enna H					Computa (Future				ve)		
											****	•••
Intersection												
	*****			****	****						*****	***
Cycle (sec):			10						1. (X):		0.6	
Loss Time (se			9			Averag				:	11	
Optimal Cycle): 		15			Level						F
Street Name:			Batte						Broadw			
Approach:	Nor	th Bo	ound		th B	baue	E.	st Br	ound		est Bo	nun
Movement:			- R	1.	- T	- R			- R		- 1	
Control:			ase			hase						
Rights:		Inclu			Incl			Incl	ide		Inch	
Min. Green:	0	0	0			44	0	17	17		17	
Y+R:		4.0			4.0		4.0	4.0	4.0	4.0		
Lanes:			0 0			1 0			1 0		0 1	
			1	1		(1			1		
Volume Module			c		722	200		401	278		067	
Base Vol: Growth Adj:	1 00			63		209 1.00		1.00		1 00	853	
							1.00		276	44		1
Initial Bse: Added Vol:	0			0			Ö					
PasserByVol:			0				ō	ň		•		
Initial Fut:		0	0			209	0	481	278	44	B53	1
User Adj:								.00	1.00	1.00 0.98	1.00	J,
						0.98		0.98	0.98	0.98	0.98	0
PHF Volume:			0			213		491		45		
Reduct Vol:		0	0	0			0		0	0	O	
Reduced Vol:						213		491		45	870	
PCE Adj:						1.00				1.00		
MLF Adj:	1.00					1.00		1.00			1,00	
FinalVolume:			0			213		491	284	45		
				1						1		
Saturation F.				1000	1000	1900	1000	1000	1000	1900	1900	1
Sat/Lane:						0.91				0.92		
Adjustment: Lanes:						0.42		0.63			1.00	
Final Sat.:			0.00		2518				662		1900	
Capacity Ana												
Vol/Sat:	0.00	0.00	0.00	0.29	0.29	0.29	0.00	0.43	0.43	0.03	0.46	0
Crit Moves:					****						****	
Green/Cycle:								0.34			0.34	
Volume/Cap:						0.53		1.27		0.08		
Uniform Del:						11.5		26.5			26.5	
IncremntDel:			0.0	0.3					134.1	0.1	171	
InitQueuDel:				0.0					0.0			
						1.00					1.00	
Delay/Veh:	0.0	0.0	0.0	11.7	11.7	11.7			160.6		197	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	
AdjDel/Veh:	0.0	0.0	0.0	11.7	11.7				160.6	16.1		
LOS by Move: HCM2kAvgQ:	A 0							F 39		B		
								33	33	1	οU	

$$\frac{CT^{2}}{2035} = \frac{4}{759} = \frac{7}{853}$$

$$0.5\% \quad 0.8\%$$

No significant contribution

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2035 Cumulative - Weekday PM

2035 Cumulative Weekday PM Tue May 31, 2011 10:40:16

						Computa						
********						Future						
Intersection	€9 Em	barca	dero/	Beach	St /	Grant	St					
Cycle (sec):			5			Critic					0.6	
Loss Time (se			3			Averag					57	
Optimal Cycle						Level						E
**********				*****	****							
Street Name:			Embarc	adero			Bea	ach St	(EB)/	Grant	St (W	B)
Approach:	Nor	th Bo	und	Sou	th Bo	bnuc	Ee	st B	bund	We	st Bo	und
Movement:		r				- R					T	
	ı						1		1			
Control:	Spl	it Ph	ase	Spl	Lit PI	nase	Spl	lit P	nase	Spl	it Ph	ase
Rights:		Inclu			Incl			Incl			Inclu	
Min. Green:	17		17		26	0	0			19	19	19
Y+R;		4.0	4.0		4.0	4.0	4.0		4.0	4.0		
Lanes:		. 0		0 1		0 0			0 1		1!	
			1	1								
Volume Modul									700		7.0	
Base Vol: Growth Adi:		247	1.00	1.00	184	1.00	1.00	0	355 1.00	1.00	76	1,00
Initial Bse:			29		184	1.00	1.00	1.00	355	1.00	76	1.00
Added Vol:	341	0	29	0	104	a	0	0	222	10	0	0
PasserByVol;		o	0	D	0	o	0	0	0	ő	0	ŭ
Initial Fut:			29	5	184	ō	0	o	355	18	76	9
User Adj:	1.00						1.00		1.00	1.00		1.00
PHF Adi:	0.92		0.92	0.92		0.92	0.92		0.92	0.92		0.92
PHF Volume:	371	268	32	5	200	0	0	0	386	20	83	10
Reduct Vol:	0	0	0	0	0	O	0	0	0	0	0	0
Reduced Vol:	371	26B	32	5	200	0	0	0	386	20	83	10
PCE Adj:	1.00	1.00	1.00	1.00				1.00		1.00		1.00
MLF Adj:		1.00			1.00			1.00	1.00	1.00		1.00
FinalVolume:			32	5		0	0	0	386	20	E.B	10
				1		I	1		1			
Saturation F												
Sat/Lane:				1900				1900		1900		0.98
Adjustment: Lanes:			0.92	1.00	0.97			0.00	0.87	0.98		0.09
Final Sat.:			183		1848	0.00	0.00	0.00	1644		1373	163
ETHAT SAL.:												
Capacity Ana							1					
Vol/Sat:			0.17	0.11	0.11	0.00	0.00	0.00	0.23	0.06	0.06	0.06
Crit Moves:		****							****		****	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Green/Cycle:	0.17	0.17	0,17	0.26	0.26	0,00	0.00	0.00	0.26	0.19	0.19	0.19
Volume/Cap:		1.02	1.02	0.42		0.00		0.00	0.91	0.32	0.32	0.32
Uniform Del:			42.0	31.2		0.0		0.0	36.4	35.4		35.4
incremntDel:	14.3	40.8	40.8		0.6	0.0	0.0	0.0	23.7	0.5	0.5	0.5
InitQueuDel:	0.0	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0
Delay Adj:			1.00	1.00		0.00		0.00	1.00	1.00		1.00
Delay/Veh:	55.5		82.8		31.8	0.0	0.0	0.0	60.1		36.0	36.0
User DelAdj:				1.00		1.00		1.00	1.00	1.00		1,00
AdjDel/Veh:				31.8			0.0		60.1	36.0		36.0
LOS by Move:		200	F	73	¢	A	A			D		
HCM2kAvgQ:	16	16	16	6	6	0	0	0	16	3	3	3

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- 2 341 notal critical No significant contribution

2033 CUMUTACI	ve ne	exua									age 1	
de						Computa						
	000 F	ICM OF	peratio	ns Met	hod i	(Future	Volum	ne Alt	ernati	ve)		
*********									*****		****	
Intersection												
Cycle (sec):			96			Critic					0.5	
Loss Time (se	c) -		16			Averag						. B
Optimal Cycle			00			Level				•		D
********	****			*****							****	
Street Name:			Embaro	adero			North	Point	St (E	B) / Ke	arny	St (W
Approach:	Non	th Bo	bund	Sou	th Bo	ound	Ea	st Bo	ound	We	st Bo	bund
Movement:			- R			- R		T			- Т	
				1		1						
Control:	P	cotect	ed	E	ermit	tted	Spl	it Ph	ase	Spl	it Ph	lase
Rights:		Inclu			Inclu			Inclu			Inclu	
Min. Green:	16		0		24	24	20	20	20	20	20	20
Y+R:	4.0		4.0		4.0			4.0			4.0	
Lanes:			0 0			1 0			0 1			0 1
)			1	1		1			
Volume Module			_	-	***			360	1.0		36	
Base Vol:		571	0		496	63	21		1.00	1.00	26	1.00
Growth Adj:		571		1.00		1.00	1.00	269	1.00	22	26	1.00
Initial Bse:	197	5/1	0	2		6.5	21	269	0	0	26	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol: Initial Fut:			0		496	63	21	269	14	22	26	11
User Adj:			1.00		1.00		1.00		1.00			1.00
PHF Ad1:		0.95			0.95		0.95		0.95		0.95	0.95
PHF Volume:	207				522	66	22		15	23	27	12
Reduct Vol:	a	0		0	0	0	-0	0	0	0	0	Q
Reduced Vol:	207				522		22		15	23	27	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1,00	1,00
MLF Adj:			1,00					1.00	1.00	1.00	1.00	1.00
FinalVolume:		601	0		522	66	22	283	15	23	27	12
							ļ		1	1		
Saturation Fl												
Sat/Lane:		1900			1900			1900	1900			1900
Adjustment:		0.68			0.64				0.99		0.98	0.85
Lanes:		2.00			1.83				1.02		0.54	1.00
Final Sat.:		260D	0		2225			1704	1925		1007	1615
Capacity Anal				.,			1		,	,		
				0 22	0 23	0.23	0 17	0.17	0.01	0.03	0.03	0.01
Crit Moves:	4.11	****	0.00	0,23	V.23	0.23	U.1.	****	0.01	****	0.03	0.01
Green/Cycle:	0 14		0.00	0 30	0.30	0.30	0.20	0.20	0.20		0.20	0.20
Volume/Cap:					0.78	0.78	0.83		0.04		0.14	0.04
Uniform Del:						32.1	38.4		32.2		32.9	32.2
IncremntDel:			0.0		5.4	5.4			0.0	0.2		0.0
InitQueuDel:					0.0		0.0	0.0	0.0	0.0		0.0
Delay Adj:							1.00		1.00	1.00	1.00	1.00
Delay/Veh:				37.5		37.5		52.5	32.2		33.1	32.3
User DelAdj:							1.00		1.00	1.00	1.00	1.00
AdjDel/Veh:						37.5	52.5	52.5	32.2	33.1	33.1	32.3
LOS by Move:						D	D	D	C	C	C	C

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2035 Cumulative - Weekday PM

2035 Cumulative Weekday PM Tue May 31, 2011 10:40:16

2035 Cumulat	ive We	ekday	PM Tu	e May	31, 2	1011 10	:40:10				rage 1	. /-1
		1	evel 0	f Serv	rice (computa	tion F	Report				
	2000 1	ICM OF	eratio	ns Met	hod	Future	Volum	ne Alt	ernati	ve)		
			*****	*****	****	*****	****	****	*****	*****	****	*****
Intersection												
Cvcle (sec):		9	0			Critic	al Vol	L./Car	. (X):		0.5	736
Loss Time (s	ec):	1	7			Averag	e Dela	v (se	c/veh)	:	151	5
Optimal Cycl		12	4			Level	of Ser	vice				F
			*****	*****	****	*****		****	*****		*****	****
Street Name:			Embarc	adero					Broadw	ay St		
Approach:	No	th Bo	und	Sou	th Bo	ound	E	st Bo	ound	We	st Bo	bnuc
Movement:	L -	- т	- R			- R	L -	- Т	- R	L -	- т	- R
										1		
Control:	Pı	rotect	ed	Pr	otect	ed	Spi	Lit Pt	ase	Sp	Lit P	nase
Rights:		Inclu	ide		Incl	ıde	50.000	Inclu	ode	100,000	Ov1	
Min. Green:	16	37	0	7	28	28	29	0	29	D	0	0
Y+R:	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:		2		1 (1	1 0	1 (0 0	0 1	0 (0 0	0 0
										1		
Volume Modul	e:											
Base Vol:	573	1698	0	7	1294	104	91	0	422	0	D	- (
Growth Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	573	1698	0	7	1294	104	91	0	422	0	0	(
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	- (
PasserByVol:	0	0	0	0		0	0	0	0	0	0	- 4
Initial Fut:	573	1698	0	7(1294	104	91	0	422	0	0	- 4
User Adj:	1.00	1.00	1.00	1.00	1.00	1,00	1.00	1.00	1.00	1.00	1,00	1.00
PHF Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	573	1698	0	7	1294	104	91	0	422	0	0	(
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	
Reduced Vol:		1698	0		1294	104	91	D	422	Q	0	(
PCE Adj:		1.00			1.00	1.00		1.00	1.00		1.00	
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		1698	0		1294	104	91		422	0	0	C
				1			1		1	1		
Saturation F												2020
Sat/Lane:		1900			1900	1900		1900	1900		1900	
Adjustment:		0.95		0.95		0.94		1.00	0.85		1.00	
Lanes:		2.00		1.00		0.15		0,00	1.00		0.00	
Final Sat.:				1805		266	1805		1615	. 0	0	
							1			1		
Capacity Ana						0.30		0.00	0.00			0.00
Vol/Sat:	1.32	0.47	0.00	0.00	4.39	0.39	0.05	0.00	0.26	0.00	0.00	0.00
Crit Moves: Green/Cycle:		0 41	0.00	0.00	0.31	0.31		0.00	0.32	0 00	0.00	0.00
			0.00		1.26	1.26		0.00	0.32	0.00		0.00
Volume/Cap: Uniform Del:			0.0		31.0	31.0	21.8	0.00	28.0	0.00		0.0
Uniform Del: IncremntDel:			0.0			123.B	0.1	0.0	9.3	0.0	0.0	0.
InitQueuDel:			0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.
InitQueubel: Delay Adj:	1.00			1.00		1.00	1.00		1.00			0.0
Delay/Veh:				38.6		154.8	21.9		37.3	0.0	0.0	0.0
User DelAdj:			1.00			1.00		1.00	1.00			1.0
AdiDel/Veh:			0.0			154.8		0.0	37.3		0.0	
LOS by Move:									J, 13	A.u		
DOS DY MOVE: HCM2kAvqQ:			0	0		38	2		10			
	- 10		V	v	20	~=	4			u	บ	

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 $\frac{cT}{2035} = \frac{9}{1598} = \frac{-13+7=6}{1398}$ $0.5\% \qquad 0.4\%$

No significant conteibution

2						Computa						
						(Future					****	****
Intersection												
A	*****		0	*****	****	Critic				*****	0.6	
Cycle (sec): Loss Time (se			7						c/veh)		133	3/2/2
Coss Time (SE Optimal Cycle			4			Level				•	13.	F
obcinal cacre						DEAGT .	****	****		****		
Street Name:			Embaro					Þ	dashing	ton St		
Approach:	Nor	th Bo			th Be	bund	Ea	st Bo			st Bo	ound
Movement:			- R			- R			- R		T	
										1		
Control:	Pr	otect	ed	P	otec	ted	Spl	it P	nase	Spl	it P	ase
Rights:		Incli	ıde		Incli	ude		Incl	ıde		Inclu	ode
Min. Green:	12		0	10		0	33		33	0	0	
Y+R:		4.0	4.0		4.0			4.0	4.0	4.0		
Lanes:	1 0		0 0			1 0			0 1		0	
						1				1		
Volume Module					1504	1.73			2.47			
Base Vol:		2101	0		1634	133	170		1.00	1.00	0	
Growth Adj:		2101	1.00		1.00		170	1.00	247	1.00	1.00	1.0
Initial Bse:			-		1634	133	1/0	û	247	0	0	
Added Vol:	0	0		0	0	0	0	0	0	0	0	
PasserByVol: Initial Fut:					1634		170	0	247	Ö	0	
User Ad:			1.00			1.00	1.00		1.00			1.0
PHF Ad1:			1.00			1.00	1.00		1.00	1.00		1.0
PHF Volume:		2101	2.00		1634	133	170	0	247	0	0	
Reduct Vol:	0	D			0	0	0	ō	0	ŏ	ŏ	-
Reduced Vol:		2101			1634		170	ō	0.70	o	0	- 1
PCE Adj:							1.00				1.00	1.0
MLF Ad1:		1.00				1.00		1.00			1.00	1.0
FinalVolume:		2101	0	10	1634	133	170	0	247	0	0	
			:	11		1	I			1		-
Saturation F.												
Sat/Lane:			1900		1900			1900			1900	190
				0.95			0.95				1.00	1.0
Lanes:				1.00			1.00				0.00	0.0
	1805			1805		386	1805			. 0	0	
						1)	1		
Capacity Ana: Vol/Sat:		0.41		0.01	D 34	0.34	0.00	0.00	0.15	0.00	0.00	0.0
Crit Moves:	4.44	v. 11	0.00	0.01	4.44	0.34	4+++	4.40	0.13	0.00	V.00	0.0
Green/Cycle:		0.35	0.00	0.11		0.31		0.00	0.37	0.00	0.00	0.0
Volume/Cap:						1.11		0.00			0.00	0.0
Uniform Del:								0.0		0.0		0.
IncremntDel:							0.2	0.0		0.0		0.
InitQueuDel:					0.0	0.0	0.0			0.0		Õ.
				1.00			1.00				0.00	
Delay/Veh:				35.9			20.1			0.0		0.
User DelAdj:							1.00			1.00		
AdjDel/Veh:				35.9			20.1			0.0		0.
LOS by Move:							C		C	A		
HCM2kAvgO:	36		0				3		5	0	0	

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$$\frac{cT = 9}{2035 = 2101}$$
0.4%

No significant contribution

2035 Cumulatire - Neekday PM

Level Of Service Computation Report 2000 HOM Operations Nethod (Fibure Volume Alternative) 2000 HOM Op	Cumulative Weekday PM Tue May 31, 2011 10:40:16 Page 19-1	2035 Cumulative Weekday PM Tue May 31, 2011 10:40:16 Page 20-1	
E (resc)	Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative)	2000 RCM Operations Method (Future Volume Alternative)	
Second S	rsection #17 Embarcadero / Mission St	Intersection #18 Embarcadero / Harrison St	
Note Bound South Bound	e (sec): 90	Cycle (sec): 100 Critical Vol./Cap.(X): 1.070 Loss Time (sec): 10 Average Delay (sec/veh): 160.7 Optimal Cycle: 180 Level Of Service: F	
Total: Permitted Permitted Split Phase Split Flame Include Inc	oach: North Bound South Bound East Bound West Bound	Approach: North Bound South Bound Bast Bound West Bound	
Table 1			
Creent: 0 52 0 52 52 52 52 28 0 28 0 0 0 0 0 1 0 0 0 0	rol: Permitted Permitted Split Phase Split Phase	Control: Permitted Permitted Split Phase Split Phase	
Section Sect		Min. Green: 0 63 0 0 63 63 27 0 27 0 0	0
Wolling Module: Vol:			
reh Adj; 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		Volume Module:	- ;
Initial Base 3 2453 0 0 1777 197 180 0 97 0 0 0 0 0 0 0 0 0	· Vol: 3 2453 0 0 1777 197 180 0 97 0 0 0		-
March 0			10
Fersylvol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0
Hai Fut: 3 2453			0
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0
Volume: 3 2638 0 0 191 212 194 0 104 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	00
Second Vol. 0	Adj: 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93		
Reduced Vol. 3 2638			0
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0
Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0
Saturation Flow Module: Saturation Flow			
Intraction Flow Module:			
Lane: 1900 1900 1900 1900 1900 1900 1900 190		Saturation Flow Module:	I
Internate 0.66 0.57 1.00 1.00 0.60 0.90 0.92 1.00 0.00 1.00 1.00 1.00 1.00 1.00 1.0			۵۵
1 Sat.; 4 3264 0 0 3186 353 1140 0 614 0 0 0 0 Final Sat.; 9 2527 0 0 2117 484 1805 0 1292 0 0 120		Adjustment: 1.00 0.66 1.00 1.00 0.65 0.92 0.95 1.00 0.68 1.00 1.00 1.0	
Capacity Analysis Module: Capacity Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Analysis Ana			
**************************************		Final Sat.: 0 2527 0 0 2117 484 1805 0 1292 0 0	
: Moves: ****	city Analysis Module:	Capacity Analysis Module:	
Int/Cycle: 0.58 0.58 0.00 0.00 0.58 0.58 0.00 0.00			10
form Del: 19.0 19.0 0.0 0.19.0 19.0 19.0 25.7 0.0 25.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0		Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.0	00
Permit Del: 182, 7 183 0.0 0.0 30.5 30.5 1.2 0.0 1.2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0	ime/Cap: 1.40 1.40 0.00 0.00 1.04 1.04 0.55 0.00 0.55 0.00 0.00 0.00	Volume/Cap: 0.00 1.33 0.00 0.00 1.34 1.34 0.44 0.00 0.55 0.00 0.00 0.0	20
Consider Consider			
No. 1			
ly/Veh: 201.7 202 0.0 0.0 49.5 26.9 0.0 26.9 0.0 0.0 0.0 0.0 1.00 <th< td=""><td></td><td></td><td></td></th<>			
DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			
Del/Veh: 201.7 202 0.0 0.0 49.5 49.5 26.9 0.0 26.9 0.0 0.0 0.0 0.0 AdjDel/Veh: 0.0 170 0.0 0.0 175 175.3 30.9 0.0 33.1 0.0 0.0 by Move: F F A A D D C A C A A A LOS by Move: A F A A F F C A C A A			
by Move: FFAAD DCACAAA LOS by Move: AFAAFFCACAA			
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	Flagorish (Sept. 1997) 1997 1997 1997 1997 1997 1997 199		

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-1 -3119=-22

No sig. contribution

2035 C

..... Inters Cycle Loss T Street Арргоа Moveme Contro Rights Lanes Volume Base V Growth Initia Added Passer Initia User A PHF Vo Reduct Reduce PCE Ac MLF Ad Final\ Satura Sat/La Adjust Lanes Final Vol/Sa Crit N Green Volume Unifor InitQu Delay, User C AdjDe1

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CT= 9
2035 = 2453
0.4%
No significant contribution

5 of 6 2035 Cumulative - Weekday PM

Page 22-1

2035 Cumulat	W		y 111 1U		J., .		. 40.1	-			age.	
			Level 0							00000AV		
			peratio									
								••••		*****		*****
Intersection		• • • • •	• • • • • • •		• • • • •	• • • • • •						• • • • •
Cycle (sec):		10	00			Critic	al Vo.	1./Cap	p.(X):		1.	880
Loss Time (s			10						ec/veh)		12	5.7
Optimal Cycl		10	00						1			F
**********						* * * * * * *	*****	****			* * * * *	* * * * * *
Street Name:			Embaro			12	1933	165 (820)	Bryan		1000	5 59
Approach:			ound							W		
Movement:			- R			- R			- R		T	
Control:		roteci		P	rotect				tted		Permi	
Rights:		Incl			Incl			Incl		1000	Incl	
Min. Green:		41			36			28			28	
Y+R:			4.0			4.0		4.0			4.0	
Lanes:			10.			0 1			0 1		3 1!	
Walter Madel				1			1			1		
Volume Modul		1015		1.00	16.00		25		100	240		
Base Vol:		1815			1642	70	75				111	
Growth Adj:					1.00	1.00		1.00			1.00	
Initial Bse:		1815	12		1642		75	98	0.00	242	111	B3
Added Vol:	0		0	D			0	0		0		
PasserByVol:						70	75	98		0.00	111	3
Initial Fut: User Adi:	1.00		1.00		1642	10.0	832.50	1.00			1.00	
PHF Adj:		0.97			0.97			0.97			0.97	
PHF Volume:			12		1693	72	77		167	249		
Reduct Vol:		10,1	0	170		60000	, o	0	100000	249	114	11/17/17
Reduced Vol:			12		1693			101			114	
PCE Ad1:		1.00			1.00			1.00		1.00		
	1.00		1.00		1.00			1.00			1.00	
FinalVolume:			12		1693	72		101	167		114	
Saturation F				107					%			
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.95	0.95	0.95	0.85	0.74	0.74	0.85	0.61	0.61	0.61
Lanes:	1.00	1.99		1.00			0.43	0.57	1.00	0.56	0.25	0.19
Final Sat.:				1805				795		648		
	1		1	1			1			1		
Capacity Ana	lysis	Modu.	le:									
Vol/Sat:	0.13		0.52		0.47	0.04	0,13	0.13	0.10	0.38		0.38
Crit Moves:		****		****							****	
Green/Cycle:					0.38	0.38		0.31			0.31	
Volume/Cap:					1.25	0.12		0.40			1.23	
Uniform Del:					31.2	20.4		27.0	26.2		34.3	
IncremntDel:				1.1		0.1		0.6		123.6		123.6
InitQueuDel:			0.0	0.0		0.0	0.0	0.0		0.0	0.0	
Delay Adj:			1.00		1.00			1.00			1.00	
Delay/Veh:			136,4		149			27.6		157.9		157.9
User DelAdj:					1.00	1.00	1.00			1.00		
AdjDel/Veh;					149	20.5		27.6		157.9		157.9
LOS by Move:						c		C				
BCM2kAvgQ:	6	51	51	3	47	1	5	5	4	27	27	27

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CT= -1 -31

no sig. contribution

			Level C									
									ternati			
Intersection	#20 I	Embar	cadero	/ Bras	nan :	St						
**********	****			*****								
Cycle (sec):	92		90						p. (X):		0.1	
Loss Time (se			11						ec/veh)	:	17	
Optimal Cycle	:		90			Level	Of Ser	CVICE	:			F
Street Name:			Embaro							an St		
Approach:	No		ound		ich D	ound		ast B			est B	and.
Movement:			- R			- B			– R			- R
movement:												
Control:		rotec			rotect			lit P			lit P	
Rights:		Incl			Incl		-		ude		Incl	
Min. Green;	10			14		37	26			28		28
Y+R:		4.0			4.0	4.0		4.0			4.0	4.0
Lanes:		2			0 1				1 0		0 0	
Volume Module	e:											
Base Vol:	62	1983	D	31	1646	361	204	0	16	0	0	0
Growth Adi:	1.00	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	62	1983	0	31	1646	381	204	0	16	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	62	1983	0	31	1646	381	204	0	16	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				1,00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96		0.96	0.96	0.96	0.96	0.96
PHF Volume:	65	2066		32	1715	397	213	0	17	0		0
Reduct Vol:	0			0	0	0	0	0	0	0	0	0
Reduced Vol:		2066			1715	397	213	0		0	0	0
PCE Adj:			1.00		1.00			1.00			1.00	1.00
MLF Adj:		1.00			1.00	1.00		1.00			1.00	
FinalVolume:		2066	0		1715	397	213	0	17	0	0	0
									!	1		
Saturation F.		1900		1500	1900	1900	1400	1900	1900	1000	1900	1900
Sat/Lane: Adjustment:		0.95			0.92	0.92		1.00			1.00	
Lanes:		2,00			1.62			0.00			0.00	0.00
Final Sat.:		3610	0.00		2849	660				0.00	0.00	0.00
Capacity Ana	lysis	Modu	le:									
Vol/Sat:		0.57		0.02	0.60	0.60	0.12	0.00	0.01	0.00	0.00	0.00
Crit Moves:							****					
Green/Cycle:	0.11	0.41	0.00	0.16	0.46	0.46	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:	0.32	1.39	0.00	0.12	1.32	1.32	0.38	0.00	0.03	0.00	0.00	0.00
Uniform Del:	36.9	26.5	0.0	32.7	24.5	24.5	24.2	0.0	21.6	0.0	0.0	0.0
IncremntDel:			0.0	0.2		148.9	0.4	0.0		0.0	0.0	0.0
InitQueuDel:	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Delay Adj:		1.00			1.00	1.00		0.00	1,00		0.00	0.00
Delay/Veh:		207				173.4	24.6	0.0	21.6	0.0	0.0	0.0
User DelAdj:						1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:		207				173.4		0.0	21.6	0.0	0.0	0.0
LOS by Move:						F	C			A	A	A
HCM2kAvgQ:	2	69	0	1	62	62	5	0	0	0	0	0

2035 Cumulative Weekday PM Tue May 31, 2011 10:40:16

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CT= -1 -3

no stg. contribution

2035 Cumulative Weekday PM Tue May 31, 2011 10:40:16

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	2000 F					omputa Future			ernati	vel		
*********											****	****
Intersection												
Cycle (sec):		10	0			Critic	al Vol	L./Car	. (X):		0.5	71
Loss Time (se	ecl:	1	0			Averag	e Dela	v (se	c/veh)	:	135	. 7
Optimal Cycle	: :	15	В			Level (F
	****	****	*****	*****	****	*****	*****	****	******	****	***	****
Street Name:			Embarc	adero					Howard	d St		
Approach:	No	th Bo	und	Sou	ith Bo	und	E	ast Bo	bund	W	st Bo	band
Movement:	L -	- Т	- R	L ·	- т	- R	ւ .	- т	- R	L.	- т	- R
) 											
Control:	Pr	otect	ed	Pi	otect	ed	Sp	lic Ph	ase	Sp	it Ph	ase
Rights:		Inclu	de		Inclu	ide		Inclu	ıde		Inch	ide
Min. Green:	15	45	0	10	40	40	30	0	30	0	0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:	1 (3	0 0		2	0 1		1!		0 (0	0 0
	l		1			1				I		
Volume Modul	9:											
Base Vol:	162	2126	0	4	1507	362	323	0	217	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	162	2126	0	4	1507	362	323	0	217	0	0	0
Added Vol:	0	Đ	D	0	0	D	0	0	0	0	0	0
PasserByVol:	0	D	D	0	D	D	0	0	0	0	0	0
Initial Fut:	162	2126	D	4	1507	362	323	0	217	0	0	0
User Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
PHF Volume:	174	2286	0	4	1620	389	347	0	233	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	174	2286	0	4	1620	389	347	0	233	0	0	O
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	174	2286	0	4	1620	389	347	0	233	0	0	0
	1		1	1			I		1	1		
Saturation F	LOW MO	dule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.56	1.00	0.88	0.88	0.43	0.81	1.00	0.74	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	1.00	2.00	1.00	1.40	0.00	0.60	0.00	0.00	0.00
Final Sat.:	1679	3216	0	1679	3357	808	2167	0	837	0	0	0
			1	1		1	1		1	(
Capacity Ana												
Vol/Sat:	0.10		0,00	0.00	0.48	0.48		0.00	0.28	0.00	0.00	0.00
Crit Moves:		****		****			****					
Green/Cycle:	0.15	0.50	0.00	0.10	0.45	0.45	0.30	0.00	0.30	0.00	0.00	0.00
Volume/Cap:	0.69	1.42	0.00	0.03	1.07	1.07	0.53	0.00	0.93	0.00	0.00	0.00
Uniform Del:	40.3	25.0	0.0	40.6	27.5	27.5	29.2	0.0	34.0	0.0	0.0	0.0
IncremntDel:	8.0	193	0.0	0.1	45.3	67.4	0.5	0.0	20.3	0.0	0.0	0.0
InitQueuDel:	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Delay/Veh:	48.3	218	0.0	40.7	72.8	94.9	29.7	0.0	54.3	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:		218	0.0		72.8	94.9	29.7	0.0	54.3	0.0	0.0	0.0
LOS by Move:		F	A	D	£	F	c	A	D	A	A	A

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2035 Cumulatire - Weekday PM

2035 Cumulati				y							Page :	
			.evel (of Sec	dre f	Computa	tion !	d vones				
	non +					(Future				we i		
						*****					****	
Intersection	.44	mbaro	adero	/ Fols	om St							

Cycle (sec):			10			Critic	al Vol	L./Cac	. (x):		1.6	011
Loss Time (se	(c):	1	.0						c/veh)		15	4.3
Optimal Cycle			10			Level	Of Ser	vice:				F
		****		*****					*****	*****		
Street Name:			Embaro	cadero					Folso	m St		
Approach:	Nor	th Bo	und	Sou	th B	bnuc	E	st Bo	und	We	st Bo	ound
Movement;	L -	T	- R	L -	- Т	~ R	L ·	- T	- R	L.	T	- F
				1					(
Control:	Pr	otect	ed	Pr	otect	ted	Spl	lit Ph	ase	Sp	Lit P	ase
Rights:		Incl	ıde		Incl	ude	96	Inclu	ide	457	Incl	ode
Min. Green:	12					32	31		31	0	0	
Y+R;	4.0	4.0	4.0	4.0	4.0	4.0				4.0	4.0	4.
Lanes:	1 (2	0 0		1	1 0	2 (0 0	0 1	0 (0 0	0 0
				11]	1		1	1		
Volume Module									0.00	-		
Base Vol:		1934	0		1678	48	353		334	0	0	
Growth Adj:								1.00	1.00		1.00	1.0
Initial Bse:			0		1678	48	353		334	0	О	
Added Vol:	0	0	0			0	0	0	0	0	a	
PasserByVol:	0	0	0			0	0	0	٥	0	0	
Initial Fut:		1934	0	31.720	167B	48	353	O	334	0	a	
User Adj:				1.00					1.00		1,00	
PHF Adj:		0.93						0.93	0.93		0.93	
PHF Volume:		2080	0		1804	52	380		359	0	0	
Reduct Vol:	0		0			0	0	0	0	0	0	
Reduced Vol:			0		1804	52	380		359	0	1.00	
PCE Adj:				1.00		1.00			1.00		1.00	
MLF Adj:		1.00	1.00					1.00		1.00	1.00	
FinalVolume:						52	380	0	359			
Saturation F						1	1			1		
Sat/Lane:				1900	1000	1900	1000	1900	1900	1000	1900	196
Adjustment:	0.88			1.00				1.00	0.59		1.00	1.
Lanes:		2.00		0.00					1.00		0.00	0.1
Final Sat.:			0.00		3555				1114	0.00		٠.
Capacity Anal				53		12				3.53		
Vol/Sat:				0.00	0.51	0.51	0.12	0.00	0.32	0.00	0.00	0.0
Crit Moves:			0.00	****	0.51	v	****	0.00		0.00		
Green/Cycle:	0.12	0.54	0.00	0.00	0.42	0.42	0.34	0.00	0.34	0.00	0.00	0.0
Volume/Cap:		1.43				1.21		0.00	0.94		0.00	0.1
Uniform Del:			0.0	0.0		26.1	22.0	0.0	28.5	0.0	0.0	0
IncremntDel:						100.3		0.0	30.0	0.0		ō
InitQueuDel;					0.0	0.0	0.0		0.0	0.0		
Delav Adi:							1.00		1.00		0.00	
Delay/Veh:						126.4	22.2		58.6	0.0	0.0	0
User DelAdj:							1.00		1.00		1.00	
AdjDel/Veh:									58.6	0.0		
LOS by Move:			A				C		E	A		
HCM2kAvgQ:			0			41	4		14	0		

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cT = -1 -22+9=-13 no sig. contribute

2035 Cumulative - Saturday Midday

2035 Cumulati	rae Me	eekend	MIDTU	е мау	31, 2	2011 10			.		age :	
12						Computa				1000000		
,	2000	нсм ор	eratio	ns Met	hod !	Future	Volum	ne Alt	ernatı	A6)		
Intersection												
intersection										*****		
Cycle (sec):			75			Critic						720
Loss Time (se			13			Averag					150	
Optimal Cycle			1			Level					4.31	F
obcimal carre						Tever.	*****	*****	*****		****	
Street Name:			Embarc	adero			Bea	ch St	(EB)/	Grant	St (MB)
Approach:			ound		th Bo	ound			und		st Bo	
Movement:		- т				- R		- T				- R
Control:		lit Ph				nase		Lit P			it P	
Rights:	758	Inclu	ıde		Incle		385	Inclu	de	- 25	Incl	ude
Min. Green:	17	17		0		0	0			19	19	1
Y+R:	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.4
Lanes:	0		1 0			0 0			0 1			0 0
	1			1		1			1			
Volume Module												
Base Vol:	568	296	49		185	0	0		363	10		
Growth Adj:				1.00				1.00		1.00		
Initial Bse:		296	49	1377	185	0	0	0	363	10	61	1+
Added Vol:	0		0	0	0	D	D.		0	0	0	
PasserByVol:			0	0	0	0	0		0	0	0	
Initial Fut:		296	49		185	0	0		363	10	61	
User Adj:			1.00				1.00		1.00	1.00		
PHF Adj:		0.95			0.95			0.95		0.95		
PHF Volume:			52	0		0	0		382	11	64	
Reduct Vol:	0			0	0	0	0		0	0	0	
Reduced Vol:					195		0		362	11	64	
PCE Adj: MLF Adi:		1.00	1.00		1.00		1.00	1.00	1.00	1.00		
PinalVolume:					195	0		1.00	3B2	1.00		
Finalvolume:												
Saturation F				,			1			1		
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	190
			0.91			1.00		1.00				
Lanes:			0.14		1.00			0.00				
Final Sat.:			247		1900	0	0		1644		1398	
				1					1	1		
Capacity Ana	lysis	Modu.	le:									
Vol/Sat:	0.25	0.21	0.21	0.00	0.10	0.00	0.00	0.00			0.05	0.0
Crit Moves:	****				****				***	****		
Green/Cycle:				0,00	0.26	0.00		0.00	0.26	0.19		
Volume/Cap:				0.00		0.00		0.00	0.90	0.24		
Uniform Del:					31.0	0.0	0.0		36.3	34.9		
IncremntDel:					0.5	0.0	0.0		22.2		0.4	
InitQueuDel:					0.0	0.0	0.0		0.0		0.0	
				0.00		0.00		0.00	1.00	1.00		
Delay/Veh:			161.9	0.0		0.0	0.0			35.3		
User DelAdj:						1.00		1.00		1.00		
AdjDel/Veh:				0.0		0.0	0.0					
LOS by Move:			F	A		A	A		E	D		
HCM2kAvgQ:	45	24	24	0	5	0	0	0	15	2	2	

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$$\frac{CT}{2035} = \frac{13}{568} = 2.3\%$$
No significant contribution

	- -											
			Level (of Serv	rice (Computa	tion F	Report	 t			
	2000								ernati	ve)		
*******											****	****
Intersection												****
Cycle (sec):			96			Critic	al Vol	./Ca	. (X):		0.	931
	ari.		16						ec/veh)		15	
Loss Time (so Optimal Cyclo		11	30			Level				•		F
***********						*****	*****	****			****	
Street Name:				adero					t St (E			
Approach:			und			ound			ound		st B	
Movement:			- R	L ·	T	- R			- R			- R
Control:	•	rotect							hase			
Rights:	-	Incl			Incl			Incl		763	Incl	
Min. Green:	16		0		24			20		20		
Y+R:			4.0		4.0			4.0				
Lanes:			0 0			1 0			0 1		. 0	
Volume Module				100								
Base Vol:	154	856	0	2	377	193	26	172	54	79	35	1
Growth Adj:				1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.0
Initial Bse:			0		377	193	26	172	54	79	35	1
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	_ 0	0	0	0	0	0	
Initial Fut:		856	0	1.2	377	193	26	172	54	79	35	1
User Adi:			1.00	1.00	1.00	1.00	1.00	1,00	1.00	1.00	1.00	1.0
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.9
PHF Volume:	162	901	0	2	397	203	27	181	57	83	37	1
Reduct Vol:	0	0			0	0	0	0	0	0	0	
Reduced Vol:	162	901	0	2	397	203	27	181	57	83	37	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
MLF Adi:	1.00	1,00	1.00	1,00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
FinalVolume:	162	901	0	2	397	203	27	181	57	83	37	1
	1			1			1			I		
Saturation F	low M	odule	:	1055			100					
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	190
Adjustment:	0.95	0.40	1.00	0.86	0.36	0.86	0.96	0.96	0.96	0.97	0.97	0.4
Lanes:		2.00			1.64	0.35	0.12	0.76			0.31	
Final Sat.:		1534				582						
	i			11			11					
Capacity Ana	lysis	Modu	le:									
Vol/Sat:	0.09	0.59	0.00	0.35	0.35	0.35		0.13	0.03		0.07	0.0
Crit Moves:		****					****			****		
Green/Cycle:	0.18	0.44	0.00	0.26	0.26	0.26		0.20			0.20	
Volume/Cap:	0.50	1,34		1,35		1.35		0.65			0.33	
Uniform Del:				37.0		37.0		36.8			34.2	
IncremntDel:				170.5		170.5	3.6			0.5		
InitQueuDel:		0.0			0.0	0.0		0.0		0.0		
Delay Adj:	1.00	1.00		1.00		1.00		1.00			1.00	
Delay/Veh:	38.1	189	0.0	207.5		207.5					34.8	
User DelAdj:	1.00	1.00			1.00	1.00	1.00			1.00		
AdjDel/Veh:	38.1	189		207.5	208	207.5	40.3	40.3			34.8	
LOS by Move:	0	F								c	C	
HCM2kAvgQ:		29			16	37	7	7	1	3	3	

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No significant contribution

20F4-2035 Cumulatire - Saturday Midday

ZOJJ CHMUTAC	ve Weeken	MIDTO	е Мау	31, 2	011 10	:42:0	5 			age 1	L7-1
		Level C	f Serv	rice C	omputa	tion 1	Report	:			
	2000 RCM O	eratio	ns Met	hod (Future	Volui	ne Alt	ernati			
						*****	• • • • •		*****	****	
Intersection	********				*****				*****		
Cycle (sec):		90			Critic	al Vo	L./Car	3. (X):		0.8	329
Loss Time (se	(c);	17			Averag	e Del	ay (56	c/veh)	:	102	2.1
Cycle (sec): Loss Time (se Optimal Cycle	:	91			Level	Of Sea	rvice:				F
	********	******					*****		*****	*****	****
Street Name: Approach: Movement:		Embarc	adero					Broadw	ay St		
Approach:	North B	ound	501	ith Bo	und	E.	ast Bo	ound	We	est Bo	วนกณ์
Movement:	L - T	- R	ъ.	- Т	~ R	L.	- т	- R	ь -	• т	- R
					1						
Control: Rights: Min. Green: Y+R: Lanes:	Protec	red.	Pı	rotect	ea	Sp.	LIE P	nase	Spi	LLE P	iase
Kignes:	16 27	noe o	-	Incli	ae	20	Incli	age 30		OVI	
Vin. Green.	40 40	4 0	4.0	4 0	4.0	4.0	4.0	4.0	4.0	4 0	4
Lanes:	1 0 2	0 0	1 (1 1	1 0	1 1	0 0	0 1	n (1 0	n 0
		1	1-2		1	1		1	1	·	
olume Module											
Base Vol;			7	1153	91	116	0	340	0	0	
Growth Adj:	1.00 1.00	1.00								1.00	1.0
Initial Bse:	469 1628	0	7	1153	91	116	0	340	0	0	
dded Vol:	0 0	0	0	0	0	0	0	o	0	0	
Frowth Adj: Initial Bse: Added Vol: PasserByVol: Initial Fut: User Adj: PHF Adj: PHF Volume: Reduct Vol: Reduct Vol: Reduced Vol:	0 0	0	0	عين	-0-	0	0	0	0	0	
initial Fut:	469 1628	1 00		1153	91	116		340	1 00		
ser Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
our volume.	1.00 1.00	1.00	1.00	1253	1.00	1.00	1.00	240	1,00	1.00	1.0
aduct Moli	0 0	0	,	1113	31	710	0	340	0	0	
Reduced Vol:	469 1628	0	7	1153	91	116	o	340	0	0	
PCE Ad1:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
PCE Adj: MLF Adj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.0
FinalVolume:	469 1628	0	7	1153	91	116	0	340	0	0	
			1			1		1	1		
Saturation Fi											
Sat/Lane:	1900 1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	190
Adjustment:	0.95 0.95	1.00	0.95	0.94	0.94	0.95	1.00	0.85	1.00	1.00	1.0
Lanes: Final Sat.:	1.00 2.00	0.00	1.00	1.85	0.15	1.00	0,00	1,00	0.00	0.00	0.0
: Inal Sat.:	1805 3610	U .	1802	3303	201	1802		1615			
Capacity Anal			1			1		,	1		
Vol/Sat:			0.00	0.35	0.35	0.06	0.00	0.21	0.00	0.00	0.0
	****		-100	****		****			5.55		
reen/Cycle:		0.00	0.08	0.31	0.31	0.32	0.00	0,32	0.00	0.00	0.0
/olume/Cap:										0.00	
niform Del:	37.0 26.5	0.0	38.4	31.0	31.0	22.1	0.0	26.2	0.0	0.0	0.
ncremntDel:2		0.0	0.1	66.3	66.3	0.2	0.0	3.0	0.0	0.0	0.
nitQueuDel:	0.0 0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
elay Adj:	1.00 1.00	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.0
elay Adj: Delay/Veh: 1 Ser DelAdj: .djDel/Veh: 1 .OS by Move:	261.2 B1.1	0.0	38.6	97.3	97.3	22.3	0.0	29.2	0.0		
ser DelAdj:	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
oc by war.	GT.5 81.1	0.0	38.6	91.3	11.3	22.3	U. 0	29.2	0.0		
CM2kAvgQ;	30 , 31	A	ים	27	F 27	C 2	0	C 7	Α.	Ā	
Traffix 8.0											
								on, JAN	CARN		
(T =	123	<u>r</u>		13	+34	シバ	75				
25-	163	R		13	244						
127 -					4.1						
	=7					- 5					

Significant Contribution

2035 Cumulative Weekend MIDTue May 31, 2011 10:42:05 Page 18-1 ------Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) Intersection #16 Embarcadero / Washington St Cycle (sec): Critical Vol./Cap.(X): Loss Time (sec): Average Delay (sec/veh): Optimal Cycle: Level Of Service: openion alove: in peach of Delaice! Street Name: Embarcadero Washington St
 Approach:
 North Bound
 South Bound
 East Bound
 West Bound

 Movement:
 L - T - R
 L - T - R
 L - T - R
 L - T - R
 L - T - R
 East Bound West Bound Protected Split Phase Split Phase Control: Protected Rights: Min. Green: Lanes: Volume Module: 302 2025 Base Vol: 13 1432 131 102 0 133 Initial Bse: 302 2025 0 13 1432 131 102 0 133 0 0 Added Vol: 0 0 PasserByVol: 0 0 PasserByVol: 0 0 0 Initial Fut: 302 2025 0 0 0 0 0 0 0 0 0 0 0 13 1432 131 102 0 133 0 PHF Volume: 302 2025 0 13 1432 131 102 0 133 FinalVolume: 302 2025 0 13 1432 131 102 0 133 0 6 0 Saturation Flow Module: Adjustment: 0.95 0.91 1.00 0.95 0.90 0.90 0.95 1.00 0.85 1.00 1.00 1.00 Lanes: 1.00 3.00 0.00 1.00 2.75 0.25 1.00 0.00 1.00 0.00 0.00 Final Sat.: 1805 5187 0 1805 4690 429 1805 0 1615 0 0 0 -----||-----| Capacity Analysis Module: Vol/Sat: 0.17 0.39 0.00 0.01 0.31 0.31 0.06 0.00 0.08 0.00 0.00 0.00 Crit Moves: Crit Moves: **** **** **** **** Green/Cycle: 0.13 0.33 0.00 0.11 0.31 0.31 0.37 0.00 0.37 0.00 0.00 0.00 Volume/Cap: 1.25 1.17 0.00 0.06 0.98 0.98 0.15 0.00 0.22 0.00 0.00 0.00 Uniform Del: 39.0 30.0 0.0 35.8 30.7 30.7 19.1 0.0 19.7 0.0 0.0 0.0 IncremntDel:144.0 83.6 0.0 0.1 18.2 18.2 0.1 0.0 0.2 0.0 0.0 0.0 Delay Adj: 1.00 1.00 0.00 1.00 1.00 1.00 0.00 1.00 0.00 0.00 0.00 Delay/Veh: 183.0 114 0.0 36.0 48.9 48.9 19.2 0.0 19.9 0.0 0.0 AdjDel/Veh: 183.0 114 0.0 36.0 48.9 48.9 19.2 0.0 19.9 0.0 0.0 0.0 LOS by Move: F F F A D D D 15 15

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2035 = 127 = 126.
2035 = 2025
6.3%.
Significant Contribution
Impact

2035 Cumulative - Saturday Midday

	2022/2020											
			Level (of Ser	vice	Computa	tion	Popor				
1	2000					(Future				\		
*********	****	****	*****	*****	****	*****	*****	*****	******	****		
Intersection	#17	Embar	cadero	/ Mis	sion .	St						
Cvcle (sec):			90			Critic	al Vo	1./٢=	D (X) .		0	983
Loss Time (s	ecl:		10			Averag	e Del	av (9	ec/veh)		5	6 9
Cycle (sec): Loss Time (sec) Optimal Cycle	e :	1	59			Level	Of Se	rvice	:	•	,	0.5 E
********		****		*****	*****			*****		****		
Street Name:			Embaro	adero					MIssi	on St		
Approach:	No	rth B	ound	So	uth B	ound	E	ast B	ound	W	est B	ound
Movement:	L	- T	- R	L	- T	- R	L	- T	- R	L	- T	- R
				1		1	1			1		
Control:		Permi	tted	1	Permi	tted	5p	lit P	hase	Sp	lit P	hase
Rights:		Incl	ude		Incl	ude		Incl	ude	59676	Incl	ude
Control: Rights: Min. Green: Y+R:	0	52	0	52	52	52	28	0	28	0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.
Lanes:	0	0 3	0 0	0	0 2	1 0	0	0 1!	0 0	0	0 0	0 0
			1			!	1		1	1		
Volume Module		000000000000000000000000000000000000000	90									
Base Vol:						207		0		0		
Growth Adj:								1.00		1.00		
Initial Bse:	0	2133	0	0	1461		296	0	59		0	
Added Vol:		0						0		0		
PasserByVol:	0	0	Đ	0	0	0		0	0	0		
Initial Fut:	0	2133	0	0	1461	207				0		
User Adj:									1.00			
PHF Adj:	0.93	0.93	0.93	0.93	0.93	0.93						
PHF Volume:	U	2294	0	0	1571	223	318					
Reduct Vol: Reduced Vol:	0	2704	U	0	1521	707	0	0				
Meduced vol:	1 00	1.00	1 00	1 00	15/1	223				0	0	
PCE Adj: MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1,00	1.00	1.0
FinalVolume:	1.00	2294	1.00	1.00	1571	222	310	1.00	1.00			
		2234			1211	223	318	U	6.3	. 0	U	
Saturation F	ow M	ndu le		1		,	,			1		
Sat/Lane:				1900	1900	1900	1900	1900	1900	1000	2000	100
Adjustment:								1.00	0.94	1.00	1 00	1 0
Lanes:	0.00	3.00	0.00	0.00	2.74	0.26			0.17			0.0
Final Sat.:	0	3475	0	0	3114	441	1487	0	296	0.00	0.00	0.0
			1	1			1			1		
Capacity Anal	lysis	Modul	ie:							-		
Vol/Sat;	0.00		0.00	0.00	0.50	0.50	0.21	0.00	0.21	0.00	0.00	0.00
Crit Moves:							****					. nervalor
Green/Cycle:					0.58	0.58	0.31	0.00	0.31	0.00	0.00	0.00
Volume/Cap:						0.87	0.69	0.00	0.69	0.00	0.00	0.00
Uniform Del:						16.2	27.2	0.0	27.2	0.0		
IncremntDel:						4.5			3.6		0.0	
InitQueuDel:				0.0					0.0		0.0	0.0
Delay Adj:									1.00		0.00	0.0
Delay/Veh:						20.7	30.8		30.8		0.0	
Jser DelAdj:									1.00			
AdjDel/Veh:	0.0	89.5	0.0	0.0	20.7	20.7			8.0E			0.0
LOS by Move: HCM2kAvgQ:	A	F	A	A	C	C			C			
ALMAS PRIMO		3.4			14	21	10	0	10	0	0	

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CT = 127 =

2035 = 2133

6.0%

Significant Contribution

Impact

2035 Cumulative Weekend MIDTue May 31, 2011 10:42:05 ______ Level Of Service Computation Report 2000 HCM Operations Method (Future Volume Alternative) Intersection #16 Embarcadero / Harrison St ******************** Cycle (sec): 100 Critical Vol./Cap.(X): 10 Loss Time (sec): Average Delay (sec/veh): 100 Optimal Cycle: 100 Level Of Service: D Street Name: Embarcadero Harrison St Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R Permitted Permitted Control: Split Phase | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February | February Volume Module: 0 1416 0 Base Vol: 0 1244 335 214 0 78 Initial Bse: 0 1416 0 0 1244 335 214 0 -----|----|-----||-----||------| Saturation Flow Module: Lanes: 0.00 2.00 0.00 0.00 1.68 0.32 1.00 0.00 1.00 0.00 0.00 0.00 Final Sat.: 0 2527 0 0 2058 554 1805 0 1292 0 0 0 Final Sat.: 0 2527 0 0 2058 554 1805 0 1292 0 0 0 Capacity Analysis Module: Vol/Sat: 0.00 0.60 0.00 0.00 0.65 0.65 0.13 0.00 0.06 0.00 0.00 Crit Moves: Green/Cycle: 0.00 0.63 0.00 0.00 0.63 0.63 0.27 0.00 0.27 0.00 0.00 0.00 Volume/Cap: 0.00 0.96 0.00 0.00 1.03 1.03 0.47 0.00 0.24 0.00 0.00 0.00 Volumerrap: 0.0 17.2 0.0 0.0 18.5 18.5 30.5 0.0 28.5 0.0 0.0 0.0 10.0 Incremntbel: 0.0 13.6 0.0 0.0 30.7 30.7 0.7 0.0 0.4 0.0 0.0 0.0 0.0 AdjDel/Veh: 0.0 30.8 0.0 0.0 49.2 49.2 31.3 0.0 28.9 0.0 0.0 0.0 LOS by Move: A C A

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A D D 0 28 39

Page 24-1

2035 Cumulative Weekend MIDTue May 31, 20	11 10:42:05	10:42:05
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P.	an	23-

						Computa						
	2000	HCM OF	peratio	ns Me	thod	(Future	Volu	me Al	ternat:	ive)		
Intersection	#43 1	Embaro	cadero	/ How	ard S	t						
Cycle (sec):			10			Critic						829
Loss Time (s			10			Average						0.4
Optimal Cycl			95			Level (10	F F
********						reser .						
Street Name:			Embaro							rd St		
Approach:	No	rth Bo				bauo	F.	ast B			est B	ound
Movement:			- R			- R			- R			- R
Control:	P	rotect	ted	P	rotect	ted	Sp	lit P	hase	Sp	lit P	hase
Rights:		Incl	ude		Incl	ude	1000	Incl		359.	Incl	
Min. Green:	15	45	0	10	40	40	30	0	30	0	0	- (
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lanes:		0 3				0 1		0 11		0 1		0 0
			!	1			1			11		
Volume Modul												
Base Vol:		1944	0		1316	195	189		111	0		•
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
Initial Bse:		1944	0		1316	195	189	0	111	0	0	
Added Vol:	0		0	0		0	0	0	0	0	0	•
PasserByVol:			0	0		0	0	0	0	0	0	
Initial Fut:			0		1316	195	189	0	111	0	0	C
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:		0.93	0.93		0.93	0.93		0.93			0.93	
PHF Volume: Reduct Vol:	1/5		0	0	1415	210	203	0	119	0	6	0
Reduced Vol:		2090	0		1415	210	203	0	119	0		
PCE Ad1:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	
MLF Adj:		1.00	1.00		1.00	1.00		1.00	1,00		1.00	
FinalVolume:		2090	0		1415	210	203	0	119	0	1.00	1.00
Saturation F						200						
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.88	0.56	1.00	98.0	0.88	0.43	0.81	1.00	0.74		1.00	
Lanes:	1.00	3.00	0.00	1.00	2.00	1.00	1.44	0.00	0.56	0.00	0.00	0.00
Final Sat.:	1679	3216	0	1679	3357	808	2224	0	794	0	0	•
	1		1	 								
Capacity Ana												
Vol/Sat:	0.10		0.00		0.42	0.26		0.00	0.15	0.00	0.09	0.00
Crit Moves:		***		****		NV 8702	****					
Green/Cycle:			0.00		0.44	0.44		0.00	0.30		0.06	0.00
Volume/Cap:		1.30	0.00		0.95	0.59		0.00	0.50	0.00		0.00
Uniform Del:			0.0		26.9	21.0	27.0	0,0	28.8	0.0	0.0	0.0
IncremntDel:			0.0		13.7	2.5	0.2	0.0	0.6	0.0	0.0	0.0
InitQueuDel:			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Delay Adj:		1.00	0.00		1.00	1.00		0.00	1.00			
Delay/Veh:	45.8		0.0		40.5	23.5	27.1	0.0	29.5	0.0	0.0	0.0
User DelAdj;			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			0.0		40.5	23.5	27.1		29.5	0.0	0.0	0.0
LOS by Move:			A	D O		C 5	C	A	C	A	A	A
HCM2kAvgQ:	5	44	0	0	23	5	3	0	6	0	0	

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Traffix 8.0.0715 (c) 20.

CT = 127

1944

6.5%

Significant Contribution

Impact V

		1	Level C	f Ser	vice (Computa	tion	Repor	 t			
	2000	HCM O	peratio	ns Me	thod	(Future	Volu	me Al	ternati	ve)		
********	****	*****	*****	****	****	*****	****	****	* * * * * * *	****	****	****
Intersection												
**********				****								
Cycle (sec):		- 1	90						p.(X):			918
Loss Time (s		-	10						ec/veh)	:	7	5.9
Optimal Cycl		14	09			Leve1	Of Se	rvice	:			E
*********		* * * * *				*****	****	****	*****	*****	****	****
Street Name;			Embaro						Folso	m St		
Approach:		rth B				bnuc			ound	W	est B	bnuo
Movement:			- R		- т				- R			- R
Control:	P	rotect		P.	rotect				hase	Sp	lit P	
Rights:	1.0	Incl			Incl				ude	-	Incl	
Min. Green:	12		49	32			31			0		
Y+R:	4.0		4.0		4.0						4.0	
Lanes:	1 -					1 0			0 1			0 0
Volume Modul				1			1			1		
Base Vol:		1603	0	п	1374	74	500	0	172	0	0	
Growth Ad1:			1.00		1.00	1.00		1.00	1.00		1.00	
Initial Bse:		1603	0		1374	74	500		172	0		1.0
Added Vol:	100			ő		0	300			0		
PasserByVol:		0		0	Ö		. 0		ő	0		
Initial Fut:				r	1374	74	500		172	0	0	
			1.00	1.00			1.00				1.00	
PHF Adi:		0.93		0.93		0.93		0.93			0.93	
PHF Volume:		1724	0.93		1477	80	538	0.33	185	0.53		0.9
Reduct Vol:	200		0	0		0	338	o	183	0	0	
Reduced Vol:					1477	80	538	0		0	0	
PCE Ad1:			1.00		1.00			1.00			1.00	
MLF Adj:			1.00		1.00	1.00		1.00			1.00	
FinalVolume:		1724	1.00		1477	80	538		185	1.00		
e inalvolume;								0				(
Saturation F.										1		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				1,00				1.00			1.00	
Lanes:		2.00		0.00				0.00			0.00	0.00
Final Sat.:			0	0					1114	0		(
				1		i	1			1		
Capacity Anal												
	0.12	0.65	0.00	0.00		0.43	0.17	0.00	0.17	0.00	0.00	0.0
Crit Moves:	72772727		0.7000			62 2000		3000 20047	50 1000000			
Green/Cycle:						0.41		0.00	- 100 miles		0.00	0.00
Volume/Cap:								0.00			0.00	0.00
Uniform Del:			0.0		26.5			0.0	23.2	0.0	0.0	0.6
IncremntDel:								0.0		0.0	0.0	0.0
InitQueuDel:			0.0	0.0				0.0	0.0	0.0	0.0	0.6
Delay Adj:				0.00				0.00		0.00	0.00	0.0
	71.5		0.0	0.0	61.7	61.7	23.7	0.0	24.1	0.0	0.0	0.6
User DelAdj:			1.00			1.00		1.00		1.00	1.00	1.00
AdjDel/Veh:	71.5	111	0.0	0.0	61.7	61.7	23.7	0.0	24.1	0.0	0.0	0.6
LOS by Move:	E	F	A	A	E	E	c	A	C	A	A	7
HCM2kAvgO:	5	41	0	0	27	24		0	5		0	

2035 Cumulative Weekend MIDTue May 31, 2011 10:42:05

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SECTION 5

Transit Analysis Calculations

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San Francisco JRH Cruise Terminal at Pier 27

SF MUNI AND REGIONAL TRANSIT SCREENLINE ANALYSIS

Secondary Capacity Weekday A	M Peak Hour - Outbound fro	m Downtown			_			ANNUAL GR	OWTH RATE						oject	
Northwest Compress Comp	_					.										
Northwest Kearry/Stockton Condor 1.138 1.947 58% 1.310 1.094 77% 0.6% 0.6% 1.350 1.460 82% 3 0.2% 1.450 0.2%	Screenline	Location	Ridership	Capacity	Utilization	Ridership				Capacity	Ridership	Capacity	Utilization	Trips	lotal	Growth
All Other Lines 744			1 1100	4.017	500/					0.404	4.050	1 (10	000/	_	0.00/	4 10/
Substant	Northeast	,												-		
Northwest Cally Corridor 1,697 2,704 63% 2,419 2,828 86% 1,6% 0,2% 2,620 2,860 92% 2 0.1% 0.2% Callorial 1,598 2,351 68% 2,447 2,461 99% 2,0% 0,2% 2,700 2,490 108% 2 0.1% 0.2% 1,700 2,700 2,000									3.1%	0.8%						
California 1,598 2,351 6,8% 2,447 2,461 99% 2,0% 2,0% 2,700 2,490 108% 2 0.1% 0.2% 2,700 2,490 108% 2 0.1% 0.2% 2,700 2,490 108% 2 0.1% 0.2% 2,700 2,490 2,700 2,490 2,700 2,490 2,700 2,490 2,700 2,490 2,700 2																
Sutter/Clement 616	Northwest															
FultonHayes 992 1386 72% 1,296 1,638 79% 1,296 0,3% 0,8% 1380 1,700 81% 1 0,1% 0,3% 0,3% 0,0																
Balboa Boy 1,405 58% 870 1,405 62% 0.3% 0.0% 880 1,410 62% 1 0.1% 12%											-			'		
Chestnut/Union 1,722		3												1		
Subtotal 7,434														1		
Southeast Third Street 505 833 61% 2,598 2,856 91% 7.7% 5.8% 3,770 3,780 100% 1 0.0% 0.0% 0.0% Mission Street 1,221 1,880 65% 1,502 3,008 55% 0.9% 2,2% 1,570 3,350 47% 2 0.1% 0.6% 6.6% 1,602 1,788 2,208 2,632 84% 1.9% 1,5% 2,430 2,840 86% 2 0.1% 0.2% 2,840									0.3%	0.4%						
Mission Street 1,221 1,880 65% 1,502 3,008 50% 0,9% 2,2% 1,570 3,350 47% 2 0,1% 0,6% 50% 50% 50% 1,610 1,700 1,640 1,880 78% 2,208 2,632 84% 1,9% 1,5% 2,430 2,440 86% 2 0,1% 0,2% 1,000 1,610 1,700 1,000 1,610 1,700 1,000 1,000 1,610 1,700 1,000														8		
San Bruno/Bayshore	Southeast													1		
All Other Lines 1,062		Mission Street										3,350		2		
Subtotal 4,248 6,301 67% 7,802 70,197 77% 9,386 11,676 80% 7 0.1% 0.7%			1,460	1,880	78%	2,208		84%	1.9%		2,430	2,840		2		0.2%
Southwest Subway Lines Subway		All Other Lines	1,062	1,708	62%	1,494	1,701	88%	1.6%	0.0%	1,610	1,700	95%	2	0.1%	0.3%
Haight/Noriega 1,029 1,951 53% 1,289 1,512 85% 1.0% -1.2% 1,360 1,430 95% 1 0.0% 0.2% All Other Lines 248 560 44% 305 560 54% 0.9% 0.9% 0.0% 320 560 57% 0 0.0% 0.2% Subtotal 6,627 8,699 76% 8,055 10,045 80% 8,420 10,440 81% 4 0.0% 0.2% Total All SFMUNI Screenlines 20,191 30,218 67% 28,414 36,082 79% 31,300 38,140 82% 24 0.1% 0.2% REGIONAL SCREENLINES BART		Subtotal	4,248	6,301	67%	7,802	10,197	77%			9,380	11,670	80%	7	0.1%	0.1%
All Other Lines 248 560 44% 305 560 54% 0.9% 0.0% 320 560 57% 0 0.0% 0.2%	Southwest	Subway Lines	5,350	6,188	86%	6,461	7,973	81%	0.9%	1.2%	6,740	8,450	80%	3	0.0%	0.2%
Subtotal 6,627 8,699 76% 8,055 10,045 80% 8,426 10,446 81% 4 0.0% 0.2%		Haight/Noriega	1,029	1,951	53%	1,289	1,512	85%	1.0%	-1.2%	1,360	1,430	95%	1	0.0%	0.2%
Total All SFMUNI Screenlines 20,191 30,218 67% 28,414 36,082 79% 31,300 38,140 82% 24 0.1% 0.2%		All Other Lines	248	560	44%	305	560	54%	0.9%	0.0%	320	560	57%	0	0.0%	0.2%
BART		Subtotal	6,627	8,699	76%	8,055	10,045	80%	Ì		8,420	10,440	81%	4	0.0%	0.2%
East Bay BART 19,391 24,150 80% 31,641 29,400 108% 2.3% 0.9% 35,370 30,740 115% 10 0.0% 0.1%	Total All SFN	MUNI Screenlines	20,191	30,218	67%	28,414					31,300	38,140	82%	24	0.1%	0.2%
AC Transit 1,670 3,058 55% 8,664 5,500 158% 7.8% 2.7% 12,600 6,280 201% 1 0.0% 0.0% Ferries 667 1,186 56% 2,009 2,386 84% 5.1% 3.2% 2,580 2,800 92% 0 0.0% 0.0% 0.0% 0.0% 0.0% 0.0% 0.0%							REGIONA	AL SCREENLIN	ES							
Ferries 667 1,186 56% 2,009 2,386 84% 5.1% 3.2% 2,580 2,800 92% 0 0.0% 0.0%	East Bay	BART	19,391	24,150	80%	31,641	29,400	108%	2.3%	0.9%	35,370	30,740	115%	10	0.0%	0.1%
Subtotal Substal Sub		AC Transit	1,670	3,058	55%	8,664	5,500	158%	7.8%	2.7%	12,600	6,280	201%	1	0.0%	0.0%
North Bay GGT buses GGT ferries 1,510 2,655 57% 2,690 2,475 109% 2.7% -0.3% 3,070 2,440 126% 2 0.1% 0.1% GGT ferries 949 1,700 56% 1,690 1,700 99% 2.7% 0.0% 1,930 1,700 114% 1 0.1% 0.1% South Bay BART 10,841 16,800 65% 12,978 21,000 62% 0.8% 1.0% 13,520 22,090 61% 6 0.0% 0.2% Caltrain 2,128 3,250 65% 4,521 6,400 71% 3.5% 3.1% 5,370 7,470 72% 1 0.0% 0.0% SamTrans 686 1,060 65% 812 1,060 77% 0.8% 0.0% 840 1,060 79% 0 0.0% 0.0% Ferries 0% 154 300 51% 0.0% 0.0%		Ferries	667	1,186	56%	2,009	2,386	84%	5.1%	3.2%	2,580	2,800	92%	0	0.0%	0.0%
GGT ferries 949 1,700 56% 1,690 1,700 99% 2.7% 0.0% 1,930 1,700 114% 1 0.1% 0.1% 0.1% South Bay BART 10,841 16,800 65% 12,978 21,000 62% 0.8% 1.0% 13,520 22,090 61% 6 0.0% 0.2% Caltrain 2,128 3,250 65% 4,521 6,400 71% 3.5% 3.1% 5,370 7,470 72% 1 0.0% 0.0% SamTrans 686 1,060 65% 812 1,060 77% 0.8% 0.0% 840 1,060 79% 0 0.0% 0.3% Ferries 0% 154 300 51% 0.0% 0.0% 150 300 50% 0 0.0% 0.0% Subtotal 13,655 21,110 65% 18,465 28,766 64% 19,886 30,920 64%		Subtotal	21,728	28,394	77%	42,314	37,286	113%			50,550	39,820	127%	11	0.0%	0.0%
Subtotal 2,459 4,355 56% 4,380 4,175 105% 5,000 4,140 121% 3 0.1% 0.1% South Bay BART 10,841 16,800 65% 12,978 21,000 62% 0.8% 1.0% 13,520 22,090 61% 6 0.0% 0.2% Caltrain 2,128 3,250 65% 4,521 6,400 71% 3.5% 3.1% 5,370 7,470 72% 1 0.0% 0.0% SamTrans 686 1,060 65% 812 1,060 77% 0.8% 0.0% 840 1,060 79% 0 0.0% 0.3% Ferries 0% 154 300 51% 0.0% 0.0% 150 300 50% 0 0.0% 0.0% Subtotal 13,655 21,110 65% 18,465 28,760 64% 19,886 30,920 64% 8 0.0% 0.1% <td>North Bay</td> <td>GGT buses</td> <td>1,510</td> <td>2,655</td> <td>57%</td> <td>2,690</td> <td>2,475</td> <td>109%</td> <td>2.7%</td> <td>-0.3%</td> <td>3,070</td> <td>2,440</td> <td>126%</td> <td>2</td> <td>0.1%</td> <td>0.1%</td>	North Bay	GGT buses	1,510	2,655	57%	2,690	2,475	109%	2.7%	-0.3%	3,070	2,440	126%	2	0.1%	0.1%
South Bay BART 10,841 16,800 65% 12,978 21,000 62% 0.8% 1.0% 13,520 22,090 61% 6 0.0% 0.2% Caltrain 2,128 3,250 65% 4,521 6,400 71% 3.5% 3.1% 5,370 7,470 72% 1 0.0% 0.0% SamTrans 686 1,060 65% 812 1,060 77% 0.8% 0.0% 840 1,060 79% 0 0.0% 0.3% Ferries 0% 154 300 51% 0.0% 0.0% 150 300 50% 0 0.0% 0.0% Subtotal 13,655 21,110 65% 18,465 28,760 64% 19,886 30,920 64% 8 0.0% 0.1%		GGT ferries	949	1,700	56%	1,690	1,700	99%	2.7%	0.0%	1,930	1,700	114%	1	0.1%	0.1%
Caltrain 2,128 3,250 65% 4,521 6,400 71% 3.5% 3.1% 5,370 7,470 72% 1 0.0% 0.0% SamTrans 686 1,060 65% 812 1,060 77% 0.8% 0.0% 840 1,060 79% 0 0.0% 0.3% Ferries 0% 154 300 51% 0.0% 0.0% 150 300 50% 0 0.0% 0.0% Subtotal 13,655 21,110 65% 18,465 28,760 64% 19,880 30,920 64% 8 0.0% 0.1%		Subtotal	2,459	4,355	56%	4,380	4,175	105%			5,000	4,140	121%	3	0.1%	0.1%
SamTrans 686 1,060 65% 812 1,060 77% 0.8% 0.0% 840 1,060 79% 0 0.0% 0.3% Ferries 0% 154 300 51% 0.0% 0.0% 150 300 50% 0 0.0% 0.0% Subtotal 13,655 21,110 65% 18,465 28,760 64% 19,880 30,920 64% 8 0.0% 0.1%	South Bay	BART	10,841	16,800	65%	12,978	21,000	62%	0.8%	1.0%	13,520	22,090	61%	6	0.0%	0.2%
SamTrans 686 1,060 65% 812 1,060 77% 0.8% 0.0% 840 1,060 79% 0 0.0% 0.3% Ferries 0% 154 300 51% 0.0% 0.0% 150 300 50% 0 0.0% 0.0% Subtotal 13,655 21,110 65% 18,465 28,760 64% 19,880 30,920 64% 8 0.0% 0.1%	,	Caltrain	2,128	3,250	65%	4,521		71%	3.5%	3.1%		7,470	72%	1	0.0%	0.0%
Ferries 0% 154 300 51% 0.0% 0.0% 150 300 50% 0 0.0% 0.0% Subtotal 13,655 21,110 65% 18,465 28,760 64% 19,886 30,920 64% 8 0.0% 0.1%		SamTrans	686	1,060	65%	812		77%	0.8%	0.0%		1,060	79%	0	0.0%	0.3%
Subtotal 13,655 21,110 65% 18,465 28,760 64% 19,880 30,920 64% 8 0.0% 0.1%				,		-								0		
			13,655	21,110										8		
	Total All Rec		37,842	53,859	70%	65,159	70,221	93%			75,430	74,880	101%	22	0.0%	0.1%

Sources: SFMTA, SF Planning Department - 20010

Notes

SF MUNI utilization standard is 85% (vehicle capacity includes standees which represent 30% to 80% of seats, depending upon the configuration of the vehicle) BART utilization standard is 100% (vehicle capacity is 105 passengers per car)

For all regional transit operators except BART, the capacity is based on the number of seated passengers per vehicle

San Francisco JRH Cruise Terminal at Pier 27

SF MUNI AND REGIONAL TRANSIT SCREENLINE ANALYSIS

Weekday Pl	M Peak Hour - Outbound fro	m Downtown						ANNUAL GR	OWTH RATE					Pr	oject
		EXIS	STING CONDIT	IONS		YEAR 2030		2008 t	o 2030		YEAR 2035		Project	Contri	bution to
Screenline	Location	Ridership	Capacity	Utilization	Ridership	Capacity	Utilization	Ridership	Capacity	Ridership	Capacity	Utilization	Trips	Total	Growth
						SF MUN	I SCREENLINE:	S							
Northeast	Kearny/Stockton Corridor	1,129	2,010	56%	1,328	1,694	78%	0.7%	-0.8%	1,380	1,630	85%	1	0.1%	0.5%
	All Other Lines	757	1,589	48%	1,522	2,065	74%	3.2%	1.2%	1,780	2,190	81%	1	0.0%	0.1%
	Subtotal	1,886	3,599	52%	2,850	3,759	76%			3,160	3,820	83%	2	0.1%	0.2%
Northwest	Geary Corridor	1,684	2,230	76%	2,485	2,700	92%	1.8%	0.9%	2,710	2,820	96%	1	0.0%	0.1%
	California	1,413	2,050	69%	2,275	2,050	111%	2.2%	0.0%	2,540	2,050	124%	1	0.0%	0.1%
	Sutter/Clement	565	1,008	56%	849	945	90%	1.9%	-0.3%	930	930	100%	0	0.0%	0.1%
	Fulton/Hayes	861	1,260	68%	1,144	1,638	70%	1.3%	1.2%	1,220	1,740	70%	0	0.0%	0.1%
	Balboa	615	1,247	49%	647	1,326	49%	0.2%	0.3%	650	1,340	49%	0	0.0%	0.8%
	Chestnut/Union	1,483	2,328	64%	1,732	2,013	86%	0.7%	-0.7%	1,790	1,950	92%	1	0.0%	0.2%
	Subtotal	6,621	10,123	65%	9,132	10,672	86%			9,840	10,830	91%	3	0.0%	0.1%
Southeast	Third Street	554	714	78%	2,827	2,856	99%	7.7%	6.5%	4,090	3,910	105%	0	0.0%	0.0%
	Mission Street	1,254	2,350	53%	1,546	2,256	69%	1.0%	-0.2%	1,620	2,240	72%	1	0.0%	0.2%
	San Bruno/Bayshore	1,671	2,256	74%	2,492	3,008	83%	1.8%	1.3%	2,730	3,210	85%	1	0.0%	0.1%
	All Other Lines	1,189	1,708	70%	1,661	1,820	91%	1.5%	0.3%	1,790	1,850	97%	1	0.0%	0.1%
	Subtotal	4,668	7,028	66%	8,526	9,940	86%			10,230	11,210	91%	3	0.0%	0.1%
Southwest	Subway Lines	5,883	6,783	87%	7,364	7,973	92%	1.0%	0.7%	7,750	8,270	94%	2	0.0%	0.1%
	Haight/Noriega	1,247	2,140	58%	1,530	1,890	81%	0.9%	-0.6%	1,600	1,840	87%	0	0.0%	0.1%
	All Other Lines	304	700	43%	345	840	41%	0.6%	0.8%	360	880	41%	0	0.0%	0.1%
	Subtotal	7,434	9,623	77%	9,239	10,703	86%			9,710	10,990	88%	2	0.0%	0.1%
Total All SFN	MUNI Screenlines	20,609	30,373	68%	29,747	35,074	85%			32,940	36,850	89%	10	0.0%	0.1%
		•			•	REGIONA	L SCREENLINI	ES		•			•		
East Bay	BART	20,067	24,150	83%	27,749	29,400	94%	1.5%	0.9%	29,870	30,740	97%	4	0.0%	0.0%
	AC Transit	2,517	4,193	60%	7,740	6,600	117%	5.2%	2.1%	9,990	7,320	136%	1	0.0%	0.0%
	Ferries	702	1,519	46%	2,192	2,719	81%	5.3%	2.7%	2,840	3,100	92%	0	0.0%	0.0%
	Subtotal	23,286	29,862	78%	37,681	38,719	97%			42,700	41,160	104%	5	0.0%	0.0%
North Bay	GGT buses	1,397	2,205	63%	2,591	2,205	118%	2.8%	0.0%	2,980	2,210	135%	1	0.0%	0.0%
,	GGT ferries	906	1,700	53%	1,681	1,700	99%	2.8%	0.0%	1,930	1,700	114%	0	0.0%	0.0%
	Subtotal	2,303	3,905	59%	4,272	3,905	109%			4,910	3,910	126%	1	0.0%	0.0%
South Bay	BART	10,202	16,800	61%	11,321	21,000	54%	0.5%	1.0%	11,590	22,090	52%	3	0.0%	0.2%
•	Caltrain	1,986	3,250	61%	4,092	6,400	64%	3.3%	3.1%	4,820	7,470	65%	1	0.0%	0.0%
	SamTrans	575	940	61%	413	940	44%	-1.5%	0.0%	380	940	40%	0	0.0%	-0.1%
	Ferries			0%	76	300	25%	0.0%	0.0%	80	300	27%	0	0.0%	0.0%
	Subtotal	12,763	20,990	61%	15,902	28,640	56%			16,870	30,800	55%	4	0.0%	0.1%
Total All Red	ional Screenlines	38,352	54,757	70%	57,855	71,264	81%			64,480	75,870	85%	10	0.0%	0.0%

Sources: SFMTA, SF Planning Department - 20010

Notes

SF MUNI utilization standard is 85% (vehicle capacity includes standees which represent 30% to 80% of seats, depending upon the configuration of the vehicle) BART utilization standard is 100% (vehicle capacity is 105 passengers per car)

For all regional transit operators except BART, the capacity is based on the number of seated passengers per vehicle

AC34 MUNI TRANSIT ANALYSIS EXISTING CONDITIONS - PEAK HOUR CAPACITY BY SUBAREA

Existing Service	Week	day PM	Saturday Midday			
	Inbound	Outbound	Inbound	Outbound		
Presidio/Crissy/Marina						
22-Fillmore	504	504	378	378		
28-19th Avenue	315	315	315	315		
30-Stockton *	312	312	410	410		
43-Masonic	315	315	252	252		
45-Union-Stockton	315	315	441	441		
47-Van Ness *	378	378	378	378		
49-Van Ness-Mission	<u>752</u>	<u>752</u>	<u>564</u>	<u>564</u>		
subtotal	2,891	2,891	2,738	2,738		
		<i>5,782</i>		5,475		
Fisherman's Wharf						
8X-Bayshore Express	504	504	504	504		
8BX-Bayshore "B" Exp	0	504	0	0		
19-Polk	252	252	252	252		
30-Stockton *	633	633	410	410		
47-Van Ness *	378	378	378	378		
F-Market	700	770	630	630		
PH Cable Car (60)	504	504	473	473		
PM Cable Car (59)	504	504	473	473		
subtotal	3,475	4,049	3,119	3,119		
24210141	5, 1, 5	7,524	3,223	6,237		
The Embarcadero		7,32 1		0/237		
C Cable Car (61)	504	504	378	378		
N-Judah	1,071	1,071	714	714		
J-Church	833	714	714	476		
K-Ingleside/T-Third	714	833	595	595		
L-Taraval	714 748		714	714		
		833				
M-Ocean View	833	714	595	595		
1-California	1,071	1,071	504	504		
1AX-California A Exp	0	189	0	0		
1BX-California B Exp	0	252	0	0		
2-Clement	315	315	189	189		
5-Fulton	567	504	441	441		
6-Parnassus	315	378	315	315		
9-San Bruno	315	315	252	252		
9L-San Bruno Limited	315	315	0	0		
10-Townsend	189	189	189	189		
12-Folsom-Pacific	189	189	189	189		
14-Mission	504	441	378	378		
14X-Mission Express	0	441	0	315		
14L-Mission Limited	441	504	315	0		
21-Hayes	378	378	252	252		
30X-Marina Express	0	504	0	0		
31-Balboa	315	315	189	189		
38-Geary	1,034	752	752	752		
38L-Geary Limited	693	630	504	504		
41-Union	0	441	0	0		
71/71L-Haight-Noriega	378	693	315	315		
82X-Levi Plaza Exp				0		
•	<u>0</u> 11 722	<u>252</u> 12 727	<u>0</u> 9 404			
subtotal	11,722	13,737 25,450	8,494	8,256		
Transura Island		25,459		16,750		
Treasure Island 108-Treasure Island	252	252	189	189		
subtotal	232	504	109	378		
Subiolai	10 240	l.	14 520			
Nata	18,340	20,929	14,539	14,301		

Notes:

Per LCW discussion with Julie Kirschbaum and Peter Straus on 6-28-11, agreed to compromise on where to place the 30X, 30 and 47 lines

For 30X, no change because only serves outbound in $\ensuremath{\mathsf{PM}}$

For 30 - Long line trips assigned to Presidio, etc, and Short Line trips to FW Turns out to be 33% Presidio 67% FW for weekday PM, and 50/50 for weekend

For 47 - split 50/50 between Presidio and FW

AC34 MUNI TRANSIT ANALYSIS EXISTING CONDITIONS - PEAK HOUR RIDERSHIP BY SUBAREA

Inbound Inbo	Existing Service	Week	day PM	Saturday	-
22-Fillmore 360 384 246 210 28-19th Avenue 235 220 240 235 30-Stockton* 243 203 325 416 43-Masonic 170 240 184 164 45-Union-Stockton 220 245 322 378 47-Van Ness* 144 120 138 129 49-Van Ness-Mission 408 408 372 270 3.600 3.629 Fisherman's Wharf 8X-Bayshore Express 456 312 379 534 588X-Bayshore "B" Exp 0 568 0 0 0 19-Polk 176 140 156 120 30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 129 128 129 129 128 129 12			Outbound	Inbound	Outbound
28-19th Avenue 235 220 240 235 30-Stockton* 243 203 325 416 43-Masonic 170 240 184 164 45-Union-Stockton 220 245 322 378 47-Van Ness* 144 120 138 129 49-Van Ness-Mission 408 408 372 270 3,600 3,629 270 3,629 270 3,600 3,629 270 27	· •			2.4	2.4.0
30-Stockton*					
43-Masonic 170			_		
45-Union-Stockton 220		_			
47-Van Ness* 144 120 138 129 49-Van Ness-Mission 408 408 372 270 Fisherman's Wharf 8 3,600 1,827 1,802 3,629 Fisherman's Wharf 8 8 3,600 3,629 Fisherman's Wharf 8 8 3,600 3,629 8N-Bayshore Express 456 312 379 534 8BX-Bayshore "B" Exp 0 568 0 0 19-Polk 176 140 156 120 30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (61) 438 380 288 396 Subtotal 2,811 3,309 2,339 2,330 C Cable Car (61) 194 390 161 1			_	_	
Age		_	_		
Subtotal 1,780 1,820 1,827 1,802 Fisherman's Wharf 8X-Bayshore Express 456 312 379 534 8BX-Bayshore "B" Exp 0 568 0 0 19-Polk 176 140 156 120 30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 subtotal 2,811 3,309 2,339 2,380 - Laure 6,120 4,719 4719 The Embarcadero C Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753					
Fisherman's Wharf 8X-Bayshore Express					
Fisherman's Wharf 8X-Bayshore Express 456 312 379 534 8BX-Bayshore Express 0 568 0 0 0 19-Polk 176 140 156 120 30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 396 328 328	subtotal	1,780		1,827	•
8X-Bayshore Express 456 312 379 534 8BX-Bayshore "B" Exp 0 568 0 0 19-Polk 176 140 156 120 30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 subtotal 2,811 3,309 2,339 2,380 6,120 4719 438 380 288 396 Subtotal 2,811 3,309 2,339 2,380 6 L7aclaifonal 471 857 280 260 14719 148 390 161 182 180 260 138 180 260 14719 148 14719 14719 14719 14719 14719 14719	Fish summer to Wiles of		3,600		3,629
8BX-Bayshore "B" Exp 0 568 0 0 19-Polk 176 140 156 120 30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 subtotal 2,811 3,309 2,339 2,380 Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 1-California 561 884 416 368 1AX-California B Exp		456	212	270	E24
19-Polk 176 140 156 120 30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 subtotal 2,811 3,309 2,339 2,380 6,120 4,719			_		
30-Stockton* 492 412 325 416 47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 subtotal 2,811 3,309 2,339 2,380 6,120 4,719 The Embarcadero C Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 1-California 561 884 416 368 1AX-California B Exp 0 120 0 0 1BX-California B Exp 0 160 0 0 1BX-California B Exp 0 160 0 0 1BX-California B Exp 0 160 0 0 2-Clement 180 275 150 108 5-Fulton 351 408 357 350 6-Parnassus 130 240 150 205 9-San Bruno 190 230 256 188 9L-San Bruno Limited 120 205 0 0 10-Townsend 186 180 123 93 12-Folsom-Pacific 123 99 141 87 14-Mission Limited 273 384 350 0 21-Hayes 156 276 148 124 30X-Marina Express 0 462 0 245 14L-Mission Limited 273 384 350 0 21-Hayes 156 276 148 124 30X-Marina Express 0 416 0 0 31-Balboa 165 230 135 123 38-Geary 528 472 584 384 38L-Geary Limited 605 720 472 496 41-Union 0 329 0 0 71/71L-Haight-Noriega 240 562 265 335 82X-Levi Plaza Exp 0 128 0 0 71/71L-Haight-Noriega 240 562 265 335 82X-Levi Plaza Exp 0 128 0 0 71/71L-Haight-Noriega 240 562 265 335 82X-Levi Plaza Exp 0 128 0 0 71/71-Haight-Noriega 240 562 265 335 82X-Levi Plaza Exp 0 128 0 0 8ubtotal 252 135					-
47-Van Ness* 144 120 138 129 F-Market 635 933 693 359 PH Cable Car (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 subtotal 2,811 3,309 2,339 2,380 C Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 1-California 561 884 416 368 1AX-California A Exp 0 120 0 0 1BX-California B Exp 0 160 0 0 2-Clement 180 275 150 108 5-Fulton			_		
F-Market (60) 469 444 360 427 PM Cable Car (59) 438 380 288 396 subtotal 2,811 3,309 2,339 2,380 4,719 The Embarcadero C Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 I-California 561 884 416 368 IAX-California B Exp 0 120 0 0 IBX-California B Exp 0 160 0 0 IBX-California B Exp 0 160 0 0 IBX-California B Exp 0 160 0 0 IBX-Galifornia B Exp 0 160 0 0 IBX-Galifornia B Exp 0 150 205 S-San Bruno 190 230 256 188 S-Fulton 351 408 357 350 G-Parnassus 130 240 150 205 S-San Bruno 190 230 256 188 ILX-Folsom-Pacific 123 99 141 87 I-A-Mission 1304 371 342 282 IAX-Mission Express 0 462 0 245 IAX-Mission Express 0 462 0 245 IAX-Mission Limited 273 384 350 0 21-Hayes 156 276 148 124 30X-Marina Express 0 416 0 0 31-Balboa 165 230 135 123 38-Geary 528 472 584 384 38L-Geary 152 240 562 355 Subtotal 6,054 10,796 5,247 4,497 16,849 9,744 Treasure Island 108-Treasure Island					
PH Cable Car (60)					
PM Cable Car (59)					
Subtotal 2,811 3,309 2,339 2,380 The Embarcadero C Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 1-California 561 884 416 368 1AX-California A Exp 0 120 0 0 1BX-California B Exp 0 160 0 0 2-Clement 180 275 150 108 5-Fulton 351 408 357 350 6-Parnassus 130 240 150 205 9-San Bruno 190 230 256 188 9L-San Bruno Limited 120 205 0 0					
The Embarcadero C Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 1-California 561 884 416 368 1AX-California A Exp 0 120 0 0 1BX-California B Exp 0 160 0 0 1BX-California B Exp 0 160 0 0 2-Clement 180 275 150 108 5-Fulton 351 408 357 350 6-Parnassus 130 240 150 205 9-San Bruno 190 230 256 188 9L-San Bruno Limited 120 205 0 0 10-Townsend 186 180 123 93 12-Folsom-Pacific 123 99 141 87 14-Mission Express 0 462 0 245 14L-Mission Limited 273 384 350 0 21-Hayes 156 276 148 124 30X-Marina Express 0 416 0 0 31-Balboa 165 230 135 123 38-Geary 528 472 584 384 38-Geary 1528 472 584 384 38-Geary 1528 472 584 384 38-Geary 1528 472 584 384 38-Geary Limited 605 720 472 496 41-Union 0 329 0 0 71/71L-Haight-Noriega 240 562 265 335 82X-Levi Plaza Exp 0 128 0 0 51-Ressure Island 136 116 84 51 51 500 500 500 500 500 500 500 500 500 5	` '				
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C Cable Car (61) 194 390 161 182 N-Judah 471 857 280 260 J-Church 207 470 202 90 K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 1-California 561 884 416 368 1AX-California A Exp 0 120 0 0 1BX-California B Exp 0 160 0 0 2-Clement 180 275 150 108 5-Fulton 351 408 357 350 6-Parnassus 130 240 150 205 9-San Bruno 190 230 256 188 9L-San Bruno Limited 120 205 0 0 10-Townsend 186 180 123 93 12-Folsom-Pacific 123 99 141 87 14-Mission Express 0 462 0 245 14L-Mission Express 0 462 0 245 14L-Mission Limited 273 384 350 0 21-Hayes 156 276 148 124 30X-Marina Express 0 416 0 0 31-Balboa 165 230 135 123 38-Geary 528 472 584 384 38L-Geary Limited 605 720 472 496 41-Union 0 329 0 0 71/71L-Haight-Noriega 240 562 265 335 82X-Levi Plaza Exp 0 128 0 0 51-Rasure Island 136 116 84 51 5ubtotal	The Embarcadero		0,120		4,719
N-Judah J-Church J-Church J-Church J-Church J-Church J-Church J-Church J-Church J-Church J-Church J-Church J-Church J-Church J-Cap K-Ingleside/T-Third J-Cap J-Church J-Cap M-Ocean View J-Cap M-Ocean View J-California J-Califo		194	390	161	187
J-Church					_
K-Ingleside/T-Third 550 753 244 217 L-Taraval 204 664 258 179 M-Ocean View 317 512 213 181 1-California 561 884 416 368 1AX-California A Exp 0 120 0 0 1BX-California B Exp 0 160 0 0 2-Clement 180 275 150 108 5-Fulton 351 408 357 350 6-Parnassus 130 240 150 205 9-San Bruno 190 230 256 188 9L-San Bruno Limited 120 205 0 0 10-Townsend 186 180 123 93 12-Folsom-Pacific 123 99 141 87 14-Mission Express 0 462 0 245 14L-Mission Express 0 462 0 245 14L-Mission Limited 273 384 350 0 21-Hayes 156 276 148 124 30X-Marina Express 0 416 0 0 31-Balboa 165 230 135 123 38-Geary 528 472 584 384 38L-Geary Limited 605 720 472 496 41-Union 0 329 0 0 71/71L-Haight-Noriega 240 562 265 335 82X-Levi Plaza Exp 0 128 0 0 51-Treasure Island 136 116 84 51					
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Treasure Island 16,849 9,744 108-Treasure Island 136 116 84 51 subtotal 252 135		_		_	 -
Treasure Island 108-Treasure Island 136 116 84 51 subtotal 252 135	Sabtotal	2,001			-
subtotal 252 135	Treasure Island		, -		· · · · · · · · · · · · · · · · · · ·
·	108-Treasure Island	136	116	84	51
10,780 16,041 9,496 8,730	subtotal				
		10,780	16,041	9,496	8,730

AC34 - Muni Service Changes

from team meeting on April 7, 2011

Line	Headways	Routing	Bus Type?
30 Stockton	no change	Central Subway - no effect north of Sutter South of Sutter - Sutter to Mason to Fifth excavation pit in Wash Sq will affect 30 and 45 line may need bus bridge between Marina & Wash Sq	no change
30X-Marina Expres	s around the clock including weekends on event days 8-minute headways?	No change to route Stays outside the Presidio	no change
30L- Marina	Peak direction only 6-minute headways	Caltrain to Marina at Broadway follows the 30X terminates at Beach and Broderick	?
Supplemental 47L	Peak direction only 10-minute headways	Civic Center to North Point	articulated
108-Treasure islar	n 15-minute headways at all times	no change	40-foot motorcoaches
Cable Cars	no change	no change	no change
F-Market & Wharv	65-minute headways at all times	between Ferry Building and Fisherman's Wharf turnback at Pier 39	historic streetcars
E-Line	20-minute headways	Caltrain to Pier 39 there is an E-Line stop at Caltrain	double-ended historic streetcars
N-Judah	no change	to Mission Bay on weekend event days	
Embarcadero to West Portal Shuttle		Embarcadero to West Portal (kind of like the ball-park shuttle but doesn't go to ballpark)	2-car trains

PEAK HOUR Cond	litions					Vehicle	
	Weekday PM	- Outbound	Weekend Mic	lday - Inbound		Capacity	
Line	Vehicles	Capacity	Vehicles	Capacity	Headways	(passengers	
30-Stockton					no change		
	(5						
30X-Marina Express					around the clock	63	
Existing	8	504	0	0	including weekends		
People Plan	<u>8</u>	<u>504</u>	<u>8</u>	<u>504</u>	8-minute headways?		
net-change	0	0	8	504			
30L-Marina (Presidi	io)				Peak direction only	63	
Existing	0	0	0	0	6-minute headways		
People Plan	<u>10</u>	<u>630</u>	<u>10</u>	<u>630</u>			
net-change	10	630	10	630			
Supplemental 47L	(Fisherman's Wh	arf)			Peak direction only	94	
Existing	0	0	0	0	10-minute headways		
People Plan	<u>6</u>	<u>564</u>	<u>6</u>	<u>564</u>			
net-change	6	564	6	564			
108-Treasure Islan	d (TI)				15-minute headways	63	
Existing	4	252	3	189	at all times		
People Plan	4	<u>252</u>	4	252			
net-change	0	0	1	63			
F-Market & Wharve	es (Emb)				5-minute headways	70	
Existing	10	700	10	700	at all times		
People Plan	<u>12</u>	840	<u>12</u>	840			
net-change	2	140	2	140			
E-Line (Emb)	-				20-minute headways	70	
Existing	0	0	0	0	,		
People Plan	<u>3</u>	210	<u>3</u>	210			
net-change	3	210	3	210			
N-Judah	-	-		-	no change		
Emb to W.Portal Sh	nuttle (Emb)				<u> </u>	119	
Existing	0	0	0	0	2-car trains		
People Plan	0	0	3	714	20-minute headways		
net-change	0	0	3	714			
	-			_			
TOTAL	21	1,544	33	2,825			

AC34 - People Plan Muni Serv	ice Changes		
PEAK HOUR Conditions			
People Plan Capacity (from al	pove)		
Presidio/Crissy Field/Marina	630	1,134	
Fisherman's Wharf	564	564	
The Embarcadero	350	1,064	
Treasure Island	<u>0</u>	<u>63</u>	
	1,544	2,825	
Existing			
Presidio/Crissy Field/Marina	2,891	2,738	
Fisherman's Wharf	4,049	3,119	
The Embarcadero	13,737	8,494	
Treasure Island	<u>252</u>	<u>189</u>	
	20,929	14,540	
Existing plus People Plan			
Presidio/Crissy Field/Marina	3,521	3,872	
Fisherman's Wharf	4,613	3,683	
The Embarcadero	14,087	9,558	
Treasure Island	<u>252</u>	<u>252</u>	
	22,473	17,365	

oatuiudy Midday	Peak Hour - Inbour	iu iiito san f	TATICISCO		
BART		Ridership	Capacity	Utilization	
East Bay		3900	8064	48%	
South Bay		2340	8547	27%	
AC Transit	_		4.0	100/	
11:22 arrival	F	19	40	48%	
11:52 arrival	F	37	40	93%	
11:20 arrival	NL	15	40	38%	
11:50 arrival	NL	21	40	53%	
11:44 arrival	0	<u>25</u>	40	63%	
CT		117	200	59%	
SamTrans	1/3/	22	40	000/	
12:09 arrival	KX	32	40	80%	
Caltrain					
12:35 arrival	429	543	650	84%	
Caldan Cata Fa					
Golden Gate Ferr	·,·····	F0	715	70/	
	Sausalito	50		7% 20%	
11:40	Larkspur	143 193	715 1430	13%	
Golden Gate Bus	96	193	1430	13%	
	10 from Marin City	13	41	32%	
	70 from San Rafael	13	41	27%	
	70 from San Rafael	11	41	27%	
	80 from San Rafael	13	41	32%	
	101 from San Rafael	13 14	41	34%	
11.43	TOT HOM Sail Kaidel	62	205	30%	
WETA Services		02	203	50 /0	
	Alameda & Oakland	263	388	68%	
	Vallejo	297	300	99%	
Blue & Gold				22,3	
	Sausalito	293	650	45%	
	Tiburon	205	500	41%	
	East Bay	4,577	8,952	51%	
	North Bay	753	2,785	27%	
	South Bay	2,915	9,237	32%	
		8,245	20,974	39%	
SOURCES:		<u> </u>	<u> </u>		······
	RDAY_TRP_1010-1012		ceived via Mo	nica P, from Rol	pert
	nsit, email on May 25				
	_summary.xls" and "r			2011	
	a P, from Joshua Widm		aii on May 24,	2011	
	LoadsSatApr2011.pdf"			2011	
	a P, from Thomas Tum				
	ed via Monica P, from I	Donald Esse, S	SamTrans em	ail on June 3, 20)11
Ferries -	<u> </u>		<u> </u>		
	ional Weekend Data 5	-25-11 WETA.	rev.xlsx" rece	ived from Chad	Mason
email on June 2, 2	011 ved via Monica P, fron	<u> </u>		<u>.</u>	
		- D-LI. M	by DOC Flag		1 7011

34th America's Cup Transit Analysis

WEEKDAY PM PEAK RACE DAY

Outbound		EXISTING		EXIS	EXISTING PLUS AC34 2012 [a]				EXISTING PLUS AC34 2013 [b]			
			Percent	Peak Hour		Percent	Passenger	Peak Hour		Percent	Passenger	
	Capacity	Ridership	Utilization	AC34 Riders	Ridership	Utilization	Shortfall	AC34 Riders	Ridership	Utilization	Shortfall	
SAN FRANCISCO												
Presidio/Crissy/Marina	2,891	1,820	63%	2,425	4,245	147%	1,354	1,758	3,578	124%	687	
Fisherman's Wharf	4,049	3,309	82%	280	3,589	89%	0	312	3,621	89%	0	
The Embarcadero	13,737	10,796	79%	93	10,889	79%	0	308	11,104	81%	0	
Treasure Island	252	116	46%	9	125	50%	0	10	126	50%	0	
Total	20,929	16,041	77%	2,807	18,848	90%	1,354	2,387	18,428	88%	687	
EAST BAY												
BART	24,150	20,067	83%	997	21,064	87%	0	1,074	21,141	88%	0	
AC Transit	4,193	2,517	60%	151	2,668	64%	0	163	2,680	64%	0	
Ferries	1,519	702	46%	51	753	50%	0	53	755	50%	0	
Total	29,862	23,286	78%	1,198	24,484	82%	0	1,291	24,576	82%	0	
NORTH BAY												
Buses	2,205	1,397	63%	108	1,505	68%	0	117	1,514	69%	0	
Ferries	1,706	906	53%	79	985	58%	0	85	991	58%	0	
Total	3,911	2,303	59%	187	2,490	64%	0	201	2,504	64%	0	
SOUTH BAY												
BART	16,800	10,202	61%	876	11,078	66%	0	945	11,147	66%	0	
Caltrain	3,250	1,986	61%	170	2,156	66%	0	183	2,169	67%	0	
SamTrans	940	575	61%	49	624	66%	0	53	628	67%	0	
Total	20,990	12,763	61%	1,096	13,858	66%	0	1,181	13,945	66%	0	

SATURDAY MIDDAY PEAK RACE DAY

Inbound		EXISTING		EXI	EXISTING PLUS AC34 2012 [a]				EXISTING PLUS AC34 2013 [b]			
	Capacity	Ridership	Percent Utilization	Peak Hour AC34 Riders	Ridership	Percent Utilization	Passenger Shortfall	Peak Hour AC34 Riders	Ridership	Percent Utilization	Passenger Shortfall	
SAN FRANCISCO												
Presidio/Crissy/Marina	2,738	1,827	67%	15,320	17,147	626%	14,409	16,103	17,930	655%	15,192	
Fisherman's Wharf	3,119	2,339	75%	1,677	4,016	129%	897	2,796	5,135	165%	2,016	
The Embarcadero	8,494	5,247	62%	388	5,635	66%	0	2,744	7,991	94%	0	
Treasure Island	189	84	44%	47	131	69%	0	102	186	98%	0	
Total	14,540	9,497	65%	17,433	26,930	185%	15,307	21,745	31,242	215%	17,208	
EAST BAY												
BART	8,064	3,900	48%	6,252	10,152	126%	2,088	10,732	14,632	181%	6,568	
AC Transit	200	117	59%	163	280	140%	80	282	399	200%	199	
Ferries	688	560	81%	653	1,213	176%	525	1,113	1,673	243%	985	
Total	8,952	4,577	51%	7,069	11,646	130%	2,694	12,142	16,704	187%	7,752	
NORTH BAY												
Buses	205	62	30%	219	281	137%	76	381	443	216%	238	
Ferries	2,580	691	27%	2,681	3,372	131%	792	4,599	5,290	205%	2,710	
Total	2,785	753	27%	2,899	3,652	131%	867	4,980	5,733	206%	2,948	
SOUTH BAY												
BART	8,547	2,340	27%	6,752	9,092	106%	545	11,598	13,938	163%	5,391	
Caltrain	650	543	84%	745	1,288	198%	638	1,268	1,811	279%	1,161	
SamTrans	40	32	80%	44	76	190%	36	73	105	262%	65	
Total	9,237	2,915	32%	7,541	10,456	113%	1,219	12,953	15,853	172%	6,616	

[[]a] Total weekday landside attendance = 40,400 visitors; total weekend landside attendance = 184,300 visitors

[[]b] Total weekday landside attendance = 43,700 visitors; total weekend landside attendance = 316,000 visitors

34th America's Cup Transit Analysis

	Existing plus AC34 2012 [a]				plus AC34 2 on Measure l		Passenger	Additional Buses per Bus Size	
SAN FRANCISCO Peak Hour	Capacity	Ridership	Percent Utilization	Capacity	Ridership	Percent Utilization	Shortfall	94	63
WEEKDAY PM PEAK	RACE DAY								
Presidio/Crissy/Marina	2,891	4,245	147%	3,521	4,245	121%	1,354	15	22
Fisherman's Wharf	4,049	3,589	89%	4,613	3,589	78%	0	0	0
The Embarcadero	13,737	10,889	79%	14,087	10,889	77%	0	0	0
Treasure Island	252	125	50%	252	125	50%	0	0	0
Total	20,929	18,848	90%	22,473	18,848	84%	1,354	15	22
SATURDAY MIDDAY	PEAK RAC	E DAY							
Presidio/Crissy/Marina	2,738	17,147	626%	3,872	17,147	443%	14,409	154	229
Fisherman's Wharf	3,119	4,016	129%	3,683	4,016	109%	897	10	15
The Embarcadero	8,494	5,635	66%	9,558	5,635	59%	0	0	0
Treasure Island	189	131	69%	252	131	52%	0	0	0
Total	14,540	26,930	185%	17,365	26,930	155%	15,307	164	244

	Existing plus AC34 2013 [b]				plus AC34 2 on Measure I		Passenger	Additional Buses per Bus Size	
SAN FRANCISCO Peak Hour	Capacity	Ridership	Percent Utilization	Capacity	Ridership	Percent Utilization	Shortfall	94	63
WEEKDAY PM PEAK	RACE DAY								
Presidio/Crissy/Marina	2,891	3,578	124%	3,521	3,578	102%	687	8	11
Fisherman's Wharf	4,049	3,621	89%	4,613	3,621	78%	0	0	0
The Embarcadero	13,737	11,104	81%	14,087	11,104	79%	0	0	0
Treasure Island	252	126	50%	252	126	50%	0	0	0
Total	20,929	18,428	88%	22,473	18,428	82%	687	8	11
SATURDAY MIDDAY	PEAK RAC	E DAY							
Presidio/Crissy/Marina	2,738	17,930	655%	3,872	17,930	463%	15,192	162	242
Fisherman's Wharf	3,119	5,135	165%	3,683	5,135	139%	2,016	22	32
The Embarcadero	8,494	7,991	94%	9,558	7,991	84%	0	0	0
Treasure Island	189	186	98%	252	186	74%	0	0	0
Total	14,540	31,242	215%	17,365	31,242	180%	17,208	184	274

[[]a] Total weekday landside attendance = 40,400 visitors; total weekend landside attendance = 184,300 visitors

[[]b] Total weekday landside attendance = 43,700 visitors; total weekend landside attendance = 316,000 visitors

San Francisco JRH Cruise Terminal at Pier 27

F-Market and Wharves Streetcar Ridership Analysis

		_			E	EXISTING PL	.US 3,000-PAS	SENGER VES	SEL	E	XISTING PL	US NET NEW	PROJECT TRIF	PS ^[f]
		EXIS	STING CONDI	TIONS					Capacity					Capacity
	Maximum Load Point Location	Ridership [a]	Capacity [D]	Capacity Utilization [C]	Project Trips ^[a]	Total Ridership	Capacity Utilization [C]	Project Contribution	Utilization w/ E-line ^[e]	Project Trips ^[a]	Total Ridership	Capacity Utilization [C]	Project Contribution	Utilization w/ E-line ^[e]
Weekday AM Peak Hour														
Northbound (towards FW)	Embarcadero / Ferry Terminal	601	700	86%	31	632	90%	4.9%	64%	29	630	90%	4.6%	64%
Southbound (towards Castro) Embarcadero / Green St	157	700	22%	24	181	26%	13.3%	18%	22	179	26%	12.3%	18%
Weekday PM Peak Hour														
Northbound (towards FW)	Embarcadero / Broadway	635	700	91%	27	662	95%	4.1%	68%	26	661	94%	3.9%	67%
Southbound (towards Castro) Embarcadero / Greenwich St	933	770	121%	11	944	123%	1.2%	90%	11	944	123%	1.2%	90%
Saturday Midday Peak Hour														
Northbound (towards FW)	Embarcadero / Broadway	693	630	110%	53	746	118%	7.1%	82%	49	742	118%	6.6%	82%
Southbound (towards Castro) Embarcadero / Broadway	359	630	57%	50	409	65%	12.2%	45%	46	405	64%	11.4%	45%

[[]a] Maximum Load Point and ridership data by SFMTA - May 2011.

[[]b] Based on the load capacity of a streetcar (70 passengers per vehicle) and existing number streetcars per hour.

[[]c] Grey shading indicates that value exceeds Muni's capacity utilization policy standard (85%).

[[]d] Project alightings (northbound) and boardings (southbound) at the Embarcadero / Lombard stop.

[[]e] One E-Embarcadero streetcar every 15 minutes (four streetcars per hour) interlined with the F-Market & Wharves service with an average capacity of 70 passengers per streetcar.

[[]f] Net new trips represent the difference between the project's 3,000-passenger ship and the average of 230 cruiseship passengers per day in July-August 2008 when the F-line data was collected; The 230-passenger average is calculated by dividing the total number of cruiseship passengers in July and August (14,400) by the total number of days (62).

SECTION 6

Pedestrian and Bicycle Calculations

Summary of Pedestrian and Bicycle Volumes The Embarcadero in vicinity of Piers 27-31 Weekday AM and PM, and Saturday Midday Peak Hours

	AM (8-9 AM)	Weel	<day PM (5-6 PM)</day 	 	Saturday Midday (12-1 PM)	_
Dodootriono	AIVI (0-9 AIVI)		PIVI (3-0 PIVI)		(12-1 PIVI)	-
Pedestrians						
<u>Promenade</u>	111		120		766	
northbound	111		139		766	
southbound	<u>70</u>		<u>131</u>		<u>279</u>	
Total	181		270		1045	
Bicycles						
<u>Bicycle Lane</u>						
northbound	13	21%	22	27%	118	91%
southbound	<u>75</u>	76%	<u>29</u>	73%	<u>43</u>	<u>70%</u>
subtotal	<u>73</u> 88	7070	<u>25</u> 51	7 3 70	161	7070
<u>Promenade</u>	00		31		101	
northbound	49	79%	61	73%	12	9%
southbound	<u>24</u>	24%	<u>11</u>	28%	<u>18</u>	<u>30%</u>
subtotal	73	<u>= 1.70</u>	72	2070	<u>30</u>	<u>5070</u>
Total	161		123		191	
rotar	707		720	1	.,,	
<u> AII</u>						
northbound	62	100%	83	100%	130	100%
southbound	<u>99</u>	<u>100%</u>	<u>40</u>	<u>100%</u>	<u>61</u>	<u>100%</u>
Total	161		123		1 9 1	

Cruise Terminal Analysis								
Pedestrian Crosswalk Level	of Service Cal	culations						
EXISTING CONDITIONS								
WEEKDAY AM		Pedestrian			 			
	Cycle Length		Pedestrians	Max Ped.	May Bad no	r 15 minutes	Length (L)	Width (W)
					NB or EB	SB or WB		
Location/Crosswalk	(sec.)	(sec.)	Hourly	Per 15 minutes	ND OF ED	SB OF WB	(feet)	(feet)
The Embarcadero/Bay			450				400	
North (Embarcadero)	90	43	156	49	24	24	120	20
West (Bay)	90	25	63	20	10	10	85	18
The Emb/Chestnut/Sansome				37				
North (Emb)	90	27	119		19	19	120	20
South (Sansome)	90	54	103	32	16	16	45	12
West (Chestnut)	90	54	96	30	15	15	45	18
The Emb/Lombard/Battery								
North (Emb)	90	34	71	22	11	11	115	20
South (Battery)	90	23	38	12	6	6	70	12
West (Lombard)	90	44	99	31	15	15	45	20
WEEKDAY PM		Pedestrian						
	Cycle Length		Pedestrians	Max Ped.	Max Ped, ne	r 15 minutes	Length (L)	Width (W)
Location/Crosswalk	(sec.)	(sec.)	Hourly	Per 15 minutes	NB or EB	SB or WB	(feet)	(feet)
The Embarcadero/Bay	(300.)	(300.)	Hourry	T CT TO IIIIII CCO	ND OI LD	OB OI WB	(1001)	(1001)
North (Embarcadero)	90	43	188	59	29	29	120	20
West (Bay)	90	25	95	30	15	15	85	18
The Emb/Chestnut/Sansome	90	23	95	30	10	10	65	10
North (Emb)	90	27	64	20	10	10	120	20
	90	21 54	114	20 36	18	18	120 45	20 12
South (Sansome)			l		.3			L
West (Chestnut)	90	54	125	39	20	20	45	18
The Emb/Lombard/Battery								
North (Emb)	90	34	82	26	13	13	115	20
South (Battery)	90	23	64	20	10	10	70	12
West (Lombard)	90	44	149	47	23	23	45	20
SATURDAY MIDDAY		Pedestrian						
	Cycle Length	Green Time	Pedestrians	Max Ped.	Max Ped. pe	r 15 minutes	Length (L)	Width (W)
Location/Crosswalk	(sec.)	(sec.)	Hourly	Per 15 minutes	NB or EB	SB or WB	(feet)	(feet)
The Embarcadero/Bay	` ',	` '					` ,	` ,
North (Embarcadero)	90	54	374	117	58	58	120	20
West (Bay)	90	25	109	34	17	17	85	18
The Emb/Chestnut/Sansome			100	0,	- ''	- ''		10
					1			
North (Emb)	90	27	139	43	22	22	120	20
	90	54	118	37	18	18	45	12
South (Sansome)					4			
South (Sansome) West (Chestnut)	90	54	107	33	17	17	45	18
West (Chestnut)		54	107	33	17	17	45	18
West (Chestnut) The Emb/Lombard/Battery	90	54 34	107 94					
West (Chestnut) The Emb/Lombard/Battery North (Emb)	90 90	34	94	29	15	15	115	20
West (Chestnut) The Emb/Lombard/Battery	90							

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EXISTING PLUS PROJECT								
WEEKDAY AM		Pedestrian						
	Cycle Length	Green Time	Pedestrians	Max Ped.	Max Ped. pe	r 15 minutes	Length (L)	Width (W)
Location/Crosswalk	(sec.)	(sec.)	Hourly	Per 15 minutes	NB or EB	SB or WB	(feet)	(feet)
The Embarcadero/Bay								
North (Embarcadero)	90	43	166	52	26	26	120	20
West (Bay)	90	25	73	23	11	11	85	18
The Emb/Chestnut/Sansome								
North (Emb)	90	27	149	46	23	23	120	20
South (Sansome)	90	54	133	41	21	21	45	12
West (Chestnut)	90	54	106	33	17	17	45	18
The Emb/Lombard/Battery	- 00	01	100		- "	.,	40	10
North (Emb)	90	34	91	28	14	14	115	20
South (Battery)	90	34 23	78	26 24	12	12	70	12
West (Lombard)		23 44	139	43	22	22	70 45	20
west (Lombard)	90	44	139	43	22	22	40	20
WEEKDAY PM		Pedestrian						
	Cycle Length	Green Time	Pedestrians	Max Ped.	Max Ped. pe	r 15 minutes	Length (L)	Width (W)
Location/Crosswalk	(sec.)	(sec.)	Hourly	Per 15 minutes	NB or EB	SB or WB	(feet)	(feet)
The Embarcadero/Bay	(000)	(333.)					(1111)	(1000)
North (Embarcadero)	90	43	197	62	31	31	120	20
West (Bay)	90	25	104	32	16	16	85	18
The Emb/Chestnut/Sansome		23	104	32	10	10	0.5	10
North (Emb)	90	27	91	28	14	14	120	20
South (Sansome)		21 54	141	20 44	22	22	120 45	12
	£		J		.4			3
West (Chestnut)	90	54	134	42	21	21	45	18
The Emb/Lombard/Battery								<u> </u>
North (Emb)	90	34	100	31	16	16	115	20
South (Battery)	90	23	99	31	16	16	70	12
West (Lombard)	90	44	184	58	29	29	45	20
SATURDAY MIDDAY		Pedestrian						
	Cycle Lenath		Pedestrians	Max Ped.	May Ped no	r 15 minutes	Length (L)	Width (W)
Location/Crosswalk	(sec.)	(sec.)	Hourly	Per 15 minutes	NB or EB	SB or WB	(feet)	(feet)
The Embarcadero/Bay	(360.)	(360.)	Hourry	. or io minutes	AD OI LD	2D 01 11B	(ICCI)	(ICCL)
North (Embarcadero)	90	43	396	124	62	62	120	20
	90			····	 	 		
West (Bay)		25	131	41	20	20	85	18
The Emb/Chestnut/Sansome		0.7					400	
North (Emb)	90	27	204	64	32	32	120	20
	90	54	183	57	29	29	45	12
South (Sansome)								
West (Chestnut)	90	54	129	40	20	20	45	18
West (Chestnut) The Emb/Lombard/Battery	90			•				
West (Chestnut) The Emb/Lombard/Battery North (Emb)	90	54 34	137	40	20	20	45 115	18 20
West (Chestnut) The Emb/Lombard/Battery	90			•				

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Cruise Terminal Analysis Pedestrian Crosswalk Level of Ser	vice Calculatio	ne						
Pedestrian walking speed:	vice Calculatio	[feet/sec					
~ .							Space	
EXISTING CONDITIONS WEEKDAY AM	Time-space	Pedestr	ian Flow	Max no. ped accumulated	Crossing Time	Occupancy Time	per ped. crossing	
Crosswalk/Location	TS (sq.ftsec)	NB or EB (ped/cycle)	SB or WB (ped/cycle)	N (ped/cycle)	t (sec)	T (ped-sec)	M (sq.ft./ped)	LOS
The Embarcadero/Bay				(peareyele)				
North (Embarcadero) West (Bay)	62057 19671	2	2 1	1	37.7 27.6	183.6 54.3	338 362	A A
The Emb/Chestnut/Sansome								
North (Emb) South (Sansome)	23657 25689	2	2 2	1	37.7 16.2	140.1 52.2	169 493	A
West (Chestnut) The Emb/Lombard/Battery	38533	2	2	1	16.1	48.4	795	Α
North (Emb)	39264	1	1	1	36.2	80.2	490	Α
South (Battery) West (Lombard)	10500 33814	1 2	1 2	0 1	23.3 16.2	27.7 50.0	379 676	A A
west (Lonibard)	33014							
WEEKDAY PM	Time-space	Pedestr	ian Flow	Max no. ped accumulated	Crossing Time	Occupancy Time	per ped. crossing	
	TS	NB or EB	SB or WB	N	t	T	М	LOS
Crosswalk/Location The Embarcadero/Bay	(sq.ftsec)	(ped/cycle)	(ped/cycle)	(ped/cycle)	(sec)	(ped-sec)	(sq.ft./ped)	
North (Embarcadero)	62057	3	3 1	2	37.7	221.4	280	A
West (Bay) The Emb/Chestnut/Sansome	19671	1		1	27.6	82.1	240	Α
North (Emb) South (Sansome)	23657 25689	1 2	1 2	1	37.6 16.2	75.2 57.8	315 445	A A
West (Chestnut)	38533	2	2	1	16.2	63.2	610	A A
The Emb/Lombard/Battery North (Emb)	39264	1	1	1	36.2	92.7	424	Α
South (Battery)	10500	1	1	1	23.4	46.7	225	Α
West (Lombard)	33814	2	2	1	16.2	75.5	448	Α
SATURDAY MIDDAY	Time and :	Da-1	ian Flow	Max no. ped accumulated	Crossing Time	Occupancy Time	per ped. crossina	
SATURDAY MIDDAY	Time-space TS	NB or EB	SB or WB	N	t	T	M	LOS
Crosswalk/Location The Embarcadero/Bay	(sq.ftsec)	(ped/cycle)	(ped/cycle)	(ped/cycle)	(sec)	(ped-sec)	(sq.ft./ped)	
North (Embarcadero)	88457	6	6	2	37.8	441.8	200	Α
West (Bay) The Emb/Chestnut/Sansome	19671	2	2	1	27.7	94.3	209	Α
North (Emb)	23657	2	2	2	37.7	163.7	144	Α
South (Sansome) West (Chestnut)	25689 38533	2	2 2	1	16.2 16.2	59.8 54.0	429 713	A A
The Emb/Lombard/Battery								
North (Emb) South (Battery)	39264 10500	1 2	1 2	1 2	36.2 23.5	106.3 95.6	369 110	A A
West (Lombard)	33814	2	2	1	16.2	72.4	467	Α
EXISTING PLUS PROJECT CONDIT	TIONS Time-space	Dadaata	ian Flow	Max no. ped accumulated	Crossing Time	Occupancy Time	per ped. crossing	
	TS	NB or EB	SB or WB	N	t	T	M	LOS
Crosswalk/Location The Embarcadero/Bay	(sq.ftsec)	(ped/cycle)	(ped/cycle)	(ped/cycle)	(sec)	(ped-sec)	(sq.ft./ped)	
North (Embarcadero)		3	3	1	37.7	195.3	318	Α
West (Bay) The Emb/Chestnut/Sansome	19671	1	1	11	27.6	62.9	313	A
North (Emb)	23657	2	2	2	37.7	175.2	135	A
South (Sansome) West (Chestnut)	25689 38533	2	2	1	16.2 16.2	67.4 53.5	381 721	A A
The Emb/Lombard/Battery	20004	1	1	1	20.0	102.7	382	
North (Emb) South (Battery)	39264 10500	1	1	1	36.2 23.4	56.8	185	A A
West (Lombard)	33814	2	2	1	16.2	70.2	482	Α
				Max no. ped	Crossing	Occupancy	per ped.	
WEEKDAY PM	Time-space TS	Pedestr NB or EB	ian Flow SB or WB	accumulated N	Time t	Time T	crossing M	LOS
Crosswalk/Location	(sq.ftsec)	(ped/cycle)	(ped/cycle)	(ped/cycle)	(sec)	(ped-sec)	(sq.ft./ped)	
The Embarcadero/Bay North (Embarcadero)	62057	3	3	2	37.7	231.9	268	Α
West (Bay)		2	2	1	27.7	89.8	219	Α
The Emb/Chestnut/Sansome North (Emb)	23657	1	1	1	37.6	106.5	222	Α
South (Sansome) West (Chestnut)		2 2	2 2	1	16.3 16.2	71.4 67.7	360 569	A A
The Emb/Lombard/Battery								
North (Emb)	39264 10500	2	2 2	1	36.2 23.5	112.8 72.9	348 144	A A
South (Battery)			3	1	16.3	93.7	361	A
South (Battery) West (Lombard)	33814	3		1	l		per ped.	
West (Lombard)		3		Max no. ped	Crossing	Occupancy		
West (Lombard)	33814 Time-space	Pedestr	ian Flow SB or WB	accumulated	Time	Time	crossing	100
West (Lombard) SATURDAY MIDDAY Crosswalk/Location	33814		ian Flow SB or WB (ped/cycle)					LOS
West (Lombard) SATURDAY MIDDAY Crosswalk/Location The Embarcadero/Bay	Time-space TS (sq.ftsec)	Pedestr NB or EB (ped/cycle)	SB or WB (ped/cycle)	accumulated N (ped/cycle)	Time t (sec)	Time T (ped-sec)	crossing M (sq.ft./ped)	
West (Lombard) SATURDAY MIDDAY Crosswalk/Location The Embarcadero/Bay North (Embarcadero) West (Bay)	33814 Time-space TS (sq.ftsec) 62057	Pedestr NB or EB	SB or WB	accumulated N	Time t	Time T	crossing M	A A
West (Lombard) SATURDAY MIDDAY Crosswalk/Location The Embarcadero/Bay North (Embarcadero) West (Bay) The Emb/Chestnut/Sansome	33814 Time-space TS (sq.ftsec) 62057 19671	Pedestr NB or EB (ped/cycle) 6 2	SB or WB (ped/cycle) 6 2	accumulated N (ped/cycle) 3	Time t (sec) 37.9 27.7	Time T (ped-sec) 468.9 113.1	crossing M (sq.ft./ped) 132 174	A A
West (Lombard) SATURDAY MIDDAY Crosswalk/Location The Embarcadero/Bay North (Embarcadero) West (Bay) The Emb/Chestnut/Sansome North (Emb) South (Sansome)	33814 Time-space TS (sq.ftsec) 62057 19671 23657 25689	Pedestr NB or EB (ped/cycle) 6 2	SB or WB (ped/cycle) 6 2 3 3	accumulated N (ped/cycle) 3 1 2 1	Time t (sec) 37.9 27.7 37.8 16.3	Time T (ped-sec) 468.9 113.1 240.8 93.3	crossing M (sq.ft./ped) 132 174 98 275	A A A
West (Lombard) SATURDAY MIDDAY Crosswalk/Location The Embarcadero/Bay North (Embarcadero) West (Bay) The Emb/Chestnut/Sansome North (Emb) South (Sansome) West (Chestnut)	33814 Time-space TS (sq.ftsec) 62057 19671 23657 25689	Pedestr NB or EB (ped/cycle) 6 2	SB or WB (ped/cycle) 6 2	accumulated N (ped/cycle) 3 1	Time t (sec) 37.9 27.7	Time T (ped-sec) 468.9 113.1	crossing M (sq.ft./ped) 132 174 98	A A
West (Lombard) SATURDAY MIDDAY Crosswalk/Location The Embarcadero/Bay North (Embarcadero) West (Bay) The Emb/Chestnut/Sansome North (Emb) South (Sansome)	33814 Time-space TS (sq.ftsec) 62057 19671 23657 25689	Pedestr NB or EB (ped/cycle) 6 2	SB or WB (ped/cycle) 6 2 3 3	accumulated N (ped/cycle) 3 1 2 1	Time t (sec) 37.9 27.7 37.8 16.3	Time T (ped-sec) 468.9 113.1 240.8 93.3	crossing M (sq.ft./ped) 132 174 98 275	A A A

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SECTION 7Parking Information

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PUBLIC OFF-STREET PARKING AVAILABLE BY STUDY AREA

				Ar	ea			
				Fort Mason/		Emb from	Emb from	
		GGB/ Crissy		Aquatic P/		Bay to Ferry	Ferry B to	
		Field	Marina	West FW	East FW	В	China Basin	
Type		Α	В	С	D	E	F	Total
CPO	Customer parking only	865	236	411	889	30	918	3,349
FPA	Free, publicly available	1,252	615	301				2,168
PHO	Permit holders only		192	161	286	325	1,377	2,341
PPA	Paid, publicly available	779	152	1,107	5,432	8,127	11,509	27,106
Total		2,896	1,195	1,980	6,607	8,482	13,804	34,964
Subtotal	publicly available	2,031	767	1,408	5,432	8,127	11,509	29,274
Average	Weekday Midday Utilization			83%	83%	89%	52%	
Average	Weekend Midday Utilization	- 		88%	87%	33%	22%	

Source: San Francisco Municipal Transportation Agency

	OFF-STREET PARKING AVAILABI SFMTA	SFMTA	SFMTA	SFMTA	SFMTA	SFMTA	Weekday	ation Weekend	Utiliz Summary	by Area	Weekday M	idday	TERMINAL Weekend M	,
Number	Name	Description	Address	Category	Туре	Capacity	Midday	Midday	Weekday	Weekend	Utiliza 1,132	ation 83%	Utiliz 484	ation 46%
A7	Crissy Field		215 Gorgas Ave	FPA	L	96					1,132	0370	404	4070
A8	Dirt Lot		848 P-Mason St	FPA	L	26								
A9	Palace of Fine Arts		51 Palace of Fine Arts	FPA	L	276								
A10	Stillwell Hall		874 P-Mason St	FPA	L	31								
A11	Presidio		298 Gorgas Ave	FPA	L	44								
A12	Palace of Fine Arts		2199 Jefferson St	FPA	L	116								
A13	Crissy Field		99 Zanowitz St	FPA	L	280								
A14	•		p-Hamilton St	FPA	L	150								
A15	Presidio		974 P-Lincoln Blvd	FPA	L	70								
A16			Marine Dr	FPA	L	65								
A17	ILM	Lucas Arts	1115 Gorgas Ave	PPA	G	419								
A18	Presidio		1060 Torney Ave	PPA	L	26								
A19	Presidio		10 Edie Rd	PPA	L	29								
A20	Presidio Headquarters		10 French Ct	PPA	L	60								
A21	Golden Gate Bridge (employees only M-F)	25 Battery Cranston	PPA	L	164								
A22	Golden Gate Bridge		3 Transit Facility	PPA	L	81								
A06	Presidio		1155 Gorgas Ave	FPA	L	98								
B9	Marina Green Main		370 Marina Blvd	FPA	L	468								
B10	Yacht Harbor		41 Yacht Rd	FPA	L	147								
B14	Pierce and Lombard		3252 Pierce Street	PPA	L	116	N/A	N/A						
B15	Pacific Park Mgmt	Chestnut Street Ltd	2055 CHESTNUT ST	PPA	L	36								
С9	Ft Mason overflow		50 Marina Blvd	FPA	L	97			83%	88%				
C10	Marina Green Triangle		150 Marina Blvd	FPA	L	204								
C13	Sangiacomo Family LTd Partners	Marina Cove Residential	1550 BAY ST	PPA	G	176								
C14	No name but active lot	Monthly only	2927 Larkin ST	PPA	G	94								
C15	ACE Parking	Ghirardelli	900 NORTH POINT ST	PPA	G	280	83%	90%						
C16	ProPark	Beach & Hyde Garage	655 BEACH ST	PPA	G	120	N/A	84%						
C17	Fort Mason	, ,	3698 Laguna St	PPA	L	437								
D6	Hyatt		555 North Point St	CPO	G	101	N/A	84%	83%	87%				
D7	Holiday Inn		1300 Columbus Ave	CPO	G	115	N/A	84%						
D8	Holiday Inn Express Cal Parking		550 NORTH POINT ST	CPO	G	96	N/A	84%						
D9	Radisson		210 Beach St	CPO	G	165	N/A	88%						
D20	Pier 45		2899 Taylor St	PHO	L	70	N/A	88%						
D21	Parc Telegraph Parking		1603 MONTGOMERY ST	PPA	G	60	86%	N/A			59	86%		
D22	ACE Parking		55 FRANCISCO ST	PPA	G	400	88%	closed			216	88%		
D23	City Park		80 Francisco St	PPA	G	526	76%	47%			318	76%	197	47%
D24	Impark	Safeway/Walgreen's	350 BAY ST	PPA	G	353	N/A	87%						
D25	North Point Investors	Impark	2310 POWELL ST	PPA	G	284								
D26	Impark		2210 STOCKTON ST	PPA	G	150	N/A	84%						
D27	Cost Plus	City Park	455 North Point St	PPA	G	110	N/A	84%						
D28	Tuscan Inn		425 NORTH POINT ST	PPA	G	64								
D29	Sheraton Fisherman's Wharf, City park	Sheraton Hotel FW	2500 MASON ST	PPA	G	256	N/A	88%						
D30	Hilton		590 BAY ST	CPO	G	150	N/A	84%						
D30	Impark	2210 Stockton	2291 STOCKTON ST	PPA	G	200	N/A	88%						
D31	ACE Parking	Anchorage Garage	500 BEACH ST	PPA	G	575	N/A	84%						
D32	Savoy Corporation	- •	2720 TAYLOR ST	PPA	G	50		100%						
D33	Impark	350 Bush St Pkng (The Wha	ar 350 BEACH ST	PPA	G	241	N/A	88%						
D34	AMPCO	Pier 39 Parking	2550 POWELL ST	PPA	G	980	N/A	100%						
D35	US Parking	SF Clean Green	601 Bay St	PPA	L	29					I			

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JBLIC	OFF-STREET PARKING AVAILA						Utiliz	ation		ation			TERMINAL	
	SFMTA	SFMTA	SFMTA	SFMTA	SFMTA	SFMTA	Weekday	Weekend		y by Area	Weekday N	,	Weekend I	,
	Name	Description	Address	Category	Type	Capacity	Midday	Midday	Weekday	Weekend		zation		zation
D36	Central Parking System	SWL 314	2 BAY ST	PPA	L	120	101%	100%			108	101%	107	100
D37	City Park	Cost Plus	450 NORTH POINT ST	PPA	L	66	N/A	84%						
038	Nunzio corporation	Aliotos Parking	423 BEACH ST	PPA	L	23	N/A	100%						
039	Academy of Art	Super Parking	2300 STOCKTON ST	PPA	L	200	N/A	88%						
040	City Park	Longshoremen Union Hall	25 BEACH ST	PPA	L	65	N/A	88%						
)41	Wharf Properties Inc	Fishermans Wharf Parking	273 JEFFERSON ST	PPA	L	210	N/A	87%						
)42	City Parking Inc Richard B Stein	Fisherman Wharf Parking	160 JEFFERSON ST	PPA	L	250	N/A	100%						
143	Central Parking System	Pier 43 1/2	1735 The Embarcadero	PPA	L	220	N/A	88%						
- 5	City Park	Shell Building	100 Bush St	PPA	G	130	100%	N/A	89%	33%				
-6	City Park		1 Front St	PPA	G	340								
7	AMPCO		388 MARKET ST	PPA	G	100	100%	N/A						
8	Standard Parking		235 PINE ST	PPA	G	100	100%	N/A						
9	Standard Parking		100 PINE ST	PPA	G	150	100%	N/A						
10	AMPCO		345 CALIFORNIA ST	PPA	G	180								
11	AMPCO		255 CALIFORNIA ST	PPA	G	65								
12	AMPCO		201 CALIFORNIA ST	PPA	G	55	100%	N/A						
13	101 California Venture	Hines	101 CALIFORNIA ST	PPA	G	250	100%	N/A						
14	Central Parking System		1 CALIFORNIA ST	PPA	G	160	95%	N/A						
15	Standard Parking		300 CALIFORNIA ST	PPA	G	60								
16	ACE Parking		150 CALIFORNIA ST	PPA	G	35								
17	City Park	Embarcadero West	350 SANSOME ST	PPA	G	201	98%	N/A						
18	AMPCO		50 CALIFORNIA ST	PPA	G	141	92%	N/A						
19	AMPCO	Embarcadero 1	350 Sacramento St	PPA	G	563	85%	19%						
20	AMPCO	Embarcadero 2	250 Sacramento St	PPA	G	671	92%	14%						
21	AMPCO	Embarcadero 3	150 Sacramento St	PPA	G	664	86%	15%						
22	AMPCO	Embarcadero 4	51 Clay St	PPA	G	220	85%	28%						
23	Golden Gateway		250 Clay Street	PPA	Ğ	1,095	89%	52%						
24	AMPCO		750 BATTERY St	PPA	G	72	92%	closed						
25	City Park	Golen Gateway Commons		PPA	G	330	93%	closed						
26	Liberty Park	colon calculay comment	900 SANSOME ST	PPA	G	140	91%	closed						
27	California Parking		847 Front St	PPA	G	85	84%	closed						
28	California Parking	California Parking	768 SANSOME ST	PPA	Ĺ	130	79%	24%						
29	Central Parking System	370 Pacific	350 PACIFIC AVE	PPA	Ĺ	55	62%	12%						
30	Hornblower	Hornblower Yachts Inc	40 Pier Three	PPA	Ĺ	180	84%	25%						
31	City Park	Tiombiower racins inc	240 PACIFIC AVE	PPA	Ĺ	29	0170	2070						
32	Pacific Park Mgmt Inc	50 Broad	90 BROADWAY	PPA	Ĺ	160	98%	67%						
33	Central Parking System	SWL 323+750 Davies	50 BROADWAY	PPA	Ĺ	270	67%	23%						
34	Central Parking System	3WE 323+730 Davies	850 Front St	PPA	Ĺ	120	91%	33%						
35	ACE Parking	SWL 314	501 The Embarcadero	PPA	L	77	85%	100%						
36	Central Parking System	SWL 321	1062 Front St	PPA	L	150	99%	27%			218	99%	59	2
37	Central Parking System	3WL 321	40 Pier Fifteen	PPA	L	80	77/0	2170			210	77/0	37	2
			40 Pier Twentythree	PPA PPA	L	140	39%	45%			32	39%	37	45
38 39	Central Parking System		,	PPA PPA	L	400	39% 82%	45% 38%			32 180	39% 82%	84	38
	Central Parking System	100 The Embercaders Asses	40 Pier Twentyseven	PPA PPA	L N/A	400 30	ō2%	აძ%			180	ōZ%	84	3
40 41	EOP 188 The Embarcadero LLC	188 The Embarcadero Assoc												
41	AMPCO	Unknown	250 The Embarcadero	PPA	N/A	400								
42	Unknown	Unknown	960 Sansome St	PPA	N/A	24	0/0/	F/0/						
43	West Coast Parking Inc		735 DAVIS ST	PPA	N/A	75	86%	56%			I		1	

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SFMTA Name SFMTA Description SFMTA Address SFMTA Category SFMTA Type SFMTA Capacity Widday F22 Port Anthority leases to Impark Pier 48 Sheds A & B 40 Pier Fortyeight PPA G 400 Closed F23 ACE Parking China Basin 185 BERRY ST PPA G 268 85% F24 Standard Parking 250 King St (Beacon Bldg.) 215 Townsend St PPA G 750 56% F25 ACE Parking Game day = \$40 250 BRANNAN ST PPA G 371 78% F26 Tower Valet Parking Game day = \$40 250 BRANNAN ST PPA G 370 97% F26 Tower Valet Parking Game day = \$40 250 BRANNAN ST PPA G 300 97% F29 ACE Parking For 1 Harrison 439 Spear St PPA G 300 97% F29 ACE Parking 405 HOWARD ST PPA G 40 F30 Charles Schwab 215 Fremont St <th>,</th> <th>Summary by A Weekday Weel 52% 22</th> <th>, ,</th> <th>Weekend Midday Utilization</th>	,	Summary by A Weekday Weel 52% 22	, ,	Weekend Midday Utilization
F22 Port Anthority leases to Impark Pier 48 Sheds A & B 40 Pier Fortyeight PPA G 400 closed F23 ACE Parking China Basin 185 BERRY ST PPA G 268 85% F24 Standard Parking 250 King St (Beacon Bldg). 215 Townsend St PPA G 750 56% F25 ACE Parking 153 TOWNSEND ST PPA G 371 78% F26 Tower Valet Parking Game day = \$40 250 BRANNAN ST PPA G 371 78% F27 Main & Harrison LLC 400 Spear 401 MAIN ST PPA G 300 97% F28 AMPCO for 1 Harrison 439 Spear St PPA G 235 F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 20 F32 City Park <t< th=""><th>closed closed 61% closed closed</th><th></th><th></th><th>Utilization</th></t<>	closed closed 61% closed closed			Utilization
F23 ACE Parking China Basin 185 BERRY ST PPA G 268 85% F24 Standard Parking 250 King St (Beacon Bldg.) 215 Townsend St PPA G 750 56% F25 ACE Parking 153 TOWNSEND ST PPA G 371 78% F26 Tower Valet Parking Game day = \$40 250 BRANNAN ST PPA G 170 63% F27 Main & Harrison LLC 400 Spear 401 MAIN ST PPA G 300 97% F28 AMPCO for 1 Harrison 439 Spear St PPA G 205 F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 116 F31 AMPCO 400 Howard St PPA G 110 F32 City Park 199 FREMONT ST PPA G 110 <th>closed 61% closed closed</th> <th>52% 22</th> <th>2%</th> <th></th>	closed 61% closed closed	52% 22	2%	
F23 ACE Parking China Basin 185 BERRY ST PPA G 268 85% F24 Standard Parking 250 King St (Beacon Bldg.) 215 Townsend St PPA G 750 56% F25 ACE Parking 153 TOWNSEND ST PPA G 371 78% F26 Tower Valet Parking Game day = \$40 250 BRANNAN ST PPA G 170 63% F27 Main & Harrison LLC 400 Spear 401 MAIN ST PPA G 300 97% F28 AMPCO for 1 Harrison 439 Spear St PPA G 205 F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 110 F32 City Park 199 FREMONT ST PPA G 110 F33 US Parking 345 SPEAR ST PPA G 120	61% closed closed			
F25 ACE Parking 153 TOWNSEND ST PPA G 371 78% F26 Tower Valet Parking Game day = \$40 250 BRANNAN ST PPA G 170 63% F27 Main & Harrison LLC 400 Spear 401 MAIN ST PPA G 300 97% F28 AMPCO for 1 Harrison 439 Spear St PPA G 235 F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 20 F32 City Park 199 FREMONT ST PPA G 118 F33 US Parking 10 NATOMA ST PPA G 110 F34 ProPark 345 SPEAR ST PPA G 400 F33 AMPCO 50 FREMONT ST PPA G 230 F36 AMPCO 455 MARKET ST PPA G	closed closed			
F25 ACE Parking 153 TOWNSEND ST PPA G 371 78% F26 Tower Valet Parking Game day = \$40 250 BRANNAN ST PPA G 170 63% F27 Main & Harrison LLC 400 Spear 401 MAIN ST PPA G 300 97% F28 AMPCO for 1 Harrison 439 Spear St PPA G 235 F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 20 F32 City Park 199 FREMONT ST PPA G 118 F33 US Parking 10 NATOMA ST PPA G 110 F34 ProPark 345 SPEAR ST PPA G 230 F34 ProPark 455 MARKET ST PPA G 120 F35 AMPCO 455 MARKET ST PPA G	closed			
F27 Main & Harrison LLC 400 Spear 401 MAIN ST PPA G 300 97% F28 AMPCO for 1 Harrison 439 Spear St PPA G 235 F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 200 F32 City Park 199 FREMONT ST PPA G 118 F33 US Parking 10 NATOMA ST PPA G 110 F34 ProPark 345 SPEAR ST PPA G 400 F34 ProPark 345 SPEAR ST PPA G 230 F36 AMPCO 455 MARKET ST PPA G 120 F37 AMPCO 120 HOWARD ST PPA G 83 F38 AMPCO 425 MARKET ST PPA G 90 F39 AMPCO 425				
F28 AMPCO for 1 Harrison 439 Spear St PPA G 235 F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 200 F32 City Park 199 FREMONT ST PPA G 118 F33 US Parking 10 NATOMA ST PPA G 110 F34 ProPark 345 SPEAR ST PPA G 400 F34 ProPark 345 SPEAR ST PPA G 230 F36 AMPCO 50 FREMONT ST PPA G 230 F37 AMPCO 455 MARKET ST PPA G 83 F38 AMPCO 120 HOWARD ST PPA G 90 F39 AMPCO 425 MARKET ST PPA G 515 F40 ACE Parking 75 HOWARD ST PPA G	closed			
F29 ACE Parking 405 HOWARD ST PPA G 160 F30 Charles Schwab 215 Fremont St PPA G 40 F31 AMPCO 400 Howard St PPA G 200 F32 City Park 199 FREMONT ST PPA G 118 F33 US Parking 10 NATOMA ST PPA G 110 F34 ProPark 345 SPEAR ST PPA G 400 F35 AMPCO 50 FREMONT ST PPA G 230 F36 AMPCO 455 MARKET ST PPA G 120 F37 AMPCO 120 HOWARD ST PPA G 83 F38 AMPCO 201 SPEAR ST PPA G 90 F39 AMPCO 425 MARKET ST PPA G 515 F40 ACE Parking 75 HOWARD ST PPA G 515 F41 Douglas Parking 160 SPEAR ST PPA G 90				
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F35 AMPCO 50 FREMONT ST PPA G 230 F36 AMPCO 455 MARKET ST PPA G 120 F37 AMPCO 120 HOWARD ST PPA G 83 F38 AMPCO 201 SPEAR ST PPA G 90 F39 AMPCO 425 MARKET ST PPA G 126 F40 ACE Parking 75 HOWARD ST PPA G 515 F41 Douglas Parking 160 SPEAR ST PPA G 37 F42 AMPCO 50 BEALE St PPA G 90 F43 Pacific Spear Corp 150 SPEAR ST PPA G 15				
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F41 Douglas Parking 160 SPEAR ST PPA G 37 F42 AMPCO 50 BEALE St PPA G 90 F43 Pacific Spear Corp 150 SPEAR ST PPA G 15				
F41 Douglas Parking 160 SPEAR ST PPA G 37 F42 AMPCO 50 BEALE St PPA G 90 F43 Pacific Spear Corp 150 SPEAR ST PPA G 15				
F42 AMPCO 50 BEALE St PPA G 90 F43 Pacific Spear Corp 150 SPEAR ST PPA G 15				
F43 Pacific Spear Corp 150 SPEAR ST PPA G 15				
' '				
F44 ACE Parking 333 MARKET ST PPA G 120				
F45 Standard Parking 121 SPEAR ST PPA G 450				
F46 Hewitt ML Zhou X Motzek RH Standard Parking 155 STEUART ST PPA G 15				
F47 CA 90 Spear Ltd Partnership 60 SPEAR ST PPA G 11				
F48 ACE Parking 1 MARKET ST PPA G 160				
F49 Impark Lot D 1050 03rd St PPA L 150				
F50 Impark Lot A 1099 03rd St PPA L 2,501 36%	21%			
F51 Stewart Douglas 144 KING ST PPA L 30	2.70			
F52 SF Redevelopment Agency SFRA 40 Pier Forty PPA L 280				
F53 Phoenix Industries Game day parking \$40 599 02nd ST PPA L 40				
F54 US Parking 270 BRANNAN ST PPA L 70 95%	25%			
F55 Impark Pier 30/32 40 Pier Thirty PPA L 998 27%	7%			
F56 Impark	29%			
F57 US Parking 250 MAIN ST PPA L 440	2770			
F58 Impark 100 FOLSOM ST PPA L 48				1
F59 Ace Parking 199 BEALE ST PPA L 81				
F60 Place 2 Park LLC 235 MAIN ST PPA L 260				
F61 Place 2 Park LLC 191 BEALE ST PPA L 230				
F62 AMPCO 123 MISSION ST PPA L 84				
F63 ACE Parking Ferry Building 100 The Embarcadero PPA L 100				
F64 Delancey St Foundation Delancey St Restaurant 600 The EMBARCADERO PPA N/A 50				
F65 Sudike Solomon/Abdi Kumsa Cross Park 1 MISSION ST PPA N/A 270				1

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VAN NESS AVENU	_	<i>,</i>		West Side	East Side	Both S	
Grove St		North Point St	General Metered	120	107	227	53%
0.010 01			Short Term Metered	3	14	17	4%
			Motorcycle Metered	1	5	6	1%
			Commercial Loading Metered	5	9	14	3%
			Unmetered Parking	59	81	140	33%
			Passenger Loading/Taxi	6	3	9	2%
			Commercial	0	1	1	0%
			Short Term	3	0	3	1%
			Disabled	5	3	8	2%
			Total Van Ness Avenue	202	223	425	100%
	Ļ			40	10	0.5	
Grove St	to	McAllister St	General Metered	13	12	25	
			Short Term Metered	0	0	0	
			Motorcycle Metered Commercial Loading Metered	2	0	2	
			Unmetered Parking	0	0	0	
			Passenger Loading/Taxi	0	0	0	
			Commercial	0	0	0	
			Short Term	0	0	0	
			Disabled	3	1	4	
			Subtotal	18	13	31	
McAllister St	to	Golden Gate Av	General Metered	11	7	18	•
			Short Term Metered	0	0	0	
			Motorcycle Metered	0	1	1	
			Commercial Loading Metered	0	2	2	
			Unmetered Parking	0	0	0	
			Passenger Loading/Taxi	0	0	0	
			Commercial	0	0	0	
			Short Term	0	0	0	
			Disabled	2	0	2	
			Subtotal	13	10	23	_
Golden Gate Av	to	Turk St	General Metered	8	11	19	
			Short Term Metered	0	0	0	
			Motorcycle Metered	0	0	0	
			Commercial Loading Metered	0	0	0	
			Unmetered Parking	0	0	0	
			Passenger Loading/Taxi	0	0	0	
			Commercial	0	0	0	
			Short Term	0	0	0	
			Disabled Subtotal	0 8	0 11	0 19	
Turk St	40	Eddy St	General Metered	5	7	12	-
Turk ot	ιο	Eddy 3t	Short Term Metered	0	1	1	
			Motorcycle Metered	0	0	0	
			Commercial Loading Metered	0	1	1	
			Unmetered Parking	0	0	Ö	
			Passenger Loading/Taxi	0	0	0	
			Commercial	0	0	0	
			Short Term	0	0	0	
			Disabled	0	0	0	
			Subtotal	5	9	14	
Eddy St	to	Ellis St	General Metered	11	5	16	-
,			Short Term Metered	0	0	0	
			Motorcycle Metered	0	0	0	
						1	
			Commercial Loading Metered	0	1		
			Commercial Loading Metered Unmetered Parking	0	0	0	
			Unmetered Parking				
				0	0	0	
			Unmetered Parking Passenger Loading/Taxi	0	0	0 0	
			Unmetered Parking Passenger Loading/Taxi Commercial	0 0	0 0 0	0 0 0	

On-Street Parking Summary

VAN NESS AVE	NUE		West Side	East Side	Both Side of Van Nes
Ellis St	to O'Farrell St	General Metered	6	6	12
		Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	0	0	o o
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
			0	0	
		Short Term	-	-	0
		Disabled	0	0	0
		Subtotal	6	6	12
D'Farrell St	to Geary Blvd	General Metered	4	3	7
		Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	ő
		Short Term	0	0	0
		Disabled	0	1	1
		Subtotal	4	4	8
Geary Blvd	to Post St	General Metered	3	1	4
		Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	2	2
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	3	3	6
Post St	to Sutter St	General Metered	5	8	13
		Short Term Metered	0	1	1
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	5	9	14
Sutter St	to Bush St	General Metered	3	3	6
		Short Term Metered	2	1	3
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	Ö
		Short Term	0	0	ő
		Disabled	0	0	0
				4	9
2l. 04	4- Di- 01	Subtotal	5		
Bush St	to Pine St	General Metered	7	4	11
		Short Term Metered	0	4	4
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	2	0	2
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	ő
		Short Term	0	0	0
		Disabled	0	1	1
		Subtotal	9	9	18

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VAN NESS AVEN	UE		West Side	East Side	Both Sides of Van Ness
Pine St	to California St	General Metered	4	2	6
		Short Term Metered	1	0	1
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	5	2	7
California St	to Sacramento St	General Metered	10	2	12
		Short Term Metered	0	3	3
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	10	5	15
Sacramento St	to Clay St	General Metered	5	9	14
		Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	1	1
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	5	10	15
Clay St	to Washington St	General Metered	4	2	6
•	•	Short Term Metered	0	1	1
		Motorcycle Metered	1	4	5
		Commercial Loading Metered	0	1	1
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	5	8	13
Washington St	to Jackson St	General Metered	7	7	14
Tracinington of	10 000.0001	Short Term Metered	0	3	3
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	1	1
		Unmetered Parking	0	0	o .
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	7	11	18
Jackson St	to Pacific Av	General Metered	9	5	14
ouckson of	to Tacille Av	Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		•	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	-	-	-
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	9	5	14

On-Street Parking Summary

VAN NESS AVE	ENUE		West Side	East Side	Both Side of Van Nes
Pacific Av	to Broadway	General Metered	5	11	16
r acilic Av	to Broadway	Short Term Metered	0	0	0
		Motorcycle Metered	0	0	ő
		Commercial Loading Metered	1	0	1
		Unmetered Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	ő
		Subtotal	6	11	17
Broadway	to Vallejo St	General Metered	0	0	0
oroauway	to vallejo st	Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		•	0	0	0
		Commercial Loading Metered	7	7	14
		Unmetered Parking			
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	7	7	14
/allejo St	to Green St	General Metered	0	2	2
		Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	9	8	17
		Passenger Loading/Taxi	2	0	2
		Commercial	0	0	0
		Short Term	1	0	1
		Disabled	0	0	0
		Subtotal	12	10	22
Green St	to Union St	General Metered	0	0	0
		Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	10	9	19
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0	0
		Subtotal	10	9	19
Jnion St	to Filbert St	General Metered	0	0	0
	to imperior	Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	6	6	12
		Passenger Loading/Taxi	0	3	3
		Commercial	0	0	0
		Short Term	1	0	1
		Disabled	0	0	0
			7	9	
'III 4 O4	4- 0	Subtotal			16
ilbert St	to Greenwich St	General Metered	0	0	0
		Short Term Metered	0	0	0
		Motorcycle Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Unmetered Parking	7	8	15
		Passenger Loading/Taxi	0	0	0
		Commercial	0	0	0
		Short Term	0	0	0
		Disabled	0	0 8	0

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				West	East	Both Sides
VAN NESS AVEN	NUE			Side	Side	of Van Ness
Greenwich St	to L	ombard St	General Metered	0	0	0
			Short Term Metered	0	0	0
			Motorcycle Metered	0	0	0
			Commercial Loading Metered	0	0	0
			Unmetered Parking	3	9	12
			Passenger Loading/Taxi	4	0	4
			Commercial	0	0	0
			Short Term	1	0	1
			Disabled	0	0	0
			Subtotal	8	9	17
Lombard St	to C	Chestnut St	General Metered	0	0	0
			Short Term Metered	0	0	0
			Motorcycle Metered	0	0	0
			Commercial Loading Metered	0	0	0
			Unmetered Parking	6	10	16
			Passenger Loading/Taxi	0	0	0
			Commercial	0	0	0
			Short Term	0	0	0
			Disabled	0	0	0
			Subtotal	6	10	16
Chestnut St	to F	rancisco St	General Metered	0	0	0
			Short Term Metered	0	0	0
			Motorcycle Metered	0	0	0
			Commercial Loading Metered	0	0	0
			Unmetered Parking	2	5	7
			Passenger Loading/Taxi	0	0	0
			Commercial	0	0	0
			Short Term	0	0	0
			Disabled	0	0	0
			Subtotal	2	5	7
Francisco St	to E	Bay St	General Metered	0	0	0
			Short Term Metered	0	0	0
			Motorcycle Metered	0	0	0
			Commercial Loading Metered	0	0	0
			Unmetered Parking	9	13	22
			Passenger Loading/Taxi	0	0	0
			Commercial	0	0	0
			Short Term	0	0	0
			Disabled	0	0	0
			Subtotal	9	13	22
Bay St	to N	North Point St	General Metered	0	0	0
			Short Term Metered	0	0	0
			Motorcycle Metered	0	0	0
			Commercial Loading Metered	0	0	0
			Unmetered Parking	0	6	6
			Passenger Loading/Taxi	0	0	0
			Commercial	0	1	1
			Short Term	0	0	0
			Disabled	0	0	0

On-Street Parking Summary

GROVE STREET			North Side of Grove S		
Hyde St.	to Polk St.	General Metered	33	94%	
		Short Term Metered	0	0%	
		Motorcycle Metered	0	0%	
		Commercial Loading Metered	0	0%	
		Unmetered Parking	0	0%	
		Passenger Loading/Taxi	0	0%	
		Commercial	0	0%	
		Short Term	0	0%	
		Disabled	2	6%	
		Total Grove Street	35	100%	
Hyde St.	to Larkin St. [a]	General Metered	9		
		Short Term Metered	0		
		Motorcycle Metered	0		
		Commercial Loading Metered	0		
		Unmetered Parking	0		
		Passenger Loading/Taxi	0		
		Commercial	0		
		Short Term	0		
		Disabled Subtotal	1 10		
Larkin St.	to Polk St.	General Metered	24	_	
Larkiii Ot.	to Folk St.	Short Term Metered	0		
		Motorcycle Metered	0		
		Commercial Loading Metered	0		
		Unmetered Parking	0		
		Passenger Loading/Taxi	0		
		Commercial	0		
		Short Term	0		
		Disabled	1		
		Subtotal	25		

[[]a] There is also on-street bicycle parking plus a 70 foot long passenger zone on the north side which also inclides an HC access ramp/red zone for the library.

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			West	East	Both	Sides
BAY STREET			Side	Side	of Ba	y St
Filmore St	to The Embarcadero	General Parking	166	177	343	69%
		Passenger Loading/Taxi	44	33	77	16%
		General Metered	30	33	63	13%
		Commercial Loading Metered	5	8	13	3%
		Disabled	0	0	0	0%
		Total Bay Street	245	251	496	100%
Filmore St	to Buchanan St	General Parking	13	19	32	
	to Buonanan ot	Passenger Loading/Taxi	0	0	0	
		General Metered	0	0	0	
		Commercial Loading Metered	0	0	0	
		Disabled	0	0	0	
		Subtotal	13	19	32	
Buchanan St	to Laguna St	General Parking	8	12	20	-
	to Lagana ot	Passenger Loading/Taxi	0	0	0	
		General Metered	0	0	0	
		Commercial Loading Metered	0	0	0	
		Disabled	0	0	0	
		Subtotal	8	12	20	
Laguna St	to Turk St	General Parking	14	19	33	_
	to Turk St	Passenger Loading/Taxi	4	0	4	
		General Metered	0	0	0	
		Commercial Loading Metered	0	0	0	
		•	0	0	-	
		Disabled Subtotal	18	1 9	0 37	
urk St	1. 0.1					_
urk St	to Octavia St	General Parking	0	16	16	
		Passenger Loading/Taxi	0	0	0	
		General Metered	0	0	0	
		Commercial Loading Metered	0	0	0	
		Disabled	0	0	0	
		Subtotal	0	16	16	_
Octavia St	to Gough St	General Parking	22	9	31	
		Passenger Loading/Taxi	0	0	0	
		General Metered	0	0	0	
		Commercial Loading Metered	0	0	0	
		Disabled	0	0	0	
		Subtotal	22	9	31	_
Gough St	to Franklin St	General Parking	19	6	25	
		Passenger Loading/Taxi	0	0	0	
		General Metered	0	0	0	
		Commercial Loading Metered	0	0	0	
		Disabled	0	0	0	
		Subtotal	19	6	25	

On-Street Parking Summary

			West	East	Both Sides
BAY STREET			Side	Side	of Bay St
Franklin St	to Van Ness Ave	General Parking	13	4	17
		Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	13	4	17
/an Ness Ave	to Polk St	General Parking	20	10	30
		Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	6	6
		Disabled	0	0	0
		Subtotal	20	16	36
Polk St	to Larkin St	General Parking	3	12	15
		Passenger Loading/Taxi	2	0	2
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	5	12	17
Larkin St	to Hyde St	General Parking	10	21	31
	•	Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	10	21	31
Hyde St	to Leavenworth St	General Parking	11	6	17
,		Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	11	6	17
eavenworth St	to Jones St	General Parking	12	8	20
.cavenworth ot	to conce of	Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	12	8	20
Jones St	to Taylor St	General Parking	0	19	19
Jones St	to Taylor St	Passenger Loading/Taxi	2	0	2
		General Metered	9	0	9
			•	-	-
		Commercial Loading Metered	0	0	0
		Disabled	0 11	0 19	0 30
F1 04	4 - M	Subtotal			
Taylor St	to Mason St	General Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		General Metered	9	19	28
		Commercial Loading Metered	2	0	2
		Disabled	0	0	0
		Subtotal	11	19	30

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			West	East	Both Sides
BAY STREET			Side	Side	of Bay St
Mason St	to Powell St	General Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		General Metered	12	14	26
		Commercial Loading Metered	3	2	5
		Disabled	0	0	0
		Subtotal	15	16	31
Powell St	to Stockton St	General Parking	21	16	37
		Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	21	16	37
Stockton St	to Kearny St	General Parking	36	33	69
		Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	36	33	69
Kearny St	to The Embarcadero	General Parking	0	0	0
		Passenger Loading/Taxi	0	0	0
		General Metered	0	0	0
		Commercial Loading Metered	0	0	0
		Disabled	0	0	0
		Subtotal	0	0	0

AC34
ESTIMATED PARKING TURNOVER

	In	Out	Acc	
08:00	0	0	0	
09:00	5	0	5	
10:00	10	0	15	
11:00	30	0	45	
12:00	20	5	60	Turnover
1:00	10	5	65	_100 vehicles
2:00	10	5	70	70 spaces used total
3:00	5	5	70	1.43 each space turns over 1.43 times
4:00	5	5	70	
5:00	5	10	65	
6:00	0	20	45	
7:00	0	20	25	
8:00	0	15	10	
9:00	0	10	0	
10:00	0	0	0	
	100	100		

Sources

Information in Bold is from the BART Giants Parade and Fleetweek ridership patterns The remaining hours were filled in based on ridership and professional judgement

YEAR 2013

478

16

223

717

8,068

34th America's Cup Parking Demand

Weekend Peak Race Day Weekday Peak Race Day Weekend Peak Race Day Weekday Peak Race Day Vehicle **Parking** Vehicle **Parking Parking** Vehicle **Parking** Vehicle **Landside Locations Trips Demand Trips Demand Trips Demand Trips** Demand Presidio and Crissy Field 5,800 2,030 23,098 8,085 6,484 2,270 24,598 8,610 Marina and Fort Mason to Acquatic Park 9,574 3,351 17,999 6,300 4,660 1,632 18,599 6,510 Fisherman's Wharf 1,773 621 4,500 1,575 1,976 692 7,499 2,625 NE Embarcadero (Fisherman's Wharf to Pier 42) 2,330 816 4,500 1,575 7,877 2,757 31,797 11,130 Downtown 0 0 0 0 0 0 3,600 1,260 Other SF 900 525 0 0 315 0 1,500 Total SF Locations 19,477 7,351 87,593 6,818 50,996 17,850 20,996 30,660

414

16

191

621

7,439

2,998

818

3,980

7,796

58,792

1,050

287

1,393

2,730

20,580

1,364

45

636

2,045

23,042

YEAR 2012

Estimated parking turnover: 1.43

Total Non-SF Locations

1,182

45

545

1.773

21,249

2,290

287

2,004

4,581

35,241

6,542

818

5,724

13,084

100,677

Treasure Island

Marin County

Alcatraz Island and Angel Island

TOTAL ALL LOCATIONS

San Francisco JRH Cruise Terminal at Pier 27

PARKING DEMAND CALCULATIONS

PROJECT

Cruise Terminal: (M.Nemey - SF Port)

220 employees 5,000 gsf 0 gsf Retail: Restaurant/Café:

Restaurant/Cate:	u gsi		
	WEEKDAY DEMAND		WEEKEND DEMAND
Cruise Terminal:			
Short-Term	2,048 daily visitor vehicle-trips	Short-Term	2,048 daily visitor vehicle-trips
	50% vehicles park		50% vehicles park
	5.5 turnover rate		5.5 turnover rate
	93 spaces		93 spaces
Long-Term	220 employees	Long-Term	220 employees
	39% employees who drive		39% employees who drive
	1.54 vehicle occupancy		1.54 vehicle occupancy
	55 spaces		55 spaces
Total	149 spaces	Total	149 spaces
Retail:			
Short-Term	26 daily visitor auto-trips	Short-Term	30 daily visitor auto-trips
	2.43 avg. veh occupancy		2.43 avg. veh occupancy
	11 daily visitor vehicle-trips		12 daily visitor vehicle-trips
	5.5 turn-over rate		5.5 turn-over rate
	1 spaces		1 spaces
Long-Term	350 gsf per employee	Long-Term	350 gsf per employee
	14 daily employees		14 daily employees
	39% employees who drive		39% employees who drive
	1.54 vehicle occupancy		1.54 vehicle occupancy
Tatal	4 spaces	T-4-1	4 spaces
Total	5 spaces	Total	5 spaces
Restaurant/Café:			
Short-Term	0 daily visitor auto-trips	Short-Term	0 daily visitor auto-trips
	2.37 avg. veh occupancy		2.37 avg. veh occupancy
	0 daily visitor vehicle-trips		0 daily visitor vehicle-trips
	5.5 turn-over rate		5.5 turn-over rate
Long Torm	0 spaces	Long Torm	0 spaces
Long-Term	350 gsf per employee	Long-Term	350 gsf per employee
	0 daily employees		0 daily employees
	39% employees who drive 1.54 vehicle occupancy		39% employees who drive 1.54 vehicle occupancy
	0 spaces		0 spaces
Total		Total	
TOTAL	0 spaces	TOTAL	0 spaces
TOTAL PARKING DI	EMAND		
Short-Term	94 spaces	Short-Term	94 spaces
Long-Term	59 spaces	Long-Term	59 spaces
TOTAL	153 spaces	TOTAL	153 spaces

SECTION 8

Other Supporting Technical Data

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8.1 Port of San Francisco Cruise Ship Data

Port of San Francisco Cruise Ship Analysis 2003-2011

			Total	Avg.Cap
Year	No. of Ve	essel Calls	Capacity	/ Vessel
2003	77	13%	92,148	1,197
2004	84	14%	123,306	1,468
2005	84	14%	127,106	1,513
2006	81	13%	141,993	1,753
2007	60	10%	116,249	1,937
2008	59	10%	108,528	1,839
2009	62	10%	126,046	2,033
2010	41	7%	70,239	1,713
(est.) 2011	61	10%	92,859	1,522
TOTAL	609	100%	998,474	1,640
Average:	68	calls per y	ear	1.640

Berthing Loca	tion	No. of Vessel Calls		
P35 North	1	40	7%	
P35 South	2	494	81%	
Pier 27	3	55	9%	
Pier 30/32	4	20	3%	
TOTAL		609	100%	

Std. Dev.

		Number of Vessels			Calls	
Day of the week		Arrivir	ng	Depart	ing	
Friday	1	85	14%	81	13%	
Monday	2	92	15%	93	15%	
Saturday	3	87	14%	96	16%	
Sunday	4	79	13%	77	13%	
Thursday	5	78	13%	76	12%	
Tuesday	6	94	15%	91	15%	
Wednesday	7	94	15%	95	16%	
TOTAL		609	100%	609	100%	

681

				Avg. days
Berthing		No. of	per year	
One Vessel	1	475	88.6%	53
Two Vessels	2	50	9.3%	6
Three Vessels	3	10	1.9%	1
Four Vessels	4	1	0.2%	0
TOTAL		536	100.0%	60
		ı	Number o	of Vaccale

			Number of	f Vessels	
Time P	eriod	Arriv	ing	Depa	arting
5:00 AM	6:00 AM	90	15%	22	4%
6:00 AM	7:00 AM	281	46%	=.	0%
7:00 AM	8:00 AM	131	22%	3	0%
8:00 AM	9:00 AM	25	4%	-	0%
9:00 AM	10:00 AM	19	3%	1	0%
10:00 AM	11:00 AM	3	0%	4	1%
11:00 AM	12:00 PM	13	2%	10	2%
12:00 PM	1:00 PM	11	2%	7	1%
1:00 PM	2:00 PM	15	2%	4	1%
2:00 PM	3:00 PM	8	1%	3	0%
3:00 PM	4:00 PM	3	0%	179	29%
4:00 PM	5:00 PM	2	0%	45	7%
5:00 PM	6:00 PM	3	0%	162	27%
6:00 PM	7:00 PM	1	0%	56	9%
7:00 PM	8:00 PM	1	0%	12	2%
8:00 PM	9:00 PM	3	0%	24	4%
9:00 PM	10:00 PM	0	0%	15	2%
10:00 PM	11:00 PM	0	0%	18	3%
11:00 PM	12:00 AM	0	0%	44	7%
TOTAL	TOTAL	609	100%	609	100%

Month of th	ne Year	Total Nur of Vessel		Avg. Calls per Year			
April	1	48	8%	5			
August	2	44	7%	5			
December	3	11	2%	1			
February	4	14	2%	2			
January	5	22	4%	2			
July	6	54	9%	6			
June	7	64	11%	7			
March	8	24	4%	3			
May	9	135	22%	15			
November	10	19	3%	2			
October	11	65	11%	7			
September	12	109	18%	12			
TOTAL		609	100%	68			
Avg. calls p	er month	51	'	6			

Size of Vessel		Number	Percent
up to 300 pax	X	26	4%
from 300 to 600 pay	K	32	5%
from 600 to 1000 pa	ах	103	17%
from 1000 to 1600 pa	ах	61	10%
from 1600 to 2000 pa	ах	265	44%
from 2000 to 2600 pa	ах	86	14%
from 2600 to 3000 pa	ах	24	4%
from 3000 to 3200 pa	ах	12	2%
TOTAL		609	100%
Avg. Siz	ze	1,640	passengers
Std. De	V.	681	passengers
Avg. Size * 2 Std. De	٧.	3,002	passengers

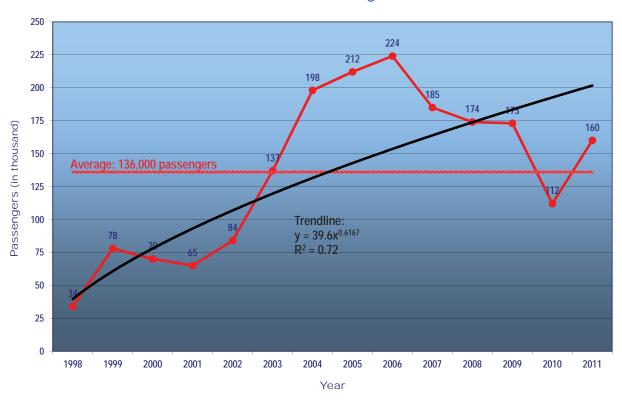
	STH OF S	STAY
No. of	No. of	
Hours	Vessels	Percent
up to 4 h.	5	1%
5 h.	9	1%
6 h.	14	2%
7 h.	8	1%
8 h.	33	5%
9 h.	154	25%
10 h.	89	15%
11 h.	93	15%
12 h.	65	11%
13 h.	9	1%
14 h.	9	1%
15 h.	18	3%
16 h.	16	3%
17 h.	11	2%
18 h.	1	0%
19 h.	1	0%
20 h.	10	2%
21 h.	2	0%
22 h.	2	0%
23 h.	2	0%
24 h.	4	1%
over 24 h.	54	9%
TOTAL	609	100%
Avg. Stay	13	hours
Median Stay	10	
Max. Stay	124	
Min. Stay	3	hours

Port of San Francisco Cruise Ship Analysis 1990-2011

	Nun	nber of Annu	al Passenge	ers	Number of A	Annual Vesse	l Calls
Year	Disembark	Transit	Embark	Total	Home Port	Transit	Total
1990				35,495			-
1992				56,148			-
1994				56,968			-
1996				52,874			
1998	10,606	11,380	11,884	33,870			-
1999	29,213	13,618	34,978	77,809			-
2000	25,534	15,716	28,804	70,054			-
2001	21,645	17,644	25,899	65,188	8	33	41
2002	34,322	17,392	31,824	83,538	19	24	43
2003	55,690	25,003	56,622	137,315	46	31	77
2004	86,447	19,471	91,655	197,573	49	35	84
2005	93,434	24,783	93,429	211,646	47	37	84
2006	92,763	39,365	91,487	223,615	35	46	81
2007	71,520	39,996	73,419	184,935			-
2008	69,976	29,003	74,943	173,922			-
2009	54,946	64,961	52,930	172,837			-
2010	41,776	29,111	41,288	112,175			-
(est.) 2011	60,000	40,000	60,000	160,000			-
TOTAL 1998-2011	747,872	387,443	769,162	1,904,477	204	206	410
Average 2001-2010	62,252	30,673	63,350	156,274	50%	50%	100%
Average 1998-2011	53,419	27,675	54,940	136,034		•	
Average 1990-2011				116,998			

Year	Ann Embark/ Disembark	ual Passeng In Transit	jers Total	Year	Vessel Calls	Average Passengers per Vessel
1998	50%	50%	100%	1998		814
1999	70%	30%	100%	1999		952
					_	
2000	63%	37%	100%	2000		1,031
2001	57%	43%	100%	2001	41	958
2002	66%	34%	100%	2002	43	1,203
2003	69%	31%	100%	2003	77	1,048
2004	82%	18%	100%	2004	84	1,261
2005	79%	21%	100%	2005	84	1,407
2006	70%	30%	100%	2006	81	1,631
2007	64%	36%	100%	2007	60	1,859
2008	71%	29%	100%	2008	59	1,678
2009	45%	55%	100%	2009	62	1,934
2010	59%	41%	100%	2010	41	1,700
(est.) 2011	60%	40%	100%	(est.) 2011	61	1,600
Average	66%	34%	100%	TOTAL	805	1,410
				Average	58	1,410
				Std. Dev.		371

Port of SF Cruise Ships 1998-2011 Total Annual Passengers



1990-2011 Cruise Statistics 2011 04 13.xls

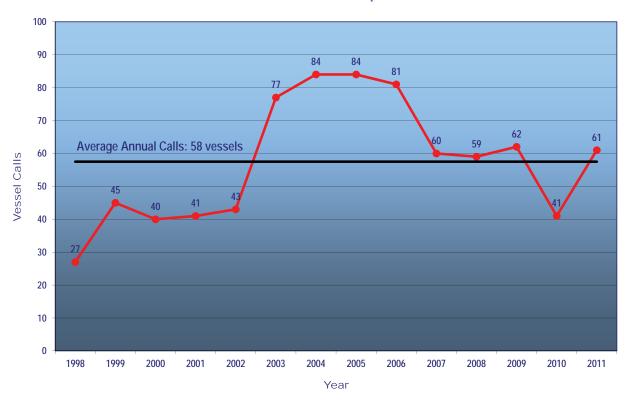
6/7/2011

Adavant Consulting

Port of SF Cruise Ships 1998-2010 Passengers Characteristics



Port of SF Cruise Ships 1998-2011 Number of Vessel Calls per Year

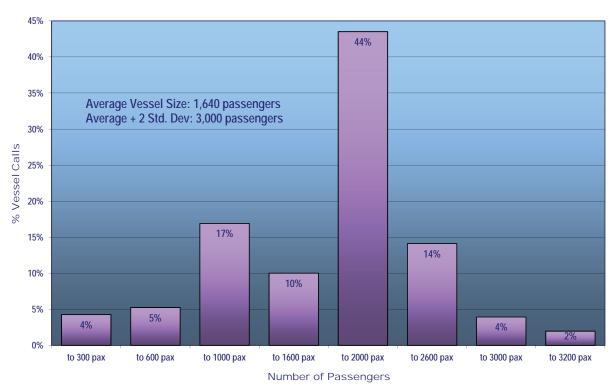


1990-2011 Cruise Statistics 2011 04 13.xls

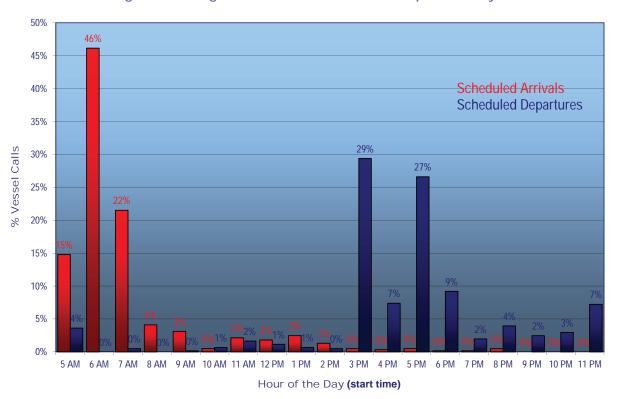
6/7/2011

Adavant Consulting

Port of SF Cruise Ships 2003-2011 Cruise Ship Calls by Vessel Size



Port of SF Cruise Ships 2003-2011 Average Percentage of Total Vessel Arrivals/Departures by Hour

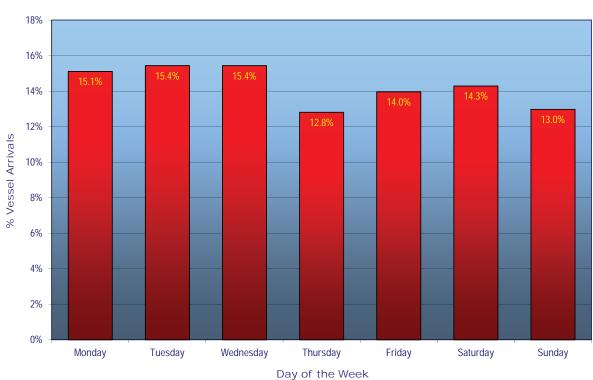


1990-2011 Cruise Statistics 2011 04 13.xls

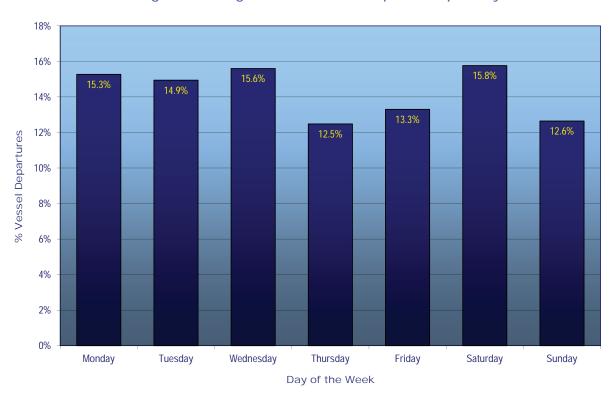
6/7/2011

Adavant Consulting

Port of SF Cruise Ships 2003-2011 Average Percentage of Total Vessel Arrivals per Day



Port of SF Cruise Ships 2003-2011 Average Percentage of Total Vessel Departures per Day

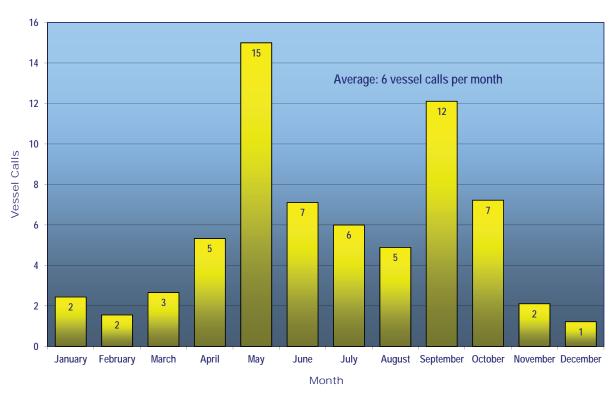


1990-2011 Cruise Statistics 2011 04 13.xls

6/7/2011

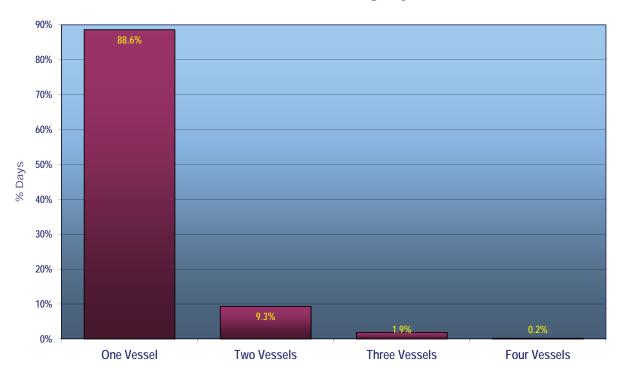
Adavant Consulting

Port of SF Cruise Ships 2003-2011 Average Number of Vessel Calls by Month



419 6/7/2011

Port of SF Cruise Ships 2003-2011 Simultaneous Berthing Days



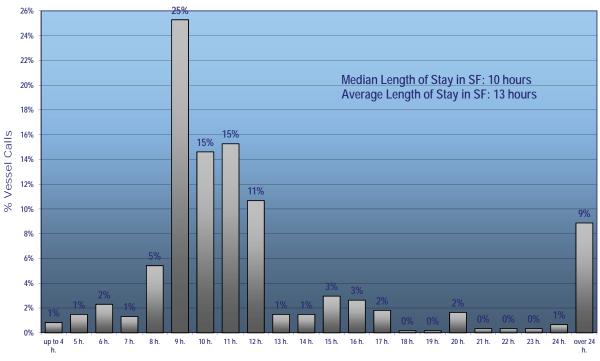
Number of Berthed Vessels

1990-2011 Cruise Statistics 2011 04 13.xls

6/7/2011

Adavant Consulting

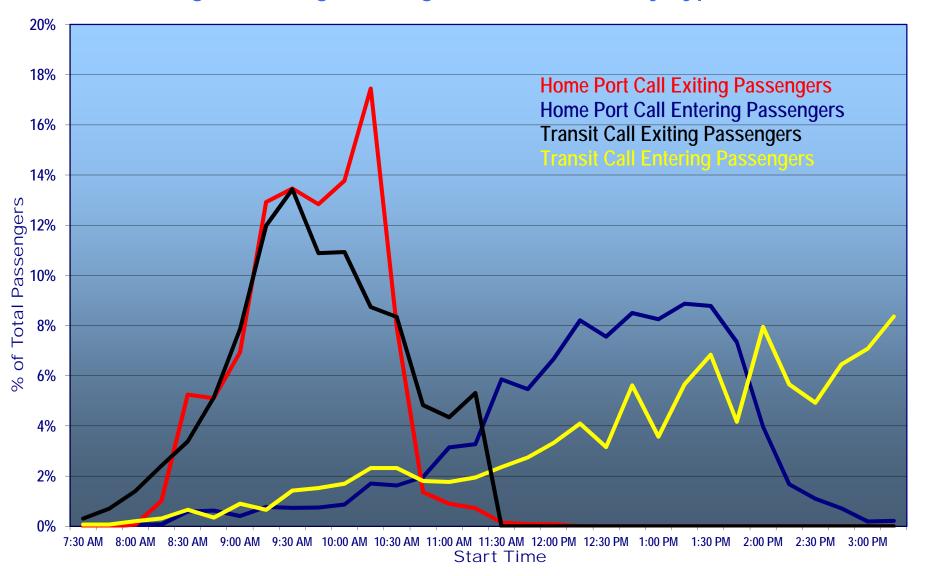
Port of SF Cruise Ships 2003-2011 Length of Stay in Port



Duration of Stay (hours)

8.2 CHS Consulting Group Survey of P35 Terminal

Port of SF Cruise Ship Surveys Passengers Exiting/Entering Pier 35 Terminal by Type of Call



San Francisco Cruise Ship Terminal Cruise Ship Activity Surveys Average Taxis Departing/Arriving at Pier 35

290 Taxi vehicle-trips per 1,000 passengers

Average	Taxis De	parting/Ar	riving at Pie	r 35		290 Taxi vehicle-trips per 1,000 passengers												
			TAXIS ARRIV			AVG TAXIS DEPARTING FROM TERMINAL All Veh. Empty Vh Vh w Pax Pax. All Veh. Empty Vh Vh w Pax Pax.				ĺ		OF DAILY		Avg.				
	All Day	All Veh. 283	Empty Vh 129	Vh w Pax 154	Pax. 376	All Veh. 283	Empty Vh 129	Vh w Pax 154	Pax. 376	All Veh. 566	Empty Vh 258	Vh w Pax 309	Pax. 752	All Veh.	Empty Vh	Vh w Pax	Pax.	Occup. 2.43
	(în/out)	50%	50%	50%	50%	50%	50%	50%	50%	100%	100%	100%	100%					
AM F	Peak Hour (in/out)	28 54%	26 81%	2 10%	4 9%	24 46%	6 19%	18 90%	43 91%	52 100%	32 100%	20 100%	47 100%	9%	12%	6%	6%	2.35
Midday F	Peak Hour	57 53%	6	54 76%	160 82%	51 47%	43 88%	17 24%	35 18%	105 100%	46	59 100%	168 100%	19%	18%	19%	22%	2.85
7:30	(in/out) 8:30	6	<i>12%</i>	0	0270	5	3	2470	4	11	100% 9	2	4					l
7:35 7:40	8:35 8:40	11 14	10 13	1	1	7 9	4	3	6	18 23	14	4 7	7 14					
7:40	8:45	18	17	1	2	13	4	6 9	13 21	31	16 21	10	23					
7:50 7:55	8:50 8:55	20 23	19 22	1	3	16 20	5 6	11 14	25 34	36 43	24 28	12 15	28 38					
8:00	9:00	28	26	2	4	24	6	18	43	52	32	20	47					
8:05 8:10	9:05 9:10	31 35	29 33	2	4	27 30	6 6	21 24	51 57	58 65	35 39	23 26	55 61					
8:15	9:15	39	37	2	4	34	6	28	69	73	43	30	73					
8:20 8:25	9:20 9:25	45 48	43 45	2	5 6	41 45	7 6	34 39	81 95	86 93	50 51	36 42	86 101					
8:30	9:30	49	46	3	6	49	7	42	102	98	53	45	108					
8:35 8:40	9:35 9:40	50 50	47 47	3	6 7	56 59	7 7	49 52	117 125	106 109	54 54	52 55	123 132					
8:45	9:45	50	47	3	6	60	7	53	127	110	54	56	133					
8:50 8:55	9:50 9:55	52 54	49 52	3 2	5 4	62 60	6 5	56 55	134 136	114 114	55 57	59 57	139 140					
9:00	10:00	53	51	2	4	62	6	56	136	115	57	58	140					
9:05 9:10	10:05 10:10	54 53	52 50	2	4 5	62 65	5 5	57 60	140 145	116 118	57 55	59 63	144 150					
9:15	10:15	53	50	3	6	65	5	60	145	118	55	63	151					
9:20 9:25	10:20 10:25	51 51	48 48	3	5 5	64 63	4	60 60	145 146	115 114	52 51	63 63	150 151					
9:30	10:30	54	51	3	6	65	3	62	151	119	54	65	157					
9:35 9:40	10:35 10:40	54 53	50 49	4	9	62 61	2	60 59	152 151	116 114	52 51	64 63	161 160					
9:45	10:45	53	49	4	9	63	2	61	158	116	51	65	167					
9:50 9:55	10:50 10:55	51 48	47 43	4 5	9 12	67 71	5 7	62 64	160 161	118 119	52 50	66 69	169 173					
10:00	11:00	48	42	6	15	73	10	63	159	121	52	69	174					
10:05 10:10	11:05 11:10	47 46	39 37	8 9	20 22	77 77	15 17	62 60	158 152	124 123	54 54	70 69	178 174					
10:15	11:15	44	33	11	26	78	19	59	149	122	52	70	175					
10:20 10:25	11:20 11:25	43 42	31 28	12 14	30 33	76 73	21 24	55 49	139 125	119 115	52 52	67 63	169 158					
10:30	11:30	39	22	17	40	70	27	43	110	109	49	60	150					
10:35 10:40	11:35 11:40	40 40	19 15	21 25	53 67	69 66	31 33	38 33	93 81	109 106	50 48	59 58	146 148					
10:45	11:45	42	12	30	78	63	35	28	64	105	47	58	142					
10:50 10:55	11:50 11:55	44 44	10 7	34 37	87 93	58 55	35 36	23 19	51 42	102 99	45 43	57 56	138 135					
11:00	12:00	47	6	41	104	51	34	17	35	98	40	58	139					
11:05 11:10	12:05 12:10	46 51	5 5	41 46	113 121	45 46	32 36	13 10	25 19	91 97	37 41	54 56	138 140					
11:15	12:15	52	5	47	125	44 45	38	6	11	96	43	53	136					
11:20 11:25	12:20 12:25	54 56	3	51 53	150 160	46	40 41	5 5	8 7	99 102	43 44	56 58	158 167					
11:30	12:30	57	3	54 50	160	48 44	43 40	5	8	105	46	59	168					
11:35 11:40	12:35 12:40	53 52	3	49	150 141	44	41	4 4	7 6	97 97	43 44	54 53	157 147					
11:45 11:50	12:45 12:50	52 51	3	49 48	141 137	46 45	43 43	3 2	5 4	98 96	46 46	52 50	146 141					
11:50	12:55	51	3	48	135	45	43 42	2	3	96 95	46 45	50 50	138					
12:00 12:05	13:00 13:05	49 50	3 2	46 48	128 126	44 43	43 42	1	2	93 93	46 44	47 49	130 128					
12:10	13:10	48	1	47	125	41	40	i	1	89	41	48	126					
12:15 12:20	13:15 13:20	48 46	1 1	47 45	123 103	40 38	39 37	1 1	1 1	88 84	40 38	48 46	124 104					
12:25	13:25	45	1	44	96	35	35	Ö	i	80	36	44	97					
12:30 12:35	13:30 13:35	44 46	1 1	43 45	92 98	33 32	33 32	0	0	77 78	34 33	43 45	92 98					
12:40	13:40	49	1	48	104	31	31	0	0	80	32	48	104					
12:45 12:50	13:45 13:50	51 51	1	50 50	106 107	29 27	29 27	0	0	80 78	30 28	50 50	106 107					
12:55	13:55	53	1	52	109	26	26	0	11	79	27	52	110					
13:00 13:05	14:00 14:05	52 49	1	51 48	109 101	25 23	25 23	0	1	77 72	26 24	51 48	110 102					
13:10	14:10	46	1	45	94	20	20	0	0	66	21	45	94					
13:15 13:20	14:15 14:20	44 40	1 1	43 39	88 81	18 16	18 16	0	0	62 56	19 17	43 39	88 81					
13:25	14:25	36	1	35	74	14	14	0	0	50	15	35	74					
13:30 13:35	14:30 14:35	33 28	0	33 28	69 58	12 11	12 11	0	0	45 39	12 11	33 28	69 58					
13:40	14:40	23	0	23	45	9	9	0	0	32	9	23	45					
13:45 13:50	14:45 14:50	16 13	0	16 13	34 28	7 7	7 7	0	0	23 20	7 7	16 13	34 28					
13:55	14:55	9	0	9	19	5	5	0	0	14	5	9	19					
14:00 14:05	15:00 15:05	6 5	0	6 5	12 8	4	4	0	0	10 8	4	6 5	12 8					
14:10	15:10	3	0	3	5	3	3	0	0	6	3	3	5					
14:15 14:20	15:15 15:20	2	0	2	4 2	2 2	2	0	0	4 3	2	2 1	4 2					
14:25	15:25	1	0	1	2	1	1	0	0	2	1	1	2					
14:30	15:30	1	0	1	2	1	1	0	0	2	1	1	2	l				

San Francisco Cruise Ship Terminal Cruise Ship Activity Surveys Average Privately Owned Vehicles Arriving/Departing Pier 35

628 Private vehicle-trips per 1,000 passengers

		AVG I All Veh.	POV ARRIVI Empty Vh		MINAL Pax.	AVG PO	V DEPARTII Empty Vh		ERMINAL Pax.	TOTAL A	VG POV AC Empty Vh	CESSING 1	ERMINAL Pax.	All Veh.		OF DAILY Vh w Pax	Pax.	Avg Occu
	All Day	613	252	361	1,014	613	252	361	1,014	1,226	504	722	2,028	All VCII.	Linpty vii	VIIWIGA	ı ux.	2.81
AM Pe	(in/out) ak Hour	50% 23	50% 20	50% 3	50% 4	50% 24	50% 3	50% 21	50% 51	100% 47	100% 23	100% 24	100% 55	4%	5%	3%	3%	2.29
Aidday Pe	(in/out) ak Hour	49% 116	87% 26	13% 113	7% 328	51% 106	13% 80	<i>88%</i> 51	93% 145	100% 211	100% 83	100% 130	100% 372	17%	16%	18%	18%	2.86
7:30	(in/out) 8:30	<i>52%</i>	<i>25%</i>	<i>69%</i>	<i>69%</i>	48% 2	75%	<i>31%</i>	<i>31%</i>	100% 4	100% 2	100% 2	<i>100%</i>					
7:35	8:35	3	2	1	2	3	1	2	5	6	3	3	7					
7:40 7:45	8:40 8:45	6 8	5 6	1 2	2	6 8	1	5 7	11 16	12 16	6 7	6 9	13 18					
7:50 7:55	8:50 8:55	11 16	9 13	2	2	13 17	1 2	12 15	29 37	24 33	10 15	14 18	31 40					
8:00	9:00	23	20	3	4	24	3	21	51	47	23	24	55					
8:05 8:10	9:05 9:10	30 37	27 33	3 4	4 5	33 42	4 5	29 37	74 95	63 79	31 38	32 41	78 100					
8:15 8:20	9:15 9:20	46 56	42 51	4 5	5 6	50 58	5 5	45 53	116 137	96 114	47 56	49 58	121 143					
8:25	9:25	63	59	4	6	68	6	62	166	131	65	66	172					
8:30 8:35	9:30 9:35	68 76	64 72	4 4	6 5	77 90	6 8	71 82	191 220	145 166	70 80	75 86	197 225					
8:40 8:45	9:40 9:45	83 90	78 86	5 4	7 7	99 107	9	90 98	246 269	182 197	87 95	95 102	253 276					
8:50	9:50	94	89	5	7	114	10	104	289	208	99	109	296					
8:55 9:00	9:55 10:00	98 100	94 96	4	6	123 129	10 10	113 119	314 331	221 229	104 106	117 123	320 337					
9:05 9:10	10:05 10:10	103 104	99 99	4 5	9 11	136 142	11 11	125 131	347 364	239 246	110 110	129 136	356 375					
9:15	10:15	108	102	6	17	148	11	137	382	256	113	143	399					
9:25	10:20 10:25	107 109	101 102	6 7	18 19	154 161	11 11	143 150	403 422	261 270	112 113	149 157	421 441					
9:30 9:35	10:30 10:35	112 113	104 104	8 9	21 24	167 170	12 12	155 158	437 448	279 283	116 116	163 167	458 472					
9:40	10:40	113	105	8	24	175	11	164	470	288	116	172	494					
9:50	10:45 10:50	115 119	106 110	9	25 25	182 187	12 12	170 175	491 501	297 306	118 122	179 184	516 526					
9:55 10:00	10:55 11:00	121 121	111	10 12	29 34	190 190	13 14	177 176	505 507	311 311	124 123	187 188	534 541					
10:05	11:05	118	104	14	41	186 181	15	171	492	304	119	185	533					
10:15	11:10 11:15	119 115	100 93	19 22	53 62	179	18 22	163 157	471 455	300 294	118 115	182 179	524 517					
	11:20 11:25	114 110	88 79	26 31	74 88	173 164	24 28	149 136	433 394	287 274	112 107	175 167	507 482					
10:30	11:30	108	72	36	101	155	31	124	360	263	103	160	461 443					
10:40	11:35 11:40	107 104	64 54	43 50	123 145	146 135	35 41	111 94	320 269	253 239	99 95	154 144	414					
	11:45 11:50	105 105	45 36	60 69	171 198	125 115	46 50	79 65	222 181	230 220	91 86	139 134	393 379					
	11:55 12:00	105 106	26 19	79 87	227 248	106 99	55 60	51 39	145 111	211 205	81 79	130 126	372 359					
11:05	12:05	109	15	94	271	96	65	31	88	205	80	125	359					
	12:10 12:15	111 111	11 8	100 103	286 295	93 88	69 71	24 17	70 48	204 199	80 79	124 120	356 343					
	12:20 12:25	114 114	6 4	108 110	307 312	86 85	75 77	11 8	30 20	200 199	81 81	119 118	337 332					
11:30	12:30	115	4	111	319	84	78	6	18	199	82	117	337					
11:40	12:35 12:40	116 116	3	113 113	322 321	84 83	80 79	4 4	14 12	200 199	83 82	117 117	336 333					
	12:45 12:50	115 113	3 2	112 111	328 323	82 82	79 79	3	9	197 195	82 81	115 114	337 331					
11:55	12:55	112	2	110	318	80	77	3	8	192	79	113	326					
12:05	13:00 13:05	111 111	3	108 108	311 311	80 78	76 74	4	10 10	191 189	79 77	112 112	321 321					
	13:10 13:15	110 111	3	107 108	305 310	77 76	73 73	4	10 10	187 187	76 76	111 111	315 320					
12:20	13:20	112	3	109	315 321	74	71	3	8	186	74	112	323 329					
12:30	13:25 13:30	114 116	3	111 113	326	74 73	71 71	2	4	188 189	74 74	114 115	330					
	13:35 13:40	116 118	3	113 115	326 333	72 73	70 71	2	4	188 191	73 74	115 117	330 337					
12:45	13:45 13:50	118 120	3	115 117	322 325	71 70	69 69	2	4	189 190	72 72	117 118	326 328					
12:55	13:55	117	2	115	320	69	68	1	2	186	70	116	322					
13:00 13:05	14:00 14:05	116 113	2	114 111	325 312	69 66	69 66	0	1 0	185 179	71 68	114 111	326 312					
13:10 13:15	14:10 14:15	108 102	2	106 100	298 281	63 60	63 60	0	0	171 162	65 62	106 100	298 282					
13:20	14:20	97	2	95	263	57	57	0	1	154	59	95	264					
13:25 13:30	14:25 14:30	90 83	2	88 81	243 223	52 49	52 49	0	1	142 132	54 51	88 81	244 224					
13:35	14:35 14:40	75 66	2 2	73 64	200 174	42 38	42 38	0	1	117 104	44 40	73 64	201 175					
13:45	14:45	58	2	56	153	35	35	Ö	1	93	37	56	154					
	14:50 14:55	50 43	2	48 40	129 109	30 26	30 25	0 1	1	80 69	32 28	48 41	130 110					
14:00	15:00 15:05	35 29	2	33 26	85 66	21 18	20 17	1	2	56 47	22 20	34 27	87 69					
		29	3	20	54	14	13	1	3	38	16	22	57					
14:10	15:10																	
14:10	15:10 15:15 15:20	19 14	2	17 12	42 31	12 8	11 7	1 1	2 2	31 22	13 9	18 13	44 33					

San Francisco Cruise Ship Terminal Cruise Ship Activity Surveys

55.2 Bus vehicle-trips per 1,000 passengers [excludes Limos]

Average Buses Arriving/Departing Pier 35

Average Vehicle Occupancy for Motor Coaches and Shuttle Bus/Vans: 14.4 pax/veh

	ı	Ì	Δ	RRIVAL	s		I	DFI	PARTUI	RES		T01	ΓΔΙ	Per	centage	Bu	ses			ı		
Vehicle Type			Average		l	St.Dv.		Average		Max.	St.Dv.	Avg.	Max.		hicle Type		Em	Veh	Pax	Wait at	Stay	Dwell
Motor Coac												5			45%		bark	Occ 25.1	632	Curb	Inside	Time
Other	.11													0	0%			0.0	0			
Shuttle Bus	/Van														52%			4.9	141			
Limo/Town														2	3%			2.7	4	hh:mm	hh:mm	hh:mm
All Vehicle	s	56	In=	50%	72	16	56	Out=	50%	74	15	111	146	56	100%	33	26	10.0	777	0:07	0:28	0:32
% Inside Te	erminal											56%										
AN	A Peak Hour	10	In=	60%	5	3	6	Out=	40%	16	6	16	21									
Perc	cent of daily	17%			6%		11%			22%		14%	14%									
	y Peak Hour	10	In=	45%	7	4	12	Out=	55%	26	7	19	31									
	cent of daily	17%			10%		21%			35%		17%	21%									
	rvey starts	3	5%	5%	4		_	0%	0%	0		3	4									
7:30 7:45	7:45 8:00	0	0%	5%	0		0	0%	0%	0		0	0 1									
8:00	8:15	1	1% 1%	6% 7%	1		0	0%	0%	0		1	1									
8:15	8:30	1	2%	9%	1		0	0%	0%	0		1	1									
8:30	8:45	0	1%	10%	1		0	1%	1%	2		1	3									
8:45	9:00	2	3%	13%	1		0	0%	1%	0		2	1									
9:00	9:15	3	5%	18%	2		2	3%	4%	3		5	5									
9:15	9:30	5	8%	26%	1		4	8%	11%	11		9	12									
9:30	9:45	4	8%	34%	2		4	7%	18%	8		8	10									
9:45	10:00	3	6%	39%	2		4	6%	25%	7		7	9									
10:00	10:15	3	5%	44%	2		3	5%	29%	4		5	6									
10:15	10:30	1	2%	46%	1		3	6%	35%	8		4	9									
10:30	10:45	3	5%	51%	2		3	5%	39%	7		5	9									
10:45	11:00	2	4%	55%	1		2	4%	44%	5		5	6									
11:00 11:15	11:15 11:30	4	7% 2%	62% 64%	2		4	7% 5%	50% 55%	8		8	10 6									
11:15	11:30	1	2%	66%	0		3	5%	60%	7		4	7									
11:45	12:00	1	2%	68%	1		2	4%	64%	7		4	8									
12:00	12:15	2	3%	71%	1		2	3%	67%	4		3	5									
12:15	12:30	2	3%	74%	2		2	4%	71%	5		4	7									
12:30	12:45	1	2%	75%	1		1	2%	73%	5		2	6									
12:45	13:00	6	10%	85%	3		4	7%	80%	7		10	10									
13:00	13:15	2	3%	89%	2		3	5%	84%	5		4	7									
13:15	13:30	2	3%	92%	2		2	3%	88%	4		4	6									
13:30	13:45	2	3%	95%	2		2	3%	90%	4		3	6									
13:45	14:00 14:15	1	2% 2%	97%	1		2	3%	93% 94%	3		2	5									
14:00 14:15	14:15	1	2% 1%	98% 99%	1		1	1% 2%	94%	4		2	4 5									
14:13	14:45	0	0%	100%	0		2	3%	99%	5		2	5									
14:45	15:00	0	0%	100%	0		0	0%	99%	1		0	1									
15:00	15:15	0	0%	100%	0		0	1%	100%	1		0	1									
15:15	15:30	0	0%	100%	0		0	0%	100%	0		0	0									
15:30	15:45	0	0%	100%	0		0	0%	100%	0		0	0									
	vey ends		0%	100%			0	0%	100%			0	0									
7:30	8:30	2			3		0			0		2	3									
7:45	8:45	3			3		0			2		3	5									
7:50	8:50	4			3		0			2		4	5									
7:55	8:55	6			4 5		2			5			9									
8:00 11:00	9:00 12:00	10 7			5		6 12			16 26		16 19	21 31	 		1						
11:00	12:00	5			4		9			20		15	26	I								
11:30	12:13	6			5		9			23		15	28									
11:45	12:45	5			5		7			21		12	26									
12:00	13:00	10			7		9			21		18	28									
														•						-		

Mon 05/10/10 7:30 AM to 12:00 PM Pier 35 Celebrity Infinity 1950 pax

Home-port with Transfers

Vessel arrived at 7:30 AM / Scheduled Departure: 5 PM

Survey started at 7:30 AM
Survey ended at 12:00 PM due to rain

Sat 05/22/10 7:30 AM to 3:30 PM Pier 35 Sea-Princess 1950 pax Home-port

Home-port

Vessel arrived at 9:30 AM / Scheduled Departure: 4 PM

Survey started at 7:30 AM

	Survey ended at 12:00 PM due to rain																y ended a	t 3:30	PM			_
Bus No.	Arrive	Enter	Depart	Wait at Curb	Stay Inside	Dwell Time	Туре	Name	De bark	Em bark	Pax	Arrive	Enter	Depart	Wait at Curb	Stay Inside	Dwell Time	Туре	Name	De bark	Em bark	Pax
1	7:30	8:23	9:40	0:53	1:17	1:17	[1]	Franciscan Lines				8:55	9:02	11:14	0:07	2:12	2:12	[1]	Coach USA	X	Χ	45
2	7:54	8:13	9:13	0:19	1:00	1:00	[1]	King's Transport				9:00	9:00	11:21	0:00	2:21	2:21	[1]	Coach America	Χ		
3	8:02	8:07	9:37	0:05	1:30	1:30	[1]	Compass Transport				9:11	9:15	11:35	0:04	2:20	2:20	[1]	Coach USA	Х		
4	8:13	8:22	9:43	0:09	1:21	1:21	[1]	Coach America				9:18	9:25	12:58	0:07	3:33	3:33		Airport Express	X		
5 6	8:17 8:26	8:40 9:03	9:53 10:05	0:23 0:37	1:13 1:02	1:13 1:02	[1] [1]	Coach USA Compass Transport				9:22 9:24	9:24 9:25	12:09 11:49	0:02 0:01	2:45 2:24	2:45 2:24		Skyline Coach Skyline Coach	X		
7	8:45	χ.	9:54	1:09	0:00	1:09	[1]	Harvest Vacation	Х			9:24	9:29	11:31	0:05	2:02	2:02	[1]	Coach America	X	Χ	16
8	8:50	Х	9:07	0:17	0:00	0:17	[1]	Coach USA	Х		35	9:30	9:36	11:58	0:06	2:22	2:22	[1]	Mercury Tours	Х		
9	8:55	9:17	9:36	0:22	0:19	0:19	[1]	Bonjour				9:38	9:43	11:53	0:05	2:10	2:10	[1]	Coach USA	Х		
10	9:02 9:04	X 9:45	9:37 10:23	0:35 0:41	0:00 0:38	0:35 0:38	[1]	Coach America		Х	69	9:40 9:44	9:44 9:44	12:18 10:09	0:04 0:00	2:34 0:25	2:34 0:25	[1] [1]	Coach USA	X		
11 12	9:04	9:45	10:23	0:41	0:36	0:36	[1] [1]	Bonjour CA Express				9:44	9:44	11:48	0:06	1:58	1:58	[1]	Coach America Coach America	X		
13	9:25	Х	9:35	0:10	0:00	0:10	[1]	West Sonoma County		Х	40	9:48	9:56	12:00	0:08	2:04	2:04	[1]	King Tours	Х		
14	9:30	9:35	10:06	0:05	0:31	0:31	[1]	CA Express				10:11	10:18	11:18	0:07	1:00	1:00	[1]	Coach 21	Χ		
15	9:30	9:35	11:05	0:05	1:30	1:30	[1]	A Perfect				10:12	10:16	11:14	0:04	0:58	0:58	[1]	Coach 21	Х		
16	9:35 9:35	X X	9:37 9:38	0:02 0:03	0:00	0:02 0:03	[3]	Super Shuttle	X		1 8	10:14	10:20 10:22	11:14 10:59	0:06 0:07	0:54 0:37	0:54 0:37	[1] [1]	Coach 21	X		
17 18	9:35	9:45	10:30	0:03	0:00	0:03	[3] [1]	My Way Tours Coach USA	^		0	10:15 10:22	10:22	11:03	0:07	0:37	0:37	[1]	Coach 21 Coach 21	X		
19	9:45	Х	9:50	0:05	0:00	0:05	[3]	Bay Airport		Х	4	10:26	10:32	11:04	0:06	0:32	0:32	[1]	Coach USA	Х		
20	9:45	Χ	9:50	0:05	0:00	0:05	[3]	Blue Shuttle	Х		4	10:32	10:39	11:40	0:07	1:01	1:01	[1]	Coach USA	Χ		
21	9:47	9:50	11:20	0:03	1:30	1:30	[1]	Peninsula Tours				10:38	10:38	11:32	0:00	0:54	0:54	[1]	Coach 21	Х		
22	9:48	X 10.07	9:53	0:05	0:00	0:05	[4]	Limo ABC	Х		3	10:54	11:09	11:41	0:15	0:32	0:32	[1]	Coach USA	X		
23 24	9:55 9:57	10:07 X	10:55 10:07	0:12 0:10	0:48 0:00	0:48 0:10	[1] [4]	Coach America No Name	Х		4	10:54 11:05	11:09 X	12:03 11:07	0:15 0:02	0:54 0:00	0:54 0:02	[1] [3]	Coach USA PRD Airport Shuttle	X		2
25	10:00	10:05	11:35	0:05	1:30	1:30	[1]	King Tour			7	11:07	X	11:15	0:02	0:00	0:08		Western Shuttle	X		6
26	10:02	Х	10:07	0:05	0:00	0:05	[4]	Limo ABC	Χ		7	11:10	11:16	12:10	0:06	0:54	0:54	[1]	Coach America	Х		
27	10:03	10:08	11:38	0:05	1:30	1:30	[3]	Passenger van				11:11	11:11	11:11	0:00	0:00	0:00	[1]	Coach America	Х		
28	10:05 10:08	10:44 10:35	11:00 11:01	0:39 0:27	0:16 0:26	0:16 0:26		Marin Airport Coach USA				11:26 11:30	X	11:36 11:40	0:10 0:10	0:00	0:10 0:10	[1]	Amtrak Marina Porter	Х	Х	16 6
29 30	10:06	X	10:20	0:27	0:20	0:26	[1] [3]	Roland Low	Х		4	11:45	X	12:10	0:10	0:00	0:10	[4] [3]	SF Megabus	X		25
31	10:14	10:35	11:01	0:21	0:26	0:26	[3]	Airport Express			·	11:50	X	11:58	0:08	0:00	0:08		Lorrie's Airport Shuttle			10
32	10:34	10:36	11:06	0:02	0:30	0:30	[3]	City Express				11:55	Χ	11:58	0:03	0:00	0:03	[3]	Lorrie's Airport Shuttle	Χ		9
33	10:35	10:40	12:10	0:05	1:30	1:30	[3]	Black Tie				12:15	12:20	12:20	0:05	0:00	0:05	[3]	Bauer	Х	.,	
34 35	10:50 10:53	10:50 X	11:05 11:15	0:00 0:22	0:15 0:00	0:15 0:22	[1]	Peninsula Tour CA Express		Х		12:15 12:16	X	12:48 12:19	0:33 0:03	0:00 0:00	0:33 0:03	[1] [3]	Raindance Tours Marin Airporter	Х	Х	12
36	10:55	X	11:21	0:26	0:00	0:26	[1] [1]	Coach USA	Х	X		12:10	X	12:13	0:03	0:00	0:03		South Bay Airporter	X		2
37	11:02	Χ	11:46	0:44	0:00	0:44	[1]	Coach America				12:24	Χ	12:27	0:03	0:00	0:03		East Bay Paratransit		Χ	2
38	11:02	11:10	11:10	0:08	0:00	0:08	[1]	Skyline Coach		Χ	48	12:28	12:30	14:06	0:02	1:36	1:36	[1]	Coach USA		Χ	
39	11:06	11:10	11:10	0:04	0:00	0:04	[3]	RIZY Airport Shuttle		Х	4	12:50	Х	12:52	0:02	0:00	0:02	[3]	American Shuttle	X		2
40 41	11:10 11:15	11:12 11:20	11:48 11:20	0:02 0:05	0:36 0:00	0:36 0:05	[1] [3]	Coach USA Super Shuttle	Х		4	12:50 12:53	X X	12:57 12:55	0:07 0:02	0:00 0:00	0:07 0:02	[3] [4]	Super Shuttle Limo	X		5
42	11:17	11:20	11:20	0:03	0:00	0:03	[3]	Super Shuttle	X		4	12:53	X	12:56	0:02	0:00	0:02	[3]	Super Shuttle	X		6
43	11:37	11:44	Х	0:07	0:16	0:16	[1]	Coach 21				12:57	Х	13:00	0:03	0:00	0:03	[3]	Marin Door to Door	Х		4
44	11:44	Χ	11:45	0:01	0:00	0:01	[3]	Super Shuttle	Х		4	12:59	13:01	13:52	0:02	0:51	0:51	[1]	Coach USA		Χ	
45												13:00	13:15	13:54	0:15	0:39	0:39		Airport Express		X	
46 47												13:17 13:20	13:18 13:20	14:36 14:04	0:01 0:00	1:18 0:44	1:18 0:44	[1] [1]	Coach America Royal Coach		X	
48												13:35	13:36	14:06	0:01	0:30	0:30		Orange Belt		Х	
49												13:37	13:38	14:34	0:01	0:56	0:56	[1]	All West		Χ	
50												13:43	Х	13:46	0:03	0:00	0:03		Limo	Х		4
51												13:44 13:45	13:45 X	14:16 13:47	0:01 0:02	0:31	0:31 0:02	[1]	Coach USA West Coast Shuttle		X	3
52 53												13:45	13:53	14:33	0:02	0:40	0:02	[3] [1]	All West		X	3
54												13:52	13:54	14:18	0:02	0:24	0:24		Coach America		Х	
55												14:00	14:01	14:23	0:01	0:22	0:22	[3]	Link Line		Χ	
56												14:01	14:01	14:43	0:00	0:42	0:42		All West		Х	
57 58												14:06 14:15	14:08 X	14:55 14:20	0:02 0:05	0:47	0:47		Coach America		X	6
58 59												14:15	14:26	14:20 15:03	0:05	0:00 0:37	0:05 0:37		Limo California Wine Tours		X	U
60												14:35	X	14:38	0:03	0:00	0:03		VIP Airport Shuttle		Х	2
61																			ļ			
62																			ļ			
63 64																						
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68																						
69 70																		1				
70																			ļ			
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											Veh											Veh

Туре		Pax	Veh	Осс
[1]	Motor Coach	192	4	48.0
[2]	Other	0	0	0.0
[3]	Shuttle Bus/Van	37	9	4.1
[4]	Limo/Town Car	14	3	4.7
	TOTAL	243	16	15.2

Type		Pax	Veh	Occ
[1]	Motor Coach	77	3	25.7
[2]	Other	0	0	0.0
[3]	Shuttle Bus/Van	90	14	6.4
[4]	Limo/Town Car	20	4	5.0
	TOTAL	187	21	8.9

Tue 06/01/10 8:30 AM to 3:30 PM Pier 35 Sea-Princess 1950 pax Home-Port

Vessel arrived at 7:30 AM / Scheduled Departure: 4 PM

Survey started at 8:15 AM Survey ended at 3:30 PM Fri 06/11/10 8:30 AM to 3:30 PM Pier 35 Sea-Princess 1950 pax Home-Port

Vessel arrived at 7:30 AM / Scheduled Departure: 4 PM

Survey started at 8:30 AM

						started a ended a											started a ended a					
Bus No.	Arrive	Enter	Depart	Wait at Curb	Stay Inside	Dwell Time		Name	De bark	Em bark	Pax	Arrive	Enter	Depart	Wait at Curb	Stay Inside	Dwell Time		Name	De bark	Em bark	Pax
1	Х	Х	9:13	Curb	0:58	0:58	[1]	Coach USA	Х	Daik		Х	Х	9:05	Curb	0:35	0:35	[1]	Coach USA	X	Daik	
2	X	X	9:19		1:04	1:04	[1]		Х			X	X	9:23		0:53	0:53	[1]	None	X		40
3 4	X	X	9:30 9:48		1:15 1:33	1:15 1:33	[1] [1]	,	X			X	X	9:25 9:37		0:55 1:07	0:55 1:07		Coach America Coach USA	X		40
5	Х	Х	10:57		2:42	2:42	[1]		Х			Х	Х	10:00		1:30	1:30	[1]	All West	Х		
6	Х	Χ	12:17		4:02	4:02	[1]		Х			Χ	Χ	10:15		1:45	1:45	[1]	All West	Χ		40
7	8:20	8:27 9:00	9:53	0:07 0:06	1:26	1:26 1:16	[1]		X			X	X	10:16 10:17		1:46	1:46 1:47		All West	X		40 40
8	8:54 9:00	9:00	10:16 10:30	0:00	1:16 1:29	1:10	[1] [1]	Royal Coach All West	X			9:00	X	9:05	0:05	1:47 0:00	0:05	[1] [3]	All West Shuttle Bay	^	Χ	2
10	9:04	9:05	10:31	0:01	1:26	1:26	[1]		Х			9:07	Χ	9:16	0:09	0:00	0:09	[3]	Super Shuttle		Χ	2
11	9:05	X	9:08	0:03	0:00	0:03	[3]	Pro Air Shuttle	X		3	9:16	9:16	10:26	0:00	1:10	1:10		Airport Express	X		.
12 13	9:15 9:16	X 9:16	9:18 10:34	0:03 0:00	0:00 1:18	0:03 1:18	[3] [1]	A-1 Shuttle All West	X		4	9:20 9:22	X X	9:26 9:27	0:06 0:05	0:00	0:06 0:05	[3] [3]	Super Shuttle Shuttle California	X		4
14	9:21	Х	9:25	0:04	0:00	0:04	[3]		Х		2	9:28	Х	9:35	0:07	0:00	0:07	[3]	Al Shuttle	Х		4
15	9:35	Х	9:37	0:02	0:00	0:02	[3]		Х			9:30	Х	9:35	0:05	0:00	0:05	[3]	Super Shuttle	Х		7
16 17	9:38 9:40	X 9:40	9:40 10:36	0:02 0:00	0:00 0:56	0:02 0:56	[4]	Limo Airport Express	X		3	9:30 9:33	X 9:34	9:35 10:31	0:05 0:01	0:00 0:57	0:05 0:57	[3] [1]	Super Shuttle Coach USA	X		4
18	9:56	X	10:01	0:05	0:00	0:05	[3]		Х		-	9:40	X	10:00	0:20	0:00	0:20	[3]	Moonlight Limo	X		2
19	10:44	10:50	11:08	0:06	0:18	0:18	[1]	Evans	Х		3	9:45	9:46	9:55	0:01	0:09	0:09	[3]	City Medical	Χ		
20	10:54	10:55	11:27	0:01	0:32	0:32	[1]	Coach America	X			9:46	9:46	9:57	0:00	0:11	0:11	[3]	City Medical	X		
21 22	11:42 11:50	11:42 11:50	12:00 12:05	0:00 0:00	0:18 0:15	0:18 0:15	[1] [1]	Vantool Coach USA	X			9:50 9:51	9:50 X	10:20 9:56	0:00 0:05	0:30	0:30 0:05	[3] [3]	Mens Warehouse US Airporter	X		4
23	12:44	12:45	13:10	0:01	0:25	0:25	[1]			Χ		9:53	Х	9:57	0:04	0:00	0:04	[3]	Marin Door to Door	Х		4
24	12:48	12:50	13:08	0:02	0:18	0:18	[1]			Χ		9:55	Χ	9:58	0:03	0:00	0:03	[3]	Best Airport	Х		4
25 26	12:55 12:56	12:55 12:56	13:28 13:28	0:00 0:00	0:33 0:32	0:33 0:32	[1] [1]			X		10:05 10:06	X X	10:10 10:11	0:05 0:05	0:00	0:05 0:05	[3] [3]	Super Shuttle Super Shuttle	X		4
27	13:03	13:05	13:37	0:02	0:32	0:32		Airport Express		Х		10:10	X	10:24	0:14	0:00	0:14	[3]	AAA Express Shuttle	X		4
28	13:05	Х	13:37	0:32	0:00	0:32	[1]			Χ	35	10:17	Χ	10:20	0:03	0:00	0:03	[3]	Western Shuttle	Х		4
29	13:44	13:44	13:56	0:00	0:12	0:12	[1]	Coach America		X		10:17	X	10:24	0:07	0:00	0:07		Lion Airport	X		4
30 31	13:45 14:15	13:45 14:15	14:05 14:33	0:00	0:20 0:18	0:20 0:18	[1] [1]			X		10:22 10:57	X 10:58	10:25 11:25	0:03 0:01	0:00 0:27	0:03 0:27		East Bay Shuttle Coach America	X		4
32	14:53	14:53	15:07	0:00	0:14	0:14	[1]	Coach America		Χ		11:00	11:00	11:25	0:00	0:25	0:25	[1]	Coach USA		Х	26
33												11:00	Х	11:10	0:10	0:00	0:10	[3]	Veloc		Х	12
34 35												11:08 11:10	X 11:13	11:17 11:44	0:09 0:03	0:00 0:31	0:09 0:31	[3] [1]	East Bay Shuttle Great American		X	4 8
36												11:17	X	11:20	0:03	0:00	0:03	[3]	American Airporter		X	2
37												11:25	Χ	11:33	0:08	0:00	0:08	[3]	Park&Jet Airporter		Χ	6
38												11:28 11:29	X X	11:31 11:32	0:03	0:00	0:03	[3]	Image Tours		X	6
39 40												11:39	X	11:32	0:05	0:00	0:05	[3] [3]	Penninsula Airporter Super Shuttle	Х	^	1
41												11:47	Х	11:55	0:08	0:00	0:08	[3]	ABC Limo		Χ	6
42												11:52	X	11:55	0:03	0:00	0:03	[3]	Super Shuttle		Х	5
43 44												12:00 12:05	X X	12:05 12:10	0:05 0:05	0:00	0:05 0:05	[4] [4]	Limo Le Grand Limo		X	4
45												12:12	X	12:17	0:05	0:00	0:05	[3]	TransAmerica	Х		2
46												12:45	Х	12:48	0:03	0:00	0:03	[3]	American Shuttle		Х	8
47 48												12:48 12:49	X 12:50	12:49 13:07	0:01 0:01	0:00 0:17	0:01 0:17	[3] [1]	Bay Shuttle Coach America		X	4 10
49												12:49	X	12:59	0:10	0:00	0:10	[1]	Coach USA		X	6
50												12:55	13:00	13:20	0:05	0:20	0:20		Airport Express		Χ	20
51 52												12:56 12:57	12:57 X	13:00 13:00	0:01 0:03	0:03	0:03	[1] [3]	Coach USA AAA Express Shuttle		X	2
53												12:57	X	13:07	0:10	0:00	0:10	[1]	Coach USA		X	6
54												13:00	Χ	13:02	0:02	0:00	0:02	[3]	Folsom Lake Express		Χ	4
55												13:02 13:08	X	13:05 13:13	0:03	0:00	0:03 0:05	[3]	Super Shuttle Super Shuttle		X	8
56 57												13:08	X 13:22	13:13	0:05	0:00	0:05	[3] [1]	Kings Tours		Х	6
58												13:25	Χ	13:29	0:04	0:00	0:04	[3]	American Shuttle		Χ	2
59									Ì			13:32	Χ	13:34	0:02	0:00	0:02	[3]	Super Shuttle		Χ	5
60 61																						
62																						
63																						
64 65																						
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73 74																						
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Туре

Pax Veh Occ

Pax Veh Occ

40 0 3 13.3 0 0.0 3 3.0

Туре

[1] Motor Coach [2] Other [3] Shuttle Bus/Van [4] Limo/Town Car TOTAL Mon 06/21/10 8:00 AM to 3:00 PM Pier 35 Sea-Princess 1950 pax Home-Port

Vessel arrived at 7:30 AM / Scheduled Departure: 4 PM

Survey started at 8:00 AM Survey ended at 3:00 PM Thu 07/01/10 8:00 AM to 3:00 PM Pier 35 Sea-Princess 1950 pax Home-Port

Vessel arrived at 7:30 AM / Scheduled Departure: 4 PM

Survey started at 7:55 AM

						started a ended a											y started a y ended a					
Bus No.	Arrive	Enter	Depart	Wait at Curb	Stay Inside	Dwell Time		Name	De bark	Em bark	Pax	Arrive	Enter	Depart	Wait at Curb	Stay Inside	Dwell Time		Name	De bark	Em bark	Pax
1	8:22	8:22	9:27	0:00	1:05	1:05	[1]	Coach USA	Х	Daik	30	Х	Х	9:34	Cuib	1:39	1:39	[1]	Coach USA	X	Daik	16
2	8:25	8:25	9:24	0:00	0:59	0:59	[1]	Coach USA	X		30	X	X	9:50	0.00	1:55	1:55	[3]	Alaska Airporter	X		15
3	8:30 8:55	8:30 9:00	9:14 9:15	0:00 0:05	0:44 0:15	0:44 0:15	[1] [1]	Coach USA Coach USA	X	Х	16 45	7:55 8:08	7:55 8:09	9:26 9:15	0:00 0:01	1:31 1:06	1:31 1:06	[1] [1]	Coach America Coach USA	X		25 12
5	9:08	9:10	10:15	0:02	1:05	1:05	[1]	Great America Stage	X	Х	10	8:16	8:16	8:34	0:00	0:18	0:18	[1]	Coach USA	X		10
6	9:10	9:10	10:37	0:00	1:27	1:27	[1]	Airport Express		Χ	1	8:28	8:30	8:35	0:02	0:05	0:05	[3]	East Bay Connection	Х		5
7	9:11	9:11	10:00	0:00	0:49	0:49	[3]	City Medical	.,	Χ	1	8:38	8:45	9:04	0:07	0:19	0:19	[1]	Coach America	Х	Χ	35
8 9	9:14 9:15	X 9:15	9:17 10:31	0:03 0:00	0:00 1:16	0:03 1:16	[3] [1]	American Shuttle King's Transport	Х	Х	4	8:52 8:53	8:53 9:03	9:23 9:27	0:01 0:10	0:30 0:24	0:30 0:24	[1] [1]	Skyline Coach Harvest Vacation	X		30 10
10	9:20	X	9:23	0:03	0:00	0:03	[3]	Super Shuttle	Х	Х	2	9:03	X	9:05	0:02	0:00	0:02	[3]	My Way Tours	X		4
11	9:24	Χ	9:31	0:07	0:00	0:07	[1]	Cascade		Χ	45	9:03	9:09	9:27	0:06	0:18	0:18	[1]	Skyline Coach	Х		12
12	9:25	Х	9:30	0:05	0:00	0:05	[3]	Wine Wrangler	X		6	9:09	9:17	9:30	0:08	0:13	0:13	[1]	Skyline Coach	Х		20
13 14	9:25 9:30	X X	9:32 9:38	0:07 0:08	0:00	0:07 0:08	[3]	Folsom Lake Express AAA Express Shuttle	X		3	9:10 9:10	X	9:17 9:17	0:07 0:07	0:00 0:00	0:07 0:07	[3]	Al Shuttle Al Shuttle	X		6 5
15	9:35	X	9:36	0:01	0:00	0:00	[3]	East Bay Shuttle	X		4	9:14	X	9:16	0:02	0:00	0:02	[3]	San Francisco Cities	X		5
16	9:38	Χ	9:43	0:05	0:00	0:05	[3]	Sunlight Airporter	Х		4	9:20	9:21	10:32	0:01	1:11	1:11	[1]	Airport Express	Х		15
17	9:41	X	9:45	0:04	0:00	0:04	[3]	East Bay Shuttle	X		7	9:21	X	9:23	0:02	0:00	0:02	[3]	Airport Express	X		5
18 19	9:42 9:44	X X	9:45 9:48	0:03 0:04	0:00	0:03 0:04	[3]	Santa Cruz Airporter Lorrie's Airport Shuttle	X		4 7	9:22 9:22	X X	9:26 9:27	0:04 0:05	0:00	0:04 0:05	[3]	Stan Chaperone East Bay Shuttle	X		5
20	9:45	Х	10:03	0:18	0:00	0:18	[3]	Super Shuttle	X		4	9:25	X	9:46	0:21	0:00	0:21	[3]	Super Shuttle	X		4
21	9:45	Χ	10:04	0:19	0:00	0:19	[3]	Super Shuttle	Х		4	9:31	Χ	9:46	0:15	0:00	0:15	[3]	City Express	Х		2
22	10:00	X	10:10	0:10	0:00	0:10	[3]	Napa Valley Tours	X		20	9:34	X	9:42	0:08	0:00	0:08	[3]	East Bay Shuttle	X		6
23 24	10:10 10:29	X X	10:16 10:32	0:06 0:03	0:00	0:06	[3] [3]	Al Shuttle Super Shuttle	X		4	9:43 9:53	X X	9:53 9:55	0:10 0:02	0:00	0:10 0:02	[3]	Tri Valley VIP Airport Shuttle	X		5 6
25	10:30	Х	10:32	0:02	0:00	0:02	[3]	Super Shuttle	X		6	9:55	Х	10:47	0:52	0:00	0:52	[3]	Central Coast Shuttle	X		9
26	10:32	Χ	10:40	0:08	0:00	0:08	[3]	Super Shuttle	Х		6	9:56	Χ	10:03	0:07	0:00	0:07	[3]	Medical Transport		Χ	2
27	10:34	X	10:38	0:04	0:00	0:04	[3]	Super Shuttle	X		6	9:59	10:02	10:30	0:03	0:28	0:28	[1]	Discovery	X		10
28 29	10:37 10:45	X X	10:44 10:47	0:07 0:02	0:00	0:07 0:02	[3]	Bay Porter None	X		6 10	9:59 9:59	10:03 10:03	10:15 10:30	0:04 0:04	0:12 0:27	0:12 0:27	[1] [1]	CA Express Discovery	X		8 30
30	10:45	X	10:51	0:06	0:00	0:06	[3]	East Bay Shuttle	Х		2	10:10	X	10:20	0:10	0:00	0:10	[3]	Park&Jet Airporter	X		6
31	10:45	Χ	10:54	0:09	0:00	0:09	[3]	Super Shuttle		Χ	6	10:15	Χ	10:17	0:02	0:00	0:02	[3]	Super Shuttle	Х		6
32	10:45 10:53	X X	10:55 10:54	0:10 0:01	0:00	0:10 0:01	[3]	North Valley Shuttle	X		9	10:32 10:36	X X	10:35 10:41	0:03 0:05	0:00	0:03 0:05	[3]	Al Shuttle	X		6
33 34	11:04	X	11:10	0:01	0:00	0:01	[3]	A Best Shuttle Stan Chaperone	X		4	10:36	X	10:41	0:03	0:00	0:03	[3]	Tri Valley United Car Service	X		6
35	11:04	Х	11:14	0:10	0:00	0:10	[3]	Super Shuttle		Χ	2	10:50	Х	11:00	0:10	0:00	0:10	[3]	A Best Shuttle	Х		7
36	11:05	Х	11:34	0:29	0:00	0:29	[1]	Coach USA	.,	Χ	15	10:52	Х	11:00	0:08	0:00	0:08	[3]	Airport Express	Х		9
37 38	11:09 11:15	X X	11:15 11:16	0:06 0:01	0:00	0:06 0:01	[3]	VIP Airport Shuttle City Express	Х	Х	6 4	10:53 10:54	X	10:54 10:59	0:01 0:05	0:00	0:01 0:05	[3]	East Bay Shuttle Super Shuttle	X		6
39	11:40	X	11:49	0:09	0:00	0:09	[1]	Coach USA		X	2	11:02	X	11:05	0:03	0:00	0:03	[3]	Super Shuttle	X		5
40	11:58	12:00	12:05	0:02	0:05	0:05	[3]	Medical Transport	Χ		1	11:07	11:08	11:33	0:01	0:25	0:25	[1]	Coach America	Х		30
41	12:10	12:11	12:26	0:01	0:15	0:15	[1]	Coach USA		Х	10	11:11	X	11:14	0:03	0:00	0:03	[3]	Tri Valley	.,	Х	7
42 43	12:15 12:15	X X	12:25 12:25	0:10 0:10	0:00	0:10 0:10	[3]	East Bay Connection East Bay Connection		X	10 12	11:14 11:14	X	11:16 11:16	0:02 0:02	0:00 0:00	0:02 0:02	[3]	ABC Airporter Angel Express	Х	Х	7
44	12:26	Х	12:29	0:03	0:00	0:03	[3]	Super Shuttle	Х	Х	12	11:15	Х	11:17	0:02	0:00	0:02	[3]	American Airporter		Х	2
45	12:28	12:29	13:00	0:01	0:31	0:31	[1]	Discovery		Χ	45	11:35	Χ	11:39	0:04	0:00	0:04	[3]	Lorrie's Airport Shuttle	:	Χ	5
46	12:40	12:40 12:46	13:04 13:17	0:00	0:24 0:31	0:24 0:31	[1]	Coach USA		X	45 6	11:55 12:12	11:59 X	12:10	0:04 0:04	0:11 0:00	0:11 0:04	[3]	Coach USA		X	10 7
47 48	12:46 12:46	X	12:50	0:00	0:00	0:04	[1] [3]	Coach USA Fairfield Airporter		X	6	12:12	X	12:16 12:18	0:04	0:00	0:04	[3]	GS Airporter South Bay Shuttle		X	7
49	12:47	12:47	13:07	0:00	0:20	0:20	[1]	Airport Express		Χ	30	12:21	Х	12:38	0:17	0:00	0:17	[3]	South Bay Shuttle		Х	3
50	12:52	Х	12:53	0:01	0:00	0:01	[3]	Fairfield Airporter		Х	6	12:26	Х	12:31	0:05	0:00	0:05	[3]	#1 Airport Shuttle		Х	6
51	12:53 12:54	X X	12:58 12:58	0:05 0:04	0:00	0:05 0:04	[3]	ABC Airporter US Airporter		X	7 6	12:29 12:30	X	12:31 12:33	0:02 0:03	0:00	0:02 0:03	[1]	Amtrak Harvest Vacation		X	4 15
52 53	12:54	X	12:57	0:04	0:00	0:04	[3]	Super Sightseeing		X	4	12:35	X	12:33	0:05	0:00	0:05	[3]	Al Shuttle		X	7
54	13:03	Χ	13:08	0:05	0:00	0:05	[3]	Park&Jet Airporter		Χ	10	12:36	12:37	13:00	0:01	0:23	0:23	[1]	Coach USA		Х	19
55	13:04	X X	13:08 13:13	0:04 0:03	0:00	0:04	[3]	A Best Shuttle American Shuttle		X	10 6	12:49 12:50	X	12:54	0:05 0:03	0:00	0:05	[3]	Leisure Limo	Ì	X	3
56 57	13:10 13:12	X	13:13	0:03	0:00	0:03		American Snuttie Al Shuttle		X	4	12:50	X	12:53 12:55	0:03	0:00	0:03	[3]	City Express AAA Classic		X	3
58	13:22	X	13:25	0:03	0:00	0:03		Leisure Living		Х	2	12:53	X	12:58	0:05	0:00	0:05		US Airporter		Х	6
59	13:23	13:23	13:56	0:00	0:33	0:33		Discovery		Χ	30	12:55	12:57	13:17	0:02	0:20	0:20	[1]	Coach USA		Χ	25
60	13:27 13:53	X X	13:31 13:56	0:04 0:03	0:00	0:04 0:03		Marin Door to Door ABC Chaufeur		X	6 8	12:56 12:56	X X	13:00 13:01	0:04 0:05	0:00	0:04 0:05		Fairfield Airporter Amour Transport		X	7 8
61 62	13:53	X	14:16	0:03	0:00	0:03	[3] [1]	Coach USA		X	8 40	13:00	X 13:01	13:01	0:05	0:00	0:05		Airport Express	Ì	X	30
63	14:16	14:17	14:38	0:01	0:21	0:21	[3]	Central Coast Shuttle		Χ	5	13:02	Χ	13:04	0:02	0:00	0:02	[3]	South Bay Shuttle		Χ	6
64	14:24	Χ	14:44	0:20	0:00	0:20	[1]	Coach USA		Χ	5	13:14	Х	13:15	0:01	0:00	0:01	[3]	Super Shuttle		Х	2
65 66												13:14 13:22	X	13:17 13:24	0:03 0:02	0:00 0:00	0:03 0:02		Park&Jet Airporter My Way Tours		X	7
67												13:22	X	13:24	0:02	0:00	0:02	[3]	East Bay Paratransit		X	3
68												13:27	13:29	14:00	0:02	0:31	0:31	[1]	Storer Coachway	1	Χ	15
69												13:28	13:30	13:50	0:02	0:20	0:20		Coach USA		X	6
70 71												13:35 13:35	X X	13:40 13:40	0:05 0:05	0:00	0:05 0:05	[3]	CA Shuttle CA Shuttle	1	X	6
72												13:37	X	13:40	0:03	0:00	0:03		CA Shuttle	1	X	6
73												14:04	14:05	14:23	0:01	0:18	0:18	[1]	Coach America		Χ	6
74											V	14:25	Х	14:31	0:06	0:00	0:06	[3]	All Occasion Limo	1	Χ	9 Voh
											Veh											Veh

Туре		Pax	Veh	Осс
[1]	Motor Coach	406	18	22.6
[2]	Other	0	0	0.0
[3]	Shuttle Bus/Van	268	46	5.8
[4]	Limo/Town Car	0	0	0.0
	TOTAL	674	64	10.5

Туре		Pax	Veh	Осс
[1]	Motor Coach	368	21	17.5
[2]	Other	0	0	0.0
[3]	Shuttle Bus/Van	308	53	5.8
[4]	Limo/Town Car	0	0	0.0
	TOTAL	676	74	9.1

Average Values

San Francisco Cruise Ship Terminal Cruise Ship Activity Surveys

Average Trucks Arriving/Departing Pier 35 31.8 Truck vehicle-trips per 1,000 passengers

			A	RRIVAL	.S		l	DEI	PARTU	RES		TO	TAL	Per	centage	l		
Vehicle Type			Average		Max.	St.Dv.		Average		Max.	St.Dv.	Avg.	Max.	by Ve	hicle Type	Wait at Curb	Stay Inside	Dwell Time
Autos/SUV Pick ups/Va Single Unit														4 11 7	13% 35% 23%	Curb	Inside	Time
Tractor-Tra														9	30%	hh:mm	hh:mm	hh:mm
All Vehicle		31	In=	50%	32	9	31	Out=	50%	40	9	62	72	31	100%	0:12	1:56	2:01
	M Peak Hour	5	In=	48%	6	5	5	Out=	52%	12	4	9	16					
	cent of daily	16%	100	000/	19%	_	17%	Out	1001	30%	•	15%	22%					
	ay Peak Hour cent of daily	2	In=	32%		1	5	Out=	68%	13	2	7	17					
	rvey starts	8% 11	37%	37%	12% 4		16%	0%	0%	<i>33%</i>		<i>12%</i> 11	23% 7					
7:30	7:45	1	2%	38%	1		0	1%	1%	1		1	2					
7:45	8:00	1	4%	42%	2		0	1%	1%	1		i	3					
8:00	8:15	1	3%	45%	2		1	2%	3%	2		2	4					
8:15	8:30	2	6%	51%	2		0	1%	4%	1		2	3					
8:30	8:45	1	3%	54%	1		1	4%	8%	5		2	6					
8:45	9:00	1	2%	56%	1		2	5%	13%	3		2	4					
9:00	9:15	0	1%	58%	1		2	6%	19%	3		2	4					-
9:15	9:30	1	4%	62%	1		1	2%	21%	1		2	2					
9:30	9:45	1	4%	66%	2		1	4%	25%	3		3	5					
9:45	10:00	1	3%	69%	1		2	5%	31%	5		3	6					
10:00	10:15	0	1%	70%	1		1	3%	33%	3		1	4					
10:15	10:30	1	2%	72%	1		2	5%	39%	3		2	4					
10:30	10:45	2	5%	77%	1		2	5%	44%	4		3	5					
10:45	11:00	1	4%	81%	1		1	3%	47%	4		2	5					
11:00	11:15	0	1%	82%	1			3%	49%	2		1 2	3					
11:15	11:30 11:45	1	3% 1%	85% 86%	1		1 2	4% 6%	54% 60%	4 5		2	5 6					
11:30 11:45	12:00	1	3%	89%	2		1	3%	63%	2		2	4					
12:00	12:15	0	1%	89%	0		1	2%	65%	2		1	2					
12:15	12:30	0	1%	90%	1		Ö	1%	65%	1		i	2					
12:30	12:45	1	2%	92%	1		2	6%	72%	5		3	6					
12:45	13:00	1	2%	94%	1		0	1%	72%	1		1	2					
13:00	13:15	0	1%	95%	1		0	1%	73%	1		1	2					
13:15	13:30	0	1%	96%	1		1	2%	75%	2		1	3					
13:30	13:45	1	2%	97%	1		1	2%	77%	1		1	2					
13:45	14:00	0	0%	97%	0		1	2%	79%	1		1	1					
14:00	14:15	1	2%	99%	1		0	1%	80%	1		1	2					
14:15	14:30	0	0%	99%	0		1	2%	82%	2		1	2					
14:30	14:45	0	1%	100%	1		0	1%	82%	1		1	2					
14:45	15:00	0	0%	100%	0		2	5%	87%	4		2	4					
15:00	15:15	0	0%	100%	0		0	1%	88%	2		0	2					
15:15	15:30	0	0%	100%	0		1	2%	90%	3		1	3					
15:30 After sur	15:45 rvey ends	0	0% 0%	100% 100%	0		0	0% 10%	90% 100%	U		0	0					
7:30	8:30	5	U%	100%	,		1	10%	100%	5		6	11					
7:30	8:45	5			6		2			9		7	15					
7:50	8:50	5			5		4			11		8	16			l		
7:55	8:55	4			4		5			12		9	16					
8:00	9:00	3			3		5			12		9	15					
11:00	12:00	2			4		5			13		7	17					
11:15	12:15	2			4		5			13		7	17					
11:30	12:30	2			3		4			10		5	13			l		
11:45	12:45	2			3		4			10		5	13					
12:00	13:00	2			2		3			9		4	11					

		Ves		7:30 Ce Home- _I d at 7:30 Survey	Ion 05/10 AM to 12 Pier 35 elebrity Int 1950 pa port with AM / Sch started at 1 at 12:00	finity x Transfers neduled D t 7:30 AM	eparture: 5 PM		Ves	sel arrive	7:30 S ed at 9:30 Survey	AM to 3:3 Pier 35 Sea-Prince 1950 par Home-po AM / Sch started at ended at	ss t eduled D	eparture: 4 PM		Ves	ssel arrive	8:30 sed at 7:30 Survey	Pier 35 Sea-Prince 1950 pa Home-Po AM / Sch started at	30 PM ess x ort eduled D 18:15 AM	eparture: 4 PM
Truck No.	Arrive	Enter	Depart	Wait at	Stay	Dwell	Type Name	Arrive	Enter	Depart	Wait at	Stay	Dwell	Type Name	Arrive	Enter	Depart	Wait at	Stay	Dwell	Type Name
1	Х	Х	8:40	Curb	Inside 1:10	1:10	[2] US Customs	Х	Х	9:07	Curb	Inside 1:37	Time 1:37	[2]	Х	Х	8:38	Curb	0:23	0:23	[3] SF Ambulance
2	X	X	8:42		1:12	1:12	[1] US Customs	X	X	9:16		1:46	1:46	[1]	X	X	8:45		0:30	0:30	[2]
3	X	X	8:42		1:12	1:12	[2] US Customs	X	X	9:33		2:03	2:03	[2]	x	X	9:07		0:52	0:52	[2]
4	X	X	8:42		1:12	1:12	[2] US Customs	X	Х	10:57		3:27	3:27	[4] Bubba Trucking	X	Х	9:10		0:55	0:55	[2] US Customs
5	X	X	8:56		1:26	1:26	[4] RRL	X	X	11:20		3:50	3:50	[4] RWT	X	X	10:36		2:21	2:21	[2] US Customs
6	Х	Х	8:57		1:27	1:27	[4] RRL	Х	Χ	11:35		4:05	4:05	[4] Weber	Х	Χ	10:37		2:22	2:22	[1] US Customs
7	Х	Χ	9:12		1:42	1:42	[4] LASF Specialty	Х	Χ	11:40		4:10	4:10	[4] Rubio's Trucking	Х	Χ	10:37		2:22	2:22	[2] US Customs
8	Х	Х	9:40		2:10	2:10	[4] All Point	Х	Χ	11:42		4:12	4:12	[4] Valley Bros	8:30	8:37	15:25	0:07	6:48	6:48	[2] BAE Systems
9	Х	Х	9:52		2:22	2:22	[4] LASF Specialty	Х	Χ	13:29		5:59	5:59	[4] JM Gonzales	8:30	8:37	15:27	0:07	6:50	6:50	[2] BAE Systems
10	Х	Х	10:17		2:47	2:47	[1]	Х	Χ	14:50		7:20	7:20	[4] AMG Transport	8:30	8:37	15:27	0:07	6:50	6:50	[2] BAE Systems
11	Х	Χ	10:28		2:58	2:58	[4] All Point	Х	Χ	15:25		7:55	7:55	[4] Meyer Trucking	8:54	Χ	9:05	0:11	0:00	0:11	[1]
12	Х	Х	11:13		3:43	3:43	[1] US Customs	7:30	9:00	9:00	1:30	0:00	1:30	[1] US Coast Guard	9:17	9:17	10:25	0:00	1:08	1:08	[2] Tighe Drayage
13	Х	Х	11:24		3:54	3:54	[1] US Customs	7:50	7:53	13:05	0:03	5:12	5:12	[4] Meyer Trucking	9:23	9:23	10:36	0:00	1:13	1:13	[1] US Customs
14	Х	X	11:24		3:54	3:54	[1] US Customs	7:57	7:57	12:34	0:00	4:37	4:37	[2] US Customs	9:49	9:50	10:19	0:01	0:29	0:29	[3] BIT Idealease
15	X	X	11:26		3:56	3:56	[4] KOOY	7:58	7:58	12:33	0:00	4:35	4:35	[1] US Customs	10:38	10:38	11:16	0:00	0:38	0:38	[2]
16	7:35	7:35	X	0:00	4:25	4:25	[2]	7:58	7:58	12:33	0:00	4:35	4:35	[2] US Customs	10:56	10:56	11:08	0:00	0:12	0:12	[2] Linkline
17	7:37 7:50	7:37 X	7:45 7:52	0:00 0:02	0:08	0:08 0:02	[1]	8:09 8:11	8:09	14:24 14:15	0:00	6:15	6:15 6:04	[2] US Customs [2] US Customs	11:05 11:17	11:05 X	11:37 12:32	0:00 1:15	0:32 0:00	0:32 1:15	[3] Brinks
18	7:50	7:58	7:52 X	0:02	4:02	4:02	[1] [4] All Point	8:11	8:11 8:13	15:10	0:00	6:04 6:57	6:57	[2] US Customs [2] US Customs	12:15	X 12:15	12:32	0:00	0:00	0:07	[2] [2] City Medical Trans
19 20	7:53	7:59	9:50	0:06	1:51	1:51	[4] All Point	8:16	8:16	14:29	0:00	6:13	6:13	[1] US Customs	12:32	X	12:45	0:13	0:00	0:07	[3] Blooms
21	8:08	8:16	9:09	0:08	0:53	0:53	[4] LASF Specialty	8:17	8:17	15:12	0:00	6:55	6:55	[2] US Customs	12:47	12:57	13:26	0:10	0:29	0:13	[3] Apria Healthcare
22	8:08	8:16	9:10	0:08	0:54	0:54	[4] LASF Specialty	8:24	8:26	11:35	0:02	3:09	3:09	[4] Weber	13:08	Χ	X	2:22	2:22	2:22	[2] Golden Years Med
23	8:15	8:15	9:17	0:00	1:02	1:02	[2]	8:28	8:28	9:15	0:02	0:47	0:47	[1] Webei	13.00	^	^	2.22	4.44	L.LL	[E] GOIGETT TEGES WICE
24	8:17	X	8:20	0:03	0:00	0:03	[4] All Point	8:32	8:32	9:12	0:00	0:40	0:40	[1]	1						
25	8:30	X	8:35	0:05	0:00	0:05	[2] US Customs	8:44	8:44	12:38	0:00	3:54	3:54	[2]							
26	8:30	8:30	9:54	0:00	1:24	1:24	[3] JIT Transportation	8:55	8:55	12:39	0:00	3:44	3:44	[2]							
27	8:35	8:35	8:47	0:00	0:12	0:12	[2]	8:58	8:58	Χ	0:00	6:32	6:32	[1]							
28	8:44	9:57	10:40	1:13	0:43	0:43	[2] JS Pena	9:28	Χ	9:32	0:04	0:00	0:04	[2] BAE Systems							
29	9:15	9:17	9:55	0:02	0:38	0:38	[4] KOOY	9:30	Х	9:35	0:05	0:00	0:05	[2] Tighe Drayage							
30	9:27	9:30	Х	0:03	2:30	2:30	[1]	9:39	Х	10:52	1:13	0:00	1:13	[3] Sunborne							
31	9:30	10:44	Х	1:14	1:16	1:16	[4] RRL	9:42	9:47	10:26	0:05	0:39	0:39	[3] Michael Hensley							
32	9:50	9:50	X	0:00	2:10	2:10	[2] Tighe Drayage	9:50	Х	11:33	1:43	0:00	1:43	[3] Apria Healthcare							
33	9:55	9:55	10:26	0:00	0:31	0:31	[3] SF Paramedic	9:56	X	13:44	3:48	0:00	3:48	[4] ETC							
34	9:56	9:56	9:56	0:00	0:00	0:00	[2] Metro Stevedor	10:30	X	10:50	0:20	0:00	0:20	[2] WestCoost Chinning							
35	10:28	10:31	11:24	0:03	0:53	0:53	[1] US Customs	10:41	X	10:46	0:05	0:00	0:05	[3] WestCoast Shipping							
36	10:32 10:34	10:32 10:34	10:37 X	0:00	0:05 1:26	0:05 1:26	[2] Tighe Drywage[4] City Express	11:46 11:55	11:46 11:55	12:14 14:45	0:00	0:28 2:50	0:28 2:50	[3] Brinks [2] Tighe Drayage							
37 38	10:34	10:34	11:53	0:00	1:26	1:18	[3] Prime	11:55	11:55	14:45 X	0:00	3:35	3:35	[4] Fighe Drayage							
38 39	10:35	10:35	11:13	0:00	0:26	0:26	[4] Weber Distrib	11:56	11:58	13:30	0:00	1:32	1:32	[3] WestCoast Shipping							
40	10:45	10:47	11:35	0:02	0:48	0:48	[3] Advanced Cargo	12:59	13:08	14:46	0:02	1:38	1:38	[3] Idealease							
41	10:50	10:55	X	0:05	1:05	1:05	[4] ETC	13:12	13:12	Χ	0:00	2:18	2:18	[2]							
42	11:36	11:36	X	0:00	0:24	0:24	[3] LASF Specialty	13:25	13:25	13:48	0:00	0:23	0:23	[2] Coach America							
								14:43	X	14:44	0:01	0:00	0:01	[3] US Mail	1			l			I

		Ve	ssel arrive	8:30 5	Fri 06/11/ AM to 3: Pier 35 Sea-Prince 1950 pa Home-Po AM / Sch	30 PM ess x ort	eparture: 4 PM		Ves	ssel arrive	8:00	Mon 06/2' 0 AM to 3: Pier 35 Sea-Princ 1950 pa Home-Po 0 AM / Sch	00 PM ess x ort	eparture: 4 PM		Ve	ssel arrive	8:00 S	hu 07/01. AM to 3:0 Pier 35 iea-Prince 1950 pa: Home-Po AM / Sch	00 PM ess x	leparture: 4 PM
					started at							started a							started at ended at		
Truck No.	Arrive	Enter	Depart	Wait at Curb		Dwell Time	Type Name	Arrive	Enter	Depart		Stay Inside	Dwell Time	Type Name	Arrive	Enter	Depart	Wait at Curb		Dwell Time	Type Name
1	Х	Х	8:47	Cuib	0:17	0:17	[4] Fast Star Trucking	Х	Х	8:15	Curb	0:15	0:15	[3] RealWay Transport	Х	Х	8:14	Curb	0:19	0:19	[1]
2	X	X	8:50		0:17	0:17	[4] Elite Transport	X	X	9:10		1:10	1:10	[2] Realway Hansport	X	X	8:14		0:19	0:19	[1]
3	X	Х	9:00		0:30	0:30	[1] US Customs	X	X	9:34		1:34	1:34	[2]	X	Х	8:44		0:49	0:49	[4] WCD
4	Х	Х	9:10		0:40	0:40	[3] RealWay Transport	Х	Х	10:17		2:17	2:17	[2] US Customs	Х	Х	8:46		0:51	0:51	[4] AB Bros/NC
5	Х	Χ	9:15		0:45	0:45	[4] Guerrero Trans	Х	Χ	10:17		2:17	2:17	[2] US Customs	Х	Х	8:50		0:55	0:55	[3] RealWay Transp
6	Х	Χ	9:20		0:50	0:50	[4] MS Transport	Х	Χ	10:17		2:17	2:17	[2] US Customs	X	Χ	9:34		1:39	1:39	[4] Holeing Truck
7	Х	Χ	9:40		1:10	1:10	[4] MOZ Transport	10:53	10:53	13:43	0:00	2:50	2:50	[1]	X	Χ	9:40		1:45	1:45	[4] Meyer Trucking
8	Х	Χ	9:52		1:22	1:22	[2] Tighe Drayage	10:55	11:02	11:36	0:07	0:34	0:34	[3] APRIA Healthcare	Х	Х	9:59		2:04	2:04	[2] US Customs
9	Х	Х	10:00		1:30	1:30	[4] Gonzales Truck	11:23	Х	11:53	0:30	0:00	0:30	[2] Golden Years Med	Х	Х	9:59		2:04	2:04	[2] US Customs
10	Х	Х	10:12		1:42	1:42	[4] JP Trucking	11:52	11:52	11:54	0:00	0:02	0:02	[2] West Coast Ship	Х	Х	9:59		2:04	2:04	[2] US Customs
11	Х	Х	10:21		1:51	1:51	[1]	13:38	13:38	14:55	0:00	1:17	1:17	[3] Brinks	Х	Х	10:10		2:15	2:15	[4] Guerrero Trans
12	X	X	11:19		2:49	2:49	[4] Ocean Transport	13:40	X	13:47	0:07	0:00	0:07	[3] FedEx	X	Х	10:11		2:16	2:16	[4] Auderdale Truck
13	X	X	13:31		5:01	5:01	[2] US Customs	14:12	X	14:15	0:03	0:00	0:03	[3] UPS	Х	Х	10:15		2:20	2:20	[4] Weber Distributo
14	X 0.27	X 0.20	14:24	0.01	5:54	5:54	[2] West Coast Chin	14:15	14:20	14:55	0:05	0:35	0:35	[3] Scully Truck	X	X	12:42		4:47 4:49	4:47	[4] Grand Deer
15	9:27 9:34	9:28 9:34	10:02 11:08	0:01 0:00	0:34 1:34	0:34 1:34	[3] West Coast Ship[4] Safeway								X 8:20	8:24	12:44 8:24	0:04	0:00	4:49 0:04	[4] G & X Truck [4] Elite Transport
16 17	9:44	9:44	11:35	0:00	1:51	1:51	[4] Garden Produce								8:42	8:43	14:55	0:04	6:12	6:12	[2] US Coast Guard
18	9:45	9:47	10:43	0:02	0:56	0:56	[4] Meyer Trucking								8:44	8:44	14:55	0:00	6:11	6:11	[2] US Coast Guard
19	10:02	10:03	10:54	0:01	0:51	0:51	[3] Brinks								8:54	8:55	11:00	0:01	2:05	2:05	[4] Elite Transport
20	10:10	10:10	10:35	0:00	0:25	0:25	[3] Holland Flower								9:06	9:06	Х	0:00	5:54	5:54	[2]
21	10:35	10:37	13:00	0:02	2:23	2:23	[2] Golden Years Med								9:26	9:31	12:33	0:05	3:02	3:02	[4] Gonzales Truck
22	10:45	10:46	11:32	0:01	0:46	0:46	[3] Frair & Swanson								9:32	9:32	X	0:00	5:28	5:28	[2] City Medical Tra
23	10:53	Х	11:37	0:44	0:00	0:44	[3] APRIA Healthcare								9:40	9:41	Х	0:01	5:19	5:19	[4] Weber Distribute
24	11:15	11:17	11:45	0:02	0:28	0:28	[4] Weber Distributor								9:45	9:46	13:40	0:01	3:54	3:54	[2]
25	11:35	Х	12:45	1:10	0:00	1:10	[2] Pacific Pulmonary								10:16	10:21	10:34	0:05	0:13	0:13	[3] APRIA Healthca
26	12:17	12:17	X	0:00	3:13	3:13	[2] US Customs								10:41	10:41	12:10	0:00	1:29	1:29	[3] JIT Transportati
27	12:30	12:33	12:33	0:03	0:00	0:03	[2] BIT Idealease								10:44	10:48	11:19	0:04	0:31	0:31	[4] ETC
28	12:39 13:00	12:39 13:00	13:21 X	0:00	0:42 2:30	0:42 2:30	[3] BIT Idealease [2] Safeway								10:50 11:24	10:57 11:24	11:09 12:02	0:07 0:00	0:12 0:38	0:12 0:38	[3] U-Haul [3] Tighe Drayage
29 30	13:00	13:00 X	X	2:04	2:30	2:30	[3] UPS								11:24	11:24 X	12:02	0:00	0:38	0:38	[3] Figne Drayage [2] Golden Years M
30 31	13.20	^	^	2.04	2.04	2.04	[5] 01 5								11:28	X	11:53	0:25	0:00	0:25	[3] U-Haul
32															12:39	12:47	13:15	0:08	0:28	0:28	[3] Axt 2 Service
33															13:31	13:32	13:50	0:01	0:18	0:18	[3] Brinks
34															14:10	14:20	14:50	0:10	0:30	0:30	[3] Bay Area Oil
35															14:40	14:40	14:50	0:00	0:10	0:10	[3] West Coast Ship
36																					1
37																					1
38																					1
39																					1
40																					1
41																					1
42															1			l			1

8.3 Transbay Traffic and Passenger Data

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Special Event Traffic Volumes on San Francisco Bay Bridges

	SAN FRA	NCISCO-OAF	KLAND BAY	BRIDGE ^[a]	(GOLDEN GA	TE BRIDGE ^{[b}]
Special Event	Morning	Midday	Evening	Total	Morning	Midday	Evening	Total
	Peak Hour ^[C]	Peak Hour [a]	Peak Hour [e]	All Day	Peak Hour ^[C]	Peak Hour [0]	Peak Hour [e]	All Day
Independence Day - Sunday, July 4, 2010	5,710	6,703	6,298	99,968	2,001	3,239	3,436	45,065
Baseline - Sunday, June 27, 2010	7,614	7,694	6,635	111,295	3,395	4,270	4,229	52,884
Difference	-1,904	-991	-337	-11,327	-1,394	-1,031	-793	-7,819
	-25%	-13%	-5%	-10%	-41%	-24%	-19%	-15%
Fleet Weekend - Saturday, October 9, 2010	7,773	8,040	6,988	123,695	3,130	3,724	3,508	49,662
Baseline - Saturday, October 2, 2010	8,456	8,136	7,628	126,247	3,719	4,058	4,126	52,696
Difference	-683	-96	-640	-2,552	-589	-334	-618	-3,034
	-8%	-1%	-8%	-2%	-16%	-8%	-15%	-6%
Fleet Weekend - Sunday, October 10, 2010	7,993	8,017	7,245	114,545	3,368	4,107	3,993	49,562
Baseline - Sunday, October 3, 2010	8,037	8,316	6,868	114,783	3,532	4,713	3,781	49,406
Difference	-44	-299	377	-238	-164	-606	212	156
	-1%	-4%	5%	0%	-5%	-13%	6%	0%
SF Giants World Series Parade - Wed., Nov. 3, 2010	9,095	6,182	6,717	115,247	5,837	3,858	3,352	55,517
Baseline - Wednesday, October 27, 2010	8,874	7,648	7,004	123,231	5,808	3,435	3,859	56,930
Difference	221	-1,466	-287	-7,984	29	423	-507	-1,413
	2%	-19%	-4%	-6%	0%	12%	-13%	-2%

Special Event Transit Riders on BART's Transbay Tube

·	INE	BOUND TO S	AN FRANCIS	CO	OUTB	OUND FROM	I SAN FRANC	CISCO
Special Event	Morning	Midday	Evening	Total	Morning	Midday	Evening	Total
	Peak Hour ^[C]	Peak Hour ^[a]	Peak Hour ^[e]	All Day	Peak Hour [C]	Peak Hour [0]	Peak Hour [e]	All Day
Independence Day - Sunday, July 4, 2010	2,698	3,730	4,839	47,746	1,033	1,793	10,366	46,301
Baseline - Sunday, June 27, 2010	11,653	12,842	6,579	82,160	1,307	5,504	11,825	80,685
Difference	-8,955	-9,112	-1,740	-34,414	-274	-3,711	-1,459	-34,384
	-77%	-71%	-26%	-42%	-21%	-67%	-12%	-43%
Fleet Weekend - Saturday, October 9, 2010	5,768	8,286	4,880	71,037	2,500	2,899	9,211	68,009
Baseline - Saturday, October 2, 2010	5,300	7,543	3,815	61,140	1,333	2,643	7,763	58,785
Difference	468	743	1,065	9,897	1,167	256	1,448	9,224
	9%	10%	28%	16%	88%	10%	19%	16%
Fleet Weekend - Sunday, October 10, 2010	4,494	9,419	3,753	54,594	1,678	2,257	9,505	56,352
Baseline - Sunday, October 3, 2010	4,305	5,990	2,787	43,581	1,284	2,172	7,174	44,975
Difference	189	3,429	966	11,013	394	85	2,331	11,377
	4%	57%	35%	25%	31%	4%	32%	25%
SF Giants World Series Parade - Wed., Nov. 3, 2010	34,304	19,910	4,253	192,605	2,698	19,766	25,589	188,728
Baseline - Wednesday, October 27, 2010	24,787	5,297	6,270	119,785	2,801	4,361	22,862	118,773
Difference	9,517	14,613	-2,017	72,820	-103	15,405	2,727	69,955
	38%	276%	-32%	61%	-4%	353%	12%	59%

[[]a] Westbound (towards San Francisco) traffic volumes

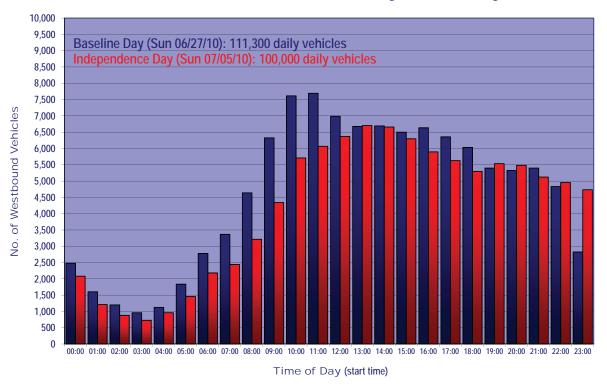
Printed on 43/1/2011 Transbay Traffic 2011 06 26.xlsx

[[]b] Southbound (towards San Francisco) traffic volumes

[[]c] One-hour period with the highest value before 11 a.m.

[[]d] One-hour period with the highest value between 11 a.m. and 3 p.m. [e] One-hour period with the highest value after 3 p.m.

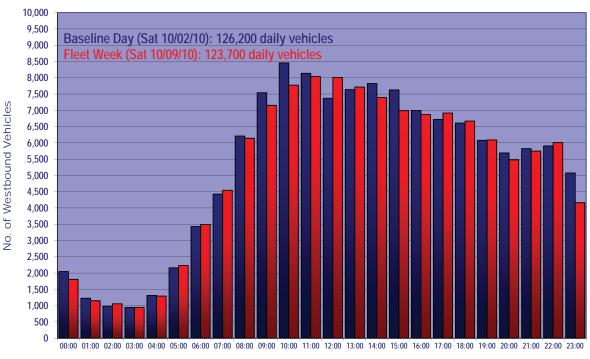
San Francisco-Oakland Bay Bridge Westbound Vehicle Traffic to SF by Time of Day



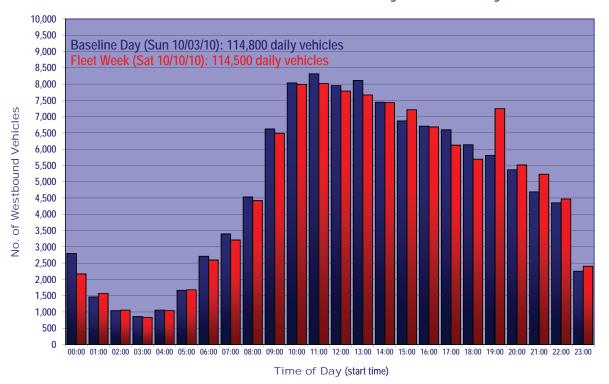
Transbay Traffic 2011 03 26.xls Printed on 6/7/2011

Adavant Consulting

San Francisco-Oakland Bay Bridge Westbound Vehicle Traffic to SF by Time of Day



San Francisco-Oakland Bay Bridge Westbound Vehicle Traffic to SF by Time of Day

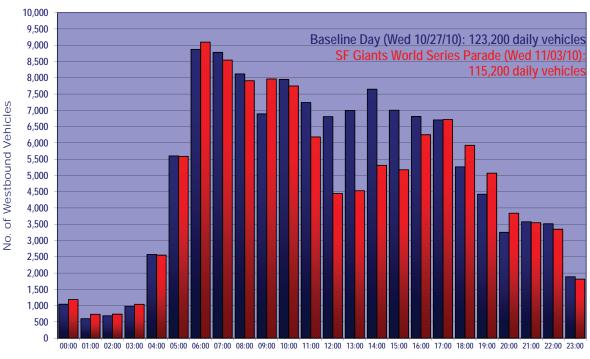


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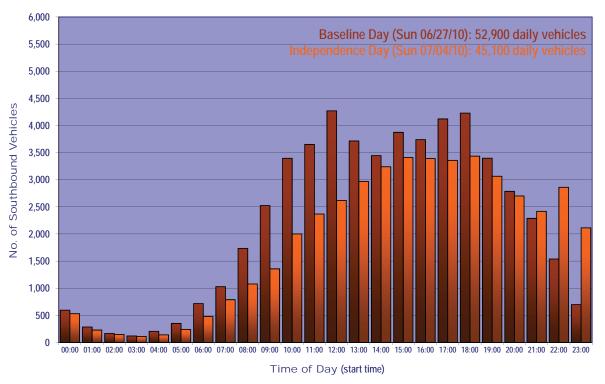
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Adavant Consulting

San Francisco-Oakland Bay Bridge Westbound Vehicle Traffic to SF by Time of Day



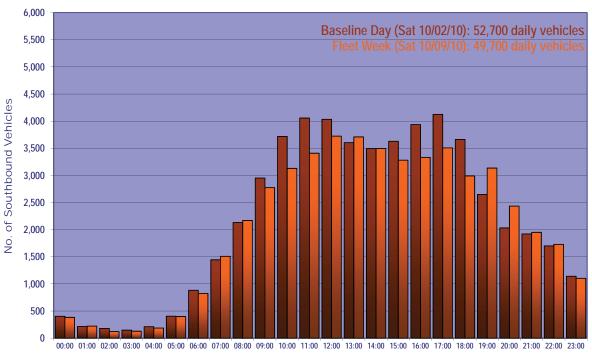
San Francisco Golden Gate Bridge Southbound Vehicle Traffic to SF by Time of Day



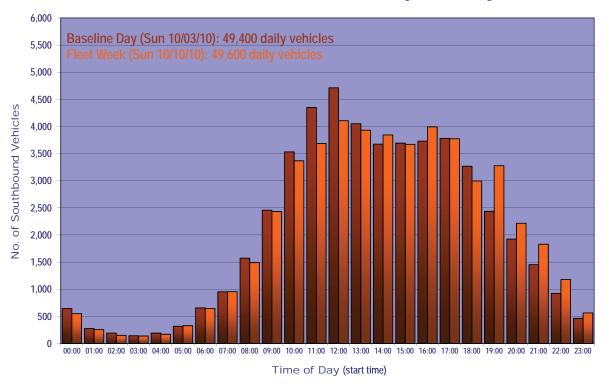
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Adavant Consulting

San Francisco Golden Gate Bridge Southbound Vehicle Traffic to SF by Time Day



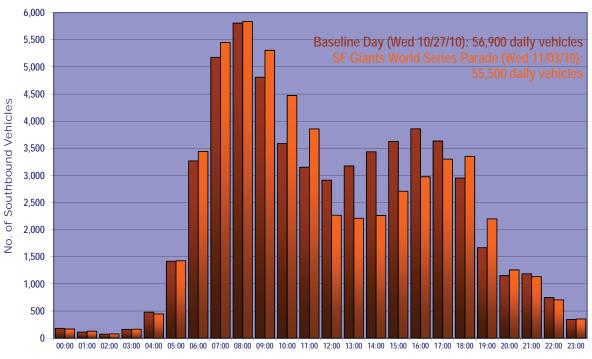
San Francisco Golden Gate Bridge Southbound Vehicle Traffic to SF by Time Day

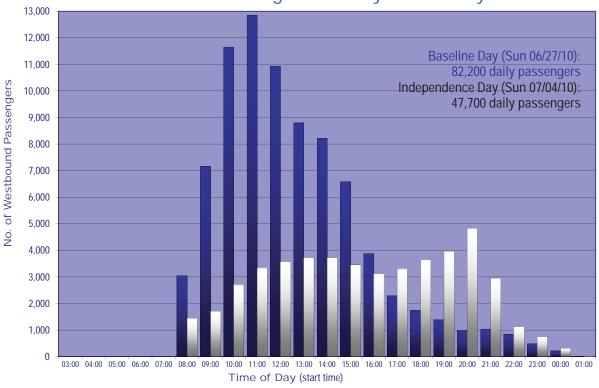


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Adavant Consulting

San Francisco Golden Gate Bridge Southbound Vehicle Traffic to SF by Time Day



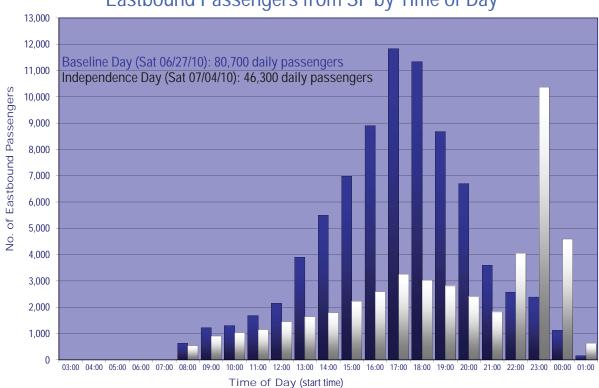


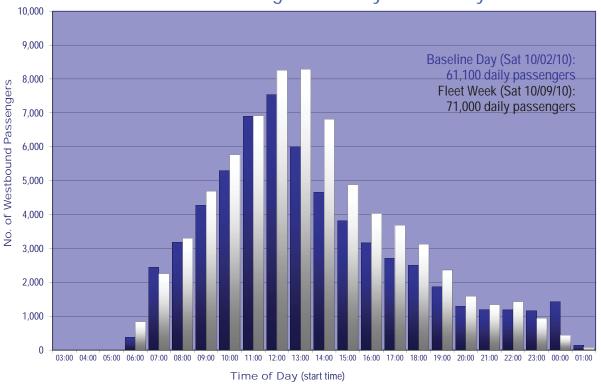
Transbay Traffic 2011 03 26.xlsx

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Adavant Consulting

BART Transbay Tube Eastbound Passengers from SF by Time of Day



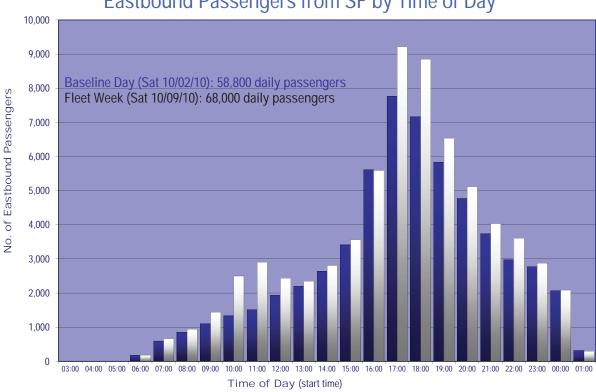


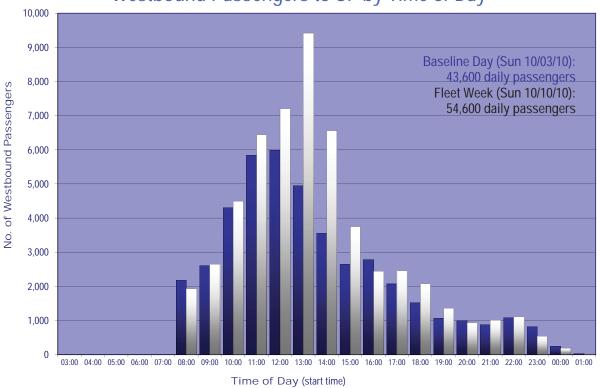
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BART Transbay Tube Eastbound Passengers from SF by Time of Day



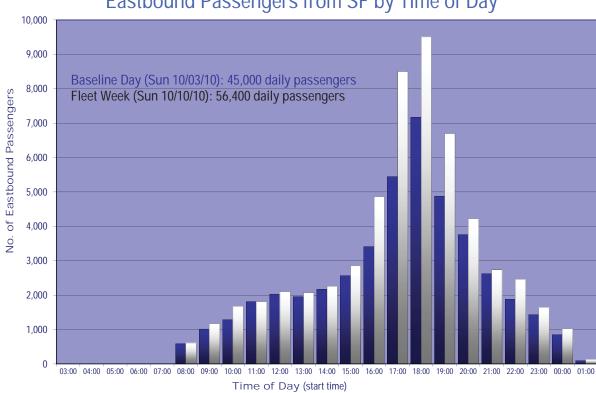


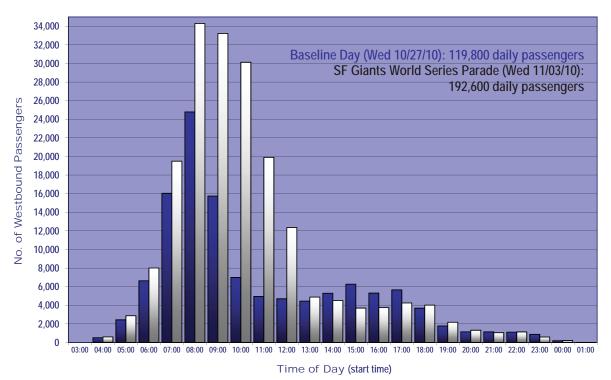
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Printed on 6/7/2011

Adavant Consulting

BART Transbay Tube Eastbound Passengers from SF by Time of Day

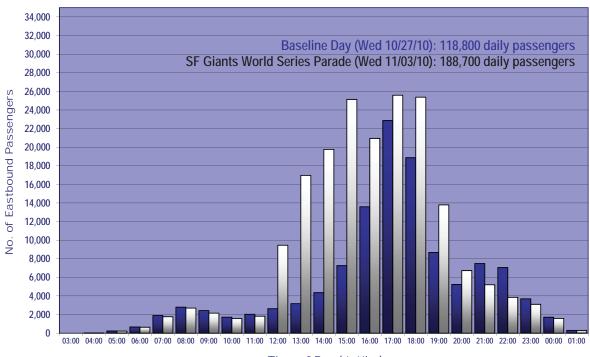




Transbay Traffic 2011 03 26.xls Printed on 6/7/2011

Adavant Consulting

BART Transbay Tube Eastbound Passengers from SF by Time of Day



8.4 Fisherman's Wharf Visitor Surveys

Fisherman's Wharf Community Benefit District-Visitor Survey, November 2006

Method of Arrival at Fisherman's Wharf

	Wav	e 1	Wav	e 2	Wav	e 3	All Su	rveys
Private Automobile	90	28.1%	81	26.4%	58	18.7%	229	24.8%
Cable Car	49	15.3%	54	17.8%	77	25.8%	180	19.5%
Walked	58	18.1%	46	15.2%	68	22.8%	172	18.6%
Bus	38	11.9%	37	12.2%	25	8.3%	100	10.8%
Streetcar	32	10.0%	20	6.6%	30	10.1%	82	8.9%
Staying at Wharf	12	3.8%	19	6.3%	17	5.7%	48	5.2%
Taxi	21	6.6%	17	5.6%	15	5.2%	53	5.7%
Ferry boat	8	2.5%	11	3.6%	5	1.5%	24	2.6%
Tour bus	7	2.2%	11	3.6%	1	0.3%	19	2.1%
Other	5	1.6%	7	2.3%	4	1.5%	16	1.7%
TOTAL	320	100.0%	303	100.0%	300	100.0%	923	100.0%
Auto	90	28.1%	81	26.7%	58	19.3%	229	24.8%
Motor Coach	7	2.2%	11	3.6%	1	0.3%	19	2.1%
Transit	127	39.7%	122	40.3%	137	45.7%	386	41.8%
Taxi	21	6.6%	17	5.6%	15	5.0%	53	5.7%
Walk/Other	75	23.4%	72	23.8%	89	29.7%	236	25.6%
TOTAL	320	100.0%	303	100.0%	300	100.0%	923	100.0%
Auto	97	30.3%	92	30.4%	59	19.7%	248	26.9%
Transit	148	46.3%	139	45.9%	152	50.7%	439	47.6%
Walk/Other	75	23.4%	72	23.8%	89	29.7%	236	25.6%
TOTAL	320	100.0%	303	100.0%	300	100.0%	923	100.0%

Place of Residence	Day	1	Day	2	Day	3	Tot	al
SF	53	16.7%	43	14.2%	40	13.4%	136	14.8%
SF Bay Area	44	13.9%	37	12.2%	39	13.0%	120	13.0%
Other USA	130	41.0%	158	52.1%	136	45.5%	424	46.1%
Foreign residence	90	28.4%	65	21.5%	84	28.1%	239	26.0%
TOTAL	317	100.0%	303	100.0%	299	100.0%	919	100.0%
Other USA (detail)								
Los Angeles-Long Beach	4	3.4%	9	5.6%	4	2.7%	17	4.0%
NY-Northern NJ-Long Island	6	5.0%	4	2.6%	4	2.7%	14	3.4%
Sacto-Stockton-Modesto	5	3.8%	4	2.6%	4	2.7%	13	3.0%
Fresno	2	1.9%	3	1.7%	2	1.3%	7	1.6%
San Diego-Carlsbad-S Marcos	3	2.2%	2	1.3%	2	1.3%	7	1.6%
Chicago-Naperville-Jolliet	1	0.9%	4	2.6%	1	1.0%	7	1.6%
Dallas-Fort Worth-Arlington	0	0.0%	4	2.6%	2	1.7%	6	1.5%
Boston-Cambridge-Quincy	0	0.3%	2	1.0%	2	1.3%	4	0.9%
Phoenix-Mesa-Scottsdale	2	1.3%	2	1.0%	0	0.3%	4	0.9%
Denver-Aurora	2	1.3%	0	0.0%	1	1.0%	3	0.7%
TOTAL	26	20.1%	33	21.0%	22	16.0%	81	19.1%
Visitors								
Outside Bay Area - Day Trips	7	3.4%	7	3.0%	5	2.5%	20	3.0%
Other USA and Foreign	213	96.6%	216	97.0%	215	97.5%	643	97.0%
TOTAL	220	100.0%	223	100.0%	220	100.0%	663	100.0%

Fisherman's Wharf Community Benefit District-Visitor Survey, November 2006

Group Size

•	Wave	e 1	Wave	2	Wave	e 3	All Sur	veys
More than six	28	10.6%	28	10.9%	13	5.0%	69	8.8%
Six	13	4.9%	11	4.3%	11	4.2%	35	4.5%
Five	15	5.7%	20	7.8%	11	4.2%	46	5.9%
Four	29	10.9%	47	18.3%	29	11.1%	105	13.4%
Three	33	12.5%	57	22.2%	30	11.5%	120	15.3%
Two	111	41.9%	79	30.7%	132	50.6%	322	41.1%
One	36	13.6%	15	5.8%	35	13.4%	86	11.0%
TOTAL	265	100.0%	257	100.0%	261	100.0%	783	100.0%
Average Group Size	3.8		4.1		3.5	<u>.</u>	3.8	

Boudin Bakery and Café Transportation Study Visitor Survey Results - April 19, 2003 Place of Origin

	All Responder	ntsimbor i yinga kai	The description of All Cai	User Respond	ents	el englis
Origin	Frequen	cy Percent	Origin	Frequency	Percent	
S.F. SD 1	127	50.6%	S.F. SD 1	18	15.9%	· Stylen
S.F. SD 2	14	5.6%	S.F. SD 2	7	6.2%	
S.F. SD 3	10	4.0%	S.F. SD 3		6.2%	
S.F. SD 4	5	2.0%	S.F. SD 4	2	1.8%	
East Bay	26	10.4%	East Bay	21	18.6%	
North Bay	20	8.0%	North Bay	17	15.0%	Tabellas de Residentes. La lista españolas de la segui
South Bay	36	14.3%	South Bay	32	28.3%	
Out of Regio	n 13	5.2%	Out of Region	9	8.0%	lon, edek ≟e esektrokko
Total	251	100.0%	Total	113	100.0%	ta i nadenki nekili. Dirakteriki nekili i

All Transi	it User Respon	dents		All Wal	king Responde	nts	n de la compania de la Compania del Compania de la Compania del Compania de la Co
Origin	Frequency	Percent		Origin	Frequency	Percent	
S.F. SD 1	44	72.1%		S.F. SD 1	64	92.8%	······································
S.F. SD 2	3	4.9%		S.F. SD 2	3	4.3%	
S.F. SD 3	2	3.3%		S.F. SD 3	1	1.4%	and the second second section is the
S.F. SD 4	3	4.9%		S.F. SD 4	1	1.4%	
East Bay	3	4.9%		East Bay	. 0	0.0%	
North Bay	3	4.9%		North Bay	0	0.0%	
South Bay	1	1.6%		South Bay	. 0	0.0%	
Out of Region	2	3.3%		Out of Region	0	0.0%	
Total	61	100.0%	-	Total	69	100.0%	d e en en Arreya (g. 1911). Terre
				数约		্ৰণ প্ৰহেশ্য	Control of the Contro

					TEST CONTRACTOR OF THE
All Othe	er Respondents		Sum of A	II Response	S Profes
Origin	Frequency I	Percent	Origin, Adams of SF	requency	Percent
S.F. SD 1	7	41.2%	S.F. SD 1	133	51.2%
S.F. SD 2	1	5.9% (3.44) (3.66) (4.67)	S.F. SD 2	14 Hog	5.4%
S.F. SD 3	1	5.9%	S.F. SD 3	11.	4.2%
S.F. SD 4	0	0.0%	S.F. SD 4	6	2.3%
East Bay	2	11.8%	East Bay	26	10.0%
North Bay	0	0.0%	North Bay	20	7.7%
South Bay	3 "(14,444) - 144	17.6%	South Bay	36	13.8%
Out of Region	3	17.6%	Out of Region	14	5.4%
Total	17	100.0%	Total	260	100.0%

Boudin Bakery and Café Transportation Study Visitor Survey Results - April 19, 2003 Place of Origin

City of Origin	nd havy, is interested	Frequen.	Percent
Alameda	a na seu a transita. Part	de e como de como es	0.4%
Albany		1	0.4%
Berkeley		5	2.0%
Burlingame		2	0.8%
Castro Valley		1	0.4%
Cupertino		1	0.4%
Dana Point		1	0.4%
Danville		1	0.4%
Discovery Bay		1	0.4%
East Bay		1	0.4%
Fairfield		_	2.0%
Fremont		3	1.2%
Fresno	The second secon	1	0.4%
Hollister		1	0.4%
Livermore		2	0.8%
Long Beach	48.5	1 2 3 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	0.4%
_		1	0.4%
Los Angeles Manteca		1	0.4%
	gradicha	2	0.4%
Napa Oakland	Assistant ²	5	
	e in expensive size		2.0%
Peninsula		2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.8%
Petaluma			0.4%
Pittsburg		2	0.8%
Pleasant Hill		1 1	0.4%
Redwood City		3 90	1.2%
Reno NV		1 00	0.4%
Richmond		2 %.	0.8%
Rio Vista		1 90	0.4%
Rohnert Park		1 00.	0.4%
Sacramento	e 1	3.	1.2%
San Bruno		2 1	0.8%
San Carlos		1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 / 1 /	0.4%
San Diego		1 ^{1,30}	0.4%
San Francisco		156	62.2%
San Jose	aarinii ka ka ka ka ka ka ka ka ka ka ka ka ka	6	2.4%
San Mateo	YV		0.8%
Santa Clara		1	0.4%
Santa Rosa		6. tg ta	
Sausalito		2	0.8%
South San Fran	ncisco	11	4.4%
Stanford		1	0.4%
Stockton		2	0.8%
Tracy		1	0.4%
Vacaville		2	0.8%
Walnut Creek		3	1.2%
Total	1	251	100.0%

Place of Origin in San Francisco	Frequen.	Percent	Percent of total
Bernal Heights	- va - Pigas 1 sansar	0.6%	0.4%
Candlestick	2	1.3%	0.8%
Castro	1	0.6%	0.4%
Chinatown	4	2.6%	1.6%
Civic Center	17	10.9%	6.8%
Corona Heights	1	0.6%	0.4%
Cow Hollow	2	1.3%	0.8%
Eureka Valley	c 2	1.3%	0.8%
Financial District	4	2.6%	2 1.6%
Fishermans Wharf	56	35.9%	22.3%
Forest Hill	2	1.3%	0.8%
Golden Gate Park	117.51 1 V3	0.6%	0.4%
Japantown	3	1.9%	1.2%
Marina	8	5.1%	3.2%
Mission	2	1.3%	0.8%
Nob Hill	2	1.3%	0.8%
North Beach	2	1.3%	0.8%
Parnassus	1	0.6%	0.4%
Russian Hill	ris reflequite	0.6%	0.4%
South of Market	4	2.6%	1.6%
Sunset	3	1.9%	1.2%
Union Square	37	23.7%	14.7%
Total	156	100.0%	62.2%

Boudin Bakery and Café Transportation Study Visitor Survey Results - April 19, 2003

Automobi	le Visitor Pa	ths the track
Street Name	Frequen.	Percent
Bay	12	7.5%
Columbus	5	3.1% (************************************
Embarcadero	54	33.5%
Franklin	_e 5	3.1%
Lombard	18	11.2% and allower
Marina	6	3.7% (**;)#::::#
Powell	8	5.0%
Sansome	3	1.9% « 🖰 🖢 🕒 »
Van Ness	27	16.8%
Other/Not Sure	23	14.3%
Tota	1 161	100.0%

Time to	o find parkin	g
Minutes	Frequen.	Percent
1	14	15.9%
2	16	18.2%
5	25	28.4%
10	8	9.1%
13	1	1.1%
15	14	15.9%
20	1	1.1%
	4	4.5%
40	1	1.1%
45	1	1.1%
60	3	3.4%
Total	88	100.0%
Average	9.99	minutes

Times to final montrinos

Length of Stay in Fisher			rman's Wharf		
	Hours	Frequen.	Percent		
***************************************	1 3	16	14.5%		
911 a	2 *******	19	17.3%		
	3	18	16.4%		
	4	35	31.8%		
	5	6	5.5%		
	6	15	13.6%		
	12	1	0.9%		
	Total	110	100.0%		
	Average	3. 45	hours		

Cost	of parking	
Cost	Frequen.	Percent
\$0.00	1	2.4%
\$4.00	3	7.3%
\$5.00	1	2.4%
\$8.00	1	2.4%
\$10.00	10	24.4%
\$12.00	6	14.6%
\$15.00	4	9.8%
\$16.00	2	4.9%
\$18.00	2	4.9%
\$20.00	4	9.8%
\$24.00	3	7.3%
\$25.00	1	2.4%
\$30.00	2	4.9%
\$36.00	1	2.4%
Total	41	100.0%
		the Disper

WILBUR SMITH ASSOCIATES

Boudin Bakery and Café Transportation Study Visitor Survey Results - April 19, 2003

Trips Trips Trips Satisfument Satisfument Satisfument Satisfument Satisfument Satisfument Total 616 The foliois of the foliois	Frequency Total 616 71 33 114 Frequency 106 32 0 23 41 41 41 41 41 41 41 41 41 4	Purpose	1		Frequency Percent	Percent	
Trips Trips Trips Trips Trips Total	Trips rtainment strainment seeing/purposes Total 616 s Frequency harcadero harcadero lo6 3 ge 3 19 ruare 41 106 0 s/Museums 23 46 0 or rants/eateries 34 7 Boudin 16 16 19 17 19 18 18 18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	Eat at Restaurant/Buy Bread at Boudin	Soudin		242	39.3%	
Trips Trips Satisfument Satisfument Satisfument Satisfument Satisfumency Total 616 Total 616 Total 616 Total 616 Total 616 Total 616 Satisfumency Total 616	Trips Trips Trips artainment 33 aeeing/purposes Total 616 s Frequency 106 106 106 106 119 119 119 119 119 119 119 119 119 11	pping			156	25.3%	
aeing/purposes	artainment 33 artainment 714 being/purposes 70tal 616 s Frequency 106 106 106 106 107 119 119 119 110 110 110 110 110 110 110	y/Water Trips			71	11.5%	
rotal 616 Frequency barcadero Total 616 106 106 106 19 Iuare S/Museums S/Museums Tants/eateries Sac 15 46 Or S/Museums 15 16 16 16 17 18 19 11 11 11 11 11 11 11 11	seing/purposes	ural/Entertainment			33	5.4%	
Frequency barcadero lubarcadero lube luare s/Museums or s/Museums or sala de or sala de de de de de de de de de d	s Frequency harcadero harcadero harcadero 106 106 107 41 119 41 119 119 123 140 150 160 180 190 190 100 100 100 100 10	ar sightseeing/purposes			114	18.5%	
Frequency 106 106 106 106 106 106 106 19 19 19 19 19 10 10 10 11 11 11 11 11 11 11 11 11 11	Frequency 106 106 106 106 106 106 10 109 10are 119 119 119 110 110 110 110 110 110 110			Total	616	100.0%	
Frequency abarcadero 106 106 106 106 106 19 19 19 19 10 10 10 10 10 10	Frequency 106 106 106 106 106 106 106 106 106 19 19 19 19 19 19 19 1						
Frequency harcadero 106 106 3 ge 3 19 luare 32 s/Museums 23 tants/eateries 34 ants/eateries 34 ants/eateries 34 ants/eateries 34 ants/eateries 34 area 3	Frequency hbarcadero hbarcadero 106 106 106 106 10 106 19 19 19 19 10 s/Museums cants/eateries Boudin 16 17 19 16 17 19 17 19 10 10 10 10 10 10 10 10 10						
nbarcadero 106 106 106 106 107 Iuare 32 41 41 41 41 41 41 41 41 41 4	rea harcadero 106 106 106 106 106 106 106 106 107 19 119 119 119 119 119 119 119 119 119	inations			Frequency		
106 3 19 19 19 19 19 11 41 41 41 15 16 17 18 18 18 18 18 19 19 10 10 10 10 11 10 10 10 10 10 10 10 10	106 3 7 19 1uare 3 19 119 119 119 119 119 119 119 119 11	rson/Embarcadero			106	18.5%	
ge 3 uare 41 tide 92 s/Museums 23 s/Museums 23 rants/eateries 34 Boudin 16 rants 33 rants 46 15 16 17 10 10 10 10 10 10 10 10 10	3 vuluare luare 41 41 41 41 60 8/Museums 8/ 8/ or rants/eateries 34 7 Boudin 16 17 19 17 19 19	39			106	18.5%	•
tide 41 tide 32 s/Museums 23 s/Museums 23 to 7 antis/eateries 34 Boudin 16 area 37	luare 41 ide 23 s/Museums 23 rants/eateries 23 rants/eateries 34 Boudin 7 Boudin 16 Total 573	Anchorage			က	0.5%	
ide 32 41 41 41 41 41 41 41 41 41 41 41 41 41	tide 41 s/Museums 23 s/Museums 23 rants/eateries 24 or 4 rants/eateries 34 sar 7 Boudin 7 Boudin 16 sirea 3 37 Total 573	Cannery			19	3.3%	
tide 32 s/Museums 23 s/Museums 23 15 or 4 rants/eateries 34 Sar 7 Boudin 16 area 37	tide 32 s/Museums 23 s/Museums 23 to 15 to 24 to 4 tants/eateries 34 tants 21 tants 21 tants 21 tants 34 tants 37 tants	adelli Square	. 5		4	7.2%	
126 32 32 83 84 85 85 85 85 85 85 85 85 85 85 85 85 85	s/Museums 23 5/Museums 23 6 7 7 8 Boudin 7 16 8 16 8 18 8 19 17 19 19	haz	1		4	7.2%	
s/Museums 23 23 24 50 7 7 8 Boudin 6 8 3 31 31 31	s/Museums 23 15 15 16 or 4 46 rants/eateries 34 34 34 34 34 34 34 36 37 37 19	/Ferry Ride			32	5.6%	
s/Museums 23 15 16 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	s/Museums 23 15 16 or 4 tants/eateries 34 34 Sar Boudin 7 Total 573	ng Trip			0	%0.0	
or 46 46 46 46 46 46 46 46 46 46 46 46 46	or 46 rants/eateries 34 sar Boudin 7 If 8 If 8 If 8 If 8 If 9 If 9 If 9 If 9 If 9 If 9 If 9 If 9	nic Ships/Museums			23	4.0%	
or 46 and	or 46 rants/eateries 34 34 Sar Boudin 7 7 Intera 3 37 19 10 10	ırium			15	2.6%	
or ants/eateries 34 34 34 36 37 37 37 37	or frants/eateries 34 34 34 36 31 31 37 37 7 7 7 7 7 7 7 16 9 37 19 7 7 19	45			46	8.0%	
rants/eateries 34 Sar Boudin 7 16 16 17 17 16 17 11	rants/eateries 34 34 34 Boudin 7 16 31 19 77 16 17 17 18 18 19 19	ng Harbor			4	0.7%	
21 21 21 21 21 21 22 21 22 22 22 22 22 2	Soudin 7 16 16 19 19 19 19 19 19 19 19 19 19 19 19 19	r restaurants/eateries			34	2.9%	
16 :	Boudin	Cable Car			21	3.7%	
16 3 37 37 37 37 37 37 37 37 37 37 37 37 3	16 1 3 37 37 19 Total 573	Bread at Boudin			7	1.2%	
3 37 37 10 10 10 10 10 10 10 10 10 10 10 10 10	3 37 37 19 Total 573	Tour	35		16	2.8%	
37	37 19 Total 573	t in the area			ო	0.5%	
	19 Total 573	scided			37	6.5%	
<u> </u>	273	sponse			19	3.3%	

	0.000	Surpence Organizations	,							410010	
	Luthose	Sciossianulation	2					Lieduei	5	rercent	
	Eat at Re	Eat at Restaurant/Buy bread at Boudin Only	d at Boudin On	<u> </u>				12		4.8%	
	Restaura	Restaurant AND Shopping						54		21.5%	
	Restaura	estaurant AND Ferry/Water Trips	er Trips					19		7.6%	
	Restaura	Restaurant AND Cultural/Entertainment	ntertainment					7		0.8%	
	Restaura	Restaurant AND Other Sightseeing/purposes	tseeing/purpos	es	Việi -			40		15.9%	
	Restaura	Restaurant AND Shopping AND Ferry/Water Trips	AND Ferry/Wat	er Trips				22		8.8%	
	Restaura	Restaurant AND Shopping AND Cultural/Entertainment	AND Cultural/E	ntertainment				6		3.6%	
	Restaura	Restaurant AND Shopping AND Other	AND Other					46		18.3%	
	Restaura	Restaurant AND Ferry/Water Trips AND Cultural/Entertainment	er Trips AND C	ultural/Entertainm	nent			το.		2.0%	
	Restaura	Restaurant AND Ferry/Water Trips AND Other	er Trips AND O	ther				2		2.0%	
	Restaura	Restaurant AND Cultural/Entertainment AND Other	ntertainment AN	AD Other		100,		. i		0.4%	
	Restaural	Restaurant AND Ferry/Water Trips AND Cultural/Entertainment AND Other	er Trips AND Cr	ultural/Entertainm	ent AND Of	her		2		0.8%	
	Restaura	Restaurant AND Shopping AND Cultural/Entertainment AND Other	AND Cultural/E	ntertainment ANE	Oother			7		2.8%	
	Restaural	Restaurant AND Shopping AND Ferry/Water Trips AND Cultural/Entertainment	AND Ferry/Wat	er Trips AND Cul	fural/Enterta	inment		2		2.0%	
	Restaura	Restaurant AND Shopping AND Ferry/Water Trips AND Other	AND Ferry/Wat	er Trips AND Oth	ier			F		4.4%	
	Restaura	Restaurant AND Shopping AND Ferry/Water Trips AND Cultural/Entertainment AND Other	AND Ferry/Wat	er Trips AND Cull	tural/Enterta	inment AND	Other	2		0.8%	
	No response	nse						6		3.6%	
			Total	N. 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				251		100.0%	
		100	Ogenium Armeteen								
			- 12								
	5'6 .										
	Number (Number of Purposes		Frequency	Percent						
	One purpose	ose		12	2.0%						
	Two purposes	oses		115	47.5%						
	Three purposes	boses		88	36.4%						
	Four purposes	oses		25	10.3%					v.š	
	Five purposes	oses		5	0.8%						
			Total	242	100.0%	ŀ		***		·	
ATT.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							44 749 140			
rsi Tri Wen	¥	Average Purposes per Trip:	per Trip:	2.55						(4)	
		,									

Boudin Bakery and Café Transportation Study Visitor Survey Results - April 19, 2003

Mode	Frequency	Percent
Auto	113	42.3%
Cable Car	31	11.6%
F-Line	17	6.4%
Muni Bus	10	3.7%
Ferry	7	2.6%
GGT Bus	0	0.0%
BART	3	1.1%
Caltrain	0	0.0%
AC Transit/Samtrans	0	0.0%
Bike	3	1.1%
Walk	69	25.8%
Other	14	5.2%
Total	267	100.0%

4.00 T	Mode of Travel									
Origin	Auto	Transit	Walk	Other	Total					
S.F. SD1	18	44	64	7	133					
S.F. SD 2	7	3	3	1	14					
S.F. SD 3	' ₂ , 7	2	0	:1	10					
S.F. SD 4	2	3	1	0	6					
East Bay	21	3	0	.2	26					
North Bay	17	3	0	0	20					
South Bay	32	1	0	.3	36					
Out of Region	9	2	1	3	15					
Total	113	61	69	17	260					

Mode		Frequency	Percent
Auto		113	43.5%
Transit		61	23.5%
Walk		69	26.5%
Other		17	6.5%
	Total	260	100.0%

Walk		Frequency	Percent
Walk Only		58	86.6%
Walk + Car		1	1.5%
Walk + Transit		8 .	11.9%
	Total	67	100.0%

Other		Frequency	Percent
Other Only		14	82.4%
Other + Car		1	5.9%
Walk + Other		2	11.8%
	Total	17	100.0%

No. of Pers.		
in the Veh.	Frequen.	Percent
1	4	3.6%
2	37	33.0%
3	22	19.6%
4	20	17.9%
5	18	16.1%
6	8	7.1%
7	2	1.8%
8	1	0.9%
Total	112	100.0%

Average		3.43	T	er	SOI	ns/	ve	ŀ

		Number of Persons in the Vehicle								
Origin	1	2	3	4	5	6	7	8	Total	
S.F. SD 1	0	6	3	5	2	0	1	0	17	
S.F. SD 2	0	4	0	2	1	0	. 0	0	7	
S.F. SD 3	1 0	5	1	1	0	0	0	0	7	
S.F. SD 4	1	0	0	0	1	0	. 0	Ó	2	
East Bay	0	6:	3	1	8	2	. 0	1	21	
North Bay	1	8	4	2	0	2	0	. 0	17	
South Bay	2	5	8	8	6	3	. 0	0	32	
Out of Region	0	3	3	1	0	1	1	. 0	9	
Total	4	37	22	20	18	R	2	- 1	112	

8.5 Traffic Simulation Analysis Technical Memo

James R. Herman Cruise Terminal Traffic Simulation Analysis Technical Memorandum

Introduction

The purpose of this Technical Memorandum is to assess whether the proposed cruise terminal at Pier 27 would cause significant traffic operations impacts inside Pier 27 and along the Embarcadero. The focus of the analysis is vehicle queuing and VISSIM simulation model was used for the analysis. This study analyzed project queuing impacts for a 3,000-passenger ship. Key performance measures presented include:

- Oueuing (length and duration) from immediate upstream and downstream intersections;
- o Taxi queuing (length and duration) extending beyond the beginning of the taxi queuing area to determine whether taxi queuing would impede bus access to the bus parking area;
- Auto drop-off queuing (length and duration) extending beyond the beginning of the auto drop-off queuing area to determine whether auto drop-off queuing would impede bus access to the bus parking area and taxi queuing;
- o Number of buses/shuttles that cannot be stored on site, and would have to be moved to an off-site storage yard; and
- o Internal queuing (length and duration) of exiting vehicles from the vehicular access point off the Embarcadero.

The study boundary for this project is from The Embarcadero/Bay Street to the Embarcadero/ Lombard/ Battery Streets and the analysis period is from 8:00 a.m. to 4:00 p.m. for both a typical weekday and Saturday

Key Operation Assumption

The VISSIM analysis incorporates the following assumptions:

Pier 27 Key Project Design Features

Pier 27 project design is based on the site plan developed for the Pier 27 preliminary design plan.

- There are one ingress lane and one egress lanes accessing Pier 27 at the Embarcadero promenade. Once entering Pier 27, the ingress lane will be widened to two, one for bus and trucks and the other one for POVs and taxis. The POV/taxi lane will split into two lanes after the bus lane split, one for taxi and the other one for POV and then eventually split again for two taxi and two POV queuing lanes with a bypass lane in the center. Similarly, there are two egress lanes inside Pier 27, which will be merged into one exiting the Embarcadero promenade.
- Taxi pick-up area would have two lanes, separated from POV loading zone, to accommodate 24 taxis at any given time. Average taxi loading duration is approximately 95 seconds, with a range from 35 to 190 seconds. In order to accommodate faster taxi processing, the Vissim analysis assumes six taxis loading simultaneously at any given time.
- Curb space in front of the terminal would be provided for approximately 34 spaces for POV/shuttle pick-ups in the morning for arrivals and POV/shuttle/taxi drop-off in the afternoon for departures. There will be two queuing lanes for this activity. Average POV loading duration is the same as taxis.



- A designated bus loading area for 14 bus/shuttle parking spaces with an additional 6 overflow bus parking spaces within the designated area. There would be another 4 bus stacking spaces along Pier 29. A total of 24 bus/shuttle parking spaces.
- If no bus parking space is available when buses arrive, the buses would be dispatched to an off-site parking area. Off-site bus parking area should be close to Pier 27 cruise terminal.
- Trucks would be required to go through a Transportation Security Administration (TSA) checkpoint. Assume checking process would take an average of 5 minutes for each truck.

Kay Traffic Control Assumptions

- Traffic signal timing for the three study intersections are assumed to be the same as current conditions.
- Pedestrian flows would be manually controlled by traffic controllers hired by the cruise operator(s) at the two internal crosswalks connecting the cruise terminal building with the taxi/bus loading area inside the valley and along the Embarcadero promenade, similar to the current operation at Pier 35. Pedestrian crossings will be dynamically controlled depending on pedestrian volumes. The following assumptions were used in the Vissim simulation model:
 - o Crossing the Promenade Pedestrian and vehicular/bicycle flow is coded similar to an actuated signal operation. Approximately 30 percent time is given to pedestrian and bicyclist crossing the Pier 27 access driveway and the remaining 70 percent time is giving to vehicles entering/exiting Pier 27 and along the Embarcadero.
 - o Crossing the valley driveway random arrival.
- Traffic controllers would have to be trained by the cruise operator to minimize delays and queuing of vehicular, pedestrian, and bicycle traffic.

Project Traffic Distribution Pattern Assumptions

- The project traffic includes a 3,000-passenger ship and 5,000-gsf retail use
- Vehicle inbound assignment
 - o 3.5 % The Embarcadero SB
 - o 19% Bay Street
 - o 5.5% Lombard Street
 - o 72% The Embarcadero NB
- Vehicle outbound assignment
 - o 10% U-turn at Chestnut/Sansome, then turn to The Embarcadero SB
 - o 17% The Embarcadero NB
 - o 83% left-turn to Bay Street
- Bus
 - 46% motor coach duration ranges from 30 to 90 minutes based on current pattern.
 Earlier arrival buses would stay longer and later arrival buses would stay shorter amount of time.
 - o 54% shuttle
 - 90% was assumed to be passenger-size vans that would use the drop-off zone and their duration would range from 1 to 4 minutes.
 - 10% was assumed to be larger size shuttle buses that would use the bus parking zone and their duration would range from 5 to 30 minutes.



Table 1 – Project Inbound Vehicle Volumes

		Cruise									
			Taxi				Tru	uck	Total		
Time Period	POV	Pickup	Dropoff	Total	Bus	Shuttle	in	out	(in)	Wkdy	Wknd
8:00-9:00	41	42	2	44	6	7	7	7	105	4	0
9:00-10:00	182	90	4	94	9	10	6	6	301	0	0
10:00-11:00	224	74	10	84	6	7	6	7	327	0	3
11:00-12:00	184	35	55	90	6	6	4	7	290	3	1
12:00-13:00	213	15	44	59	6	7	3	4	288	2	4
13:00-14:00	213	1	74	75	5	5	1	3	299	0	2
14:00-15:00	54	1	12	13	1	1	1	4	70	0	0
15:00-16:00	4	0	1	1	0	0	0	5	5	0	0
Total	1,115	258	202	460	39	43	28	43	1,685	9	10

Note: Some vehicles arrive beyond the study period

Table 2 – Project Pedestrian Volumes at Crosswalk inside Valley

Time Period	WB ¹	EB ²
8:00-9:00	123	8
9:00-10:00	497	16
10:00-11:00	436	37
11:00-12:00	20	106
12:00-13:00	1	185
13:00-14:00	0	199
14:00-15:00	0	45
15:00-16:00	0	2
Total	1077	599

Note:

^{1.} WB pedestrian crossing = bus + taxi outbound passengers

^{2.} EB pedestrian crossing = bus inbound passengers

Table 3 – Pedestrian Volumes along Embarcadero

Time Period	Wee	ekday	Weekend		
Time Period	Embarcadero SB	Embarcadero NB	Embarcadero SB	Embarcadero NB	
8:00-9:00	69	198	179	441	
9:00-10:00	89	268	243	575	
10:00-11:00	43	234	269	681	
11:00-12:00	45	249	306	748	
12:00-13:00	45	239	328	840	
13:00-14:00	46	245	342	783	
14:00-15:00	52	244	396	859	
15:00-16:00	52	250	483	856	

Note: Based on existing pedestrian counts along The Embarcadero sidewalk

Table 4 – Weekday Background Traffic Volumes

Time Period	Embarcadero SB	Bay EB	Lombard	Sansome	Embarcadero NB	From Pier
8:00-9:00	376	1280	196	253	916	10
9:00-10:00	310	1057	162	259	936	9
10:00-11:00	185	630	96	256	928	7
11:00-12:00	195	664	102	273	990	7
12:00-13:00	195	663	102	262	948	7
13:00-14:00	199	677	104	269	975	7
14:00-15:00	226	768	118	268	970	8
15:00-16:00	226	768	118	275	994	8

Table 5 – Weekend Background Traffic Volumes

Time Period	Embarcadero SB	Bay EB	Lombard	Sansome	Embarcadero NB	From Pier
8:00-9:00	258	343	95	189	657	16
9:00-10:00	351	467	130	246	857	22
10:00-11:00	389	517	143	292	1016	25
11:00-12:00	442	588	163	321	1116	28
12:00-13:00	477	635	176	352	1223	31
13:00-14:00	491	653	181	344	1197	30
14:00-15:00	573	762	211	368	1280	34
15:00-16:00	698	929	257	367	1277	37



VISSIM Model Results

VISSIM simulation model results are presented for two different situations:

- Intersections along the Embarcadero:
 - o The Embarcadero/Chestnut/Sansome Streets
 - o The Embarcadero/Lombard/Battery Streets
- Traffic operations inside the "Valley"
 - o Taxi Queuing Area inside the Valley
 - o POV Drop-off Area
 - o Exiting Vehicle Queue

The Embarcadero/Chestnut/Sansome Streets

The distance between the intersections of The Embarcadero/Chestnut/Sansome Streets and The Embarcadero/Lombard/Battery Streets is approximately 340 feet. The distance from the intersection of The Embarcadero/Chestnut/Sansome Streets to valley access point is approximately 100 feet. The average hourly vehicle queue would increase, extend and pass Pier 27 access point to approximately the upstream intersection of The Embarcadero/Lombard/Battery Streets from 11:00 a.m. to 2:00 p.m. during weekends, but would be shorter during weekdays, not extend to The Embarcadero/Lombard/Battery Streets intersection. The vehicle queue would extend approximately 283 feet (just north of The Embarcadero/Battery Street) from 11:00 a.m. to 12:00 p.m. during weekends.

Table 6 – Northbound Queue Length and Intersection LOS and Delay at the Intersection of The Embarcadero/Chestnut/Sansome

Time	Average Queue at NB approach (ft)			Intersection Delay (sec)			
	Existing (Sat)	Weekday	Weekend	Weekday Delay	LOS	Weekend Delay	LOS
8:00-9:00	24	51	34	48.1	D	20.7	С
9:00-10:00	46	159	139	47.9	D	26.1	С
10:00-11:00	78	217	198	36.2	D	28.4	С
11:00-12:00	93	199	283	30.7	С	30.8	С
12:00-13:00	98	189	195	29.4	С	24.8	С
13:00-14:00	104	197	174	31.9	С	23.6	C
14:00-15:00	68	96	145	22.5	С	20.66	С
15:00-16:00	73	48	112	18.4	В	23.2	С



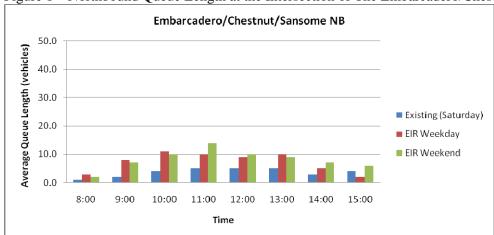


Figure 1 – Northbound Queue Length at the Intersection of The Embarcadero/Chestnut/Sansome

The Embarcadero/Lombard/Battery Streets

The distance between the intersections of The Embarcadero/Lombard/Battery Streets and The Embarcadero/Green Street is approximately 1,470 feet. During weekdays, the longest average hourly queue in the northbound approach would be approximately 1006 feet from 11:00 p.m. to 12:00 p.m. During weekends, the longest average hourly queue in the northbound approach would extend from the intersection of The Embarcadero/Lombard/Battery Street by approximately 1,061 feet, occurring during the same time period from 11:00 p.m. to 12:00 p.m., which quickly recedes after 2:00 p.m. This vehicle queue would not extend to the upstream intersection.

Table 7 - Northbound Queue and Intersection LOS and delay at the Intersection of The Embarcadero/Lombard/Battery

Time	Average Queue at NB approach (ft)			Intersection Delay (sec)			
	Existing (Sat)	Weekday	Weekend	Weekday Delay	LOS	Weekend Delay	LOS
8:00-9:00	34	62	38	44.1	D	22.2	С
9:00-10:00	58	383	152	57.4	Е	35.2	D
10:00-11:00	103	685	785	54.3	D	48.5	D
11:00-12:00	120	1006	1061	53.4	D	50.2	D
12:00-13:00	175	721	1059	50.4	D	48.3	D
13:00-14:00	175	693	1054	51.9	D	48.2	D
14:00-15:00	121	172	615	36.28	D	43.64	D
15:00-16:00	86	49	154	30.7	С	38.3	D



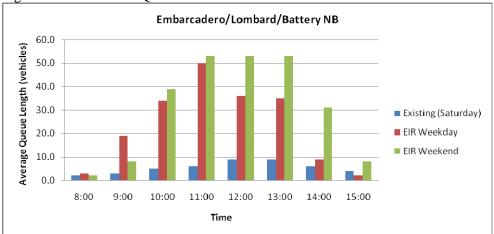


Figure 2 – Northbound Queue at the Intersection of The Embarcadero/Lombard/Battery

Taxi Queuing Area inside the Valley

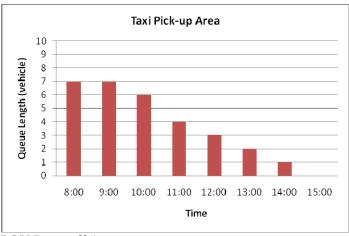
Taxi queuing area is approximately 250 feet, sufficient for 24 taxis queuing (2 taxi queuing lane with 12 taxi queuing spaces per lane). The maximum projected taxi queue would be between 8:00 a.m. to 9:00 a.m. with approximately 147 feet (or 14 vehicles in two lanes). This queue would gradually reduce as time goes on during the day. Thus, the taxi pick-up queuing would not block the bus access point to the bus parking area.

Table 8 – Queue Length at Taxi Queuing Area

Time	Queue Length (ft)	Queue (veh)
8:00-9:00	147	7
9:00-10:00	130	7
10:00-11:00	120	6
11:00-12:00	87	4
12:00-13:00	57	3
13:00-14:00	31	2
14:00-15:00	14	1
15:00-16:00	7	0

Figure 3 – Queue Length at Taxi Queuing Area





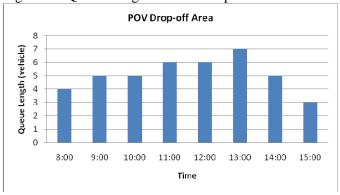
POV Drop-off Area

The POV loading area is longer than the taxi loading area, with approximately 70 feet ahead of the northern pedestrian crosswalk and extends beyond the southern crosswalk in the valley. POV loading area would be sufficient for 34 auto queuing. The distance from the beginning of POV drop-off point to bus parking area access is approximately 490 feet. The longest vehicle queue would be approximately 141 feet between 1:00 p.m. and 2:00 p.m. No vehicles would extend to a point blocking access to the bus parking area.

Table 9 – Queue Length at POV Drop-off Area

Queue Length (ft)	Queue (veh)				
77	4				
102	5				
107	5				
120	6				
116	6				
141	7				
93	5				
66	3				
	77 102 107 120 116 141 93				

Figure 4 – Queue Length at POV Drop-off Area



Queue at Valley Driveway Entry Point





No vehicle queue is anticipated to queue on the "Valley" entry lane out to The Embarcadero.

Exiting Vehicle Queue

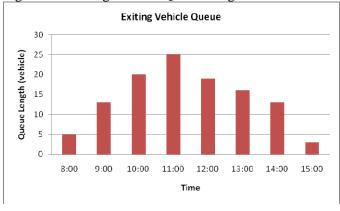
The valley exiting access to bus parking exiting point is approximately 375 feet, and the longest projected exiting queue would be approximately 508 feet between 11:00 a.m. and 12:00 p.m. Thus, the exiting vehicle queuing would block the bus exiting point from bus parking area during this period. Manually traffic control could be required to avoid impacts in the bus parking area.



Table 10 – Exiting Vehicle Queue Length

Time	Queue Length (ft)	Queue (veh)			
8:00-9:00	101	5			
9:00-10:00	253	13			
10:00-11:00	400	20			
11:00-12:00	508	25			
12:00-13:00	384	19			
13:00-14:00	318	16			
14:00-15:00	256	13			
15:00-16:00	59	3.0			

Figure 5 – Exiting Vehicle Queue Length





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8.6 Special Event Information

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AC34 - Potential Overlap between SF Area Special Events and AC34 2012 and AC34 2013 Events

July 2011 Events	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Filmore Street Fair																															
CCSF 4th of July Celebrations: Various Streets																															
SF Triathlon: Treasure Island									Ш	Ш																					
Aids Walk																															
SF Marathon																															
SF Sunday Streets: Great HWY																															\neg
Filmore Farmers Market:Steiner to Fillmore																															
North Beach Farmers Market:Columbus to Lombard																															
Alcatraz Marathon: Marina																															
Critical Mass																															\Box
Up Your Alley Fair: Folsom																															
Giants Games 2011				222	200	20	100	m	200	ii								111	111	7//		200	200	1111							
AC34 2012 - dates in July to be determined																															
AC34 2013				Ш	Ш	Ш	Ш							Ш			Ш	Ш	Ш	Ш	Ш		Ш				Ш	Ш	Ш		
August 2011 Events	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Filmore Farmers Market:Steiner to Fillmore																															ヿ
North Beach Farmers Market:Columbus to Lombard																															
The Big Gay 10 K:Laguna and Marina																															\Box
SF Sunday Streets: Civic Center																															\exists
SF Theater Festival: Fort Mason														1																	
Outside Lands: Golden Gate Park																															\neg
Street Food Festival: Mission District														T																	_
West Coast Music Festival: Fort Mason																															\neg
Tri-CA Alcatraz Triathlon: Various Streets																				*****											\neg
Critical Mass: Variou Streets																										1111					\neg
The Giant Race: Various Streets																															\neg
Giants Games 2011	000	1111	100	000	000	200	200	100	\sim	111													000	1111	100	W			100	W	00
AC34 2012 - dates in August to be determined	~~	~~	~~~	~~~	~~	~~		***	~~~	~~~				1									~~~	~~		~~~		~~	~~	~~~	~~
AC34 2013	Ш	Ш	Ш	Ш						Ш	Ш	Ш				Ш	Ш	Ш					Ш	Ш	Ш	Ш	Ш		Ш	Ш	Ш
September 2011 Events	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24							
Filmore Farmers Market:Steiner to Fillmore	Ť		ıı.	Ť	Ť	Ť		_	Ť			<u> </u>		1							- ·										\dashv
Cal Bears at Candlestick										*:*:*:				1				1													\dashv
North Beach Farmers Market:Columbus to Lombard		-												1																	\dashv
SF Symphony Free Concert : McAllister to Grove														1																	\dashv
SF Sunday Streets: Western Addition																															\dashv
Chocolate Festival: Ghiradelli Square														1																	\dashv
Chinatown Autumn Moon Festival: Chinatown																															\dashv
49er Games: Candlestick Park																															\dashv
Alcatraz Invitational Swim																															\dashv
Cal Bears at AT&T Park			_					H				 	H	† 		 	H	1				 									\dashv
SE Rowing Club Swim: Aquatic Park														1				1	 	 	 		 	 							\dashv
Sausalito Art Festival								H				 	H	† 		 		1				 									\dashv
International Dragon Boat Festival: Treasure Island			*****											1						 	 		 	 							\dashv
Walk to End Alzheimer's: Embarcadero	-		\dashv	-								-	\vdash	+	1	-			-	-	-	-	-						_		\dashv
LovEvolution														1				1	 	 	 		 								\dashv
Giants Games 2011	_	200	w	00					000	200	1111	W	100	100		-	-	1	-	-	-	-	-								\dashv
AC34 2013		1111		000			Ш					1111		\mathbf{n}	ш			1			ш	ш	 								\dashv
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Notes

- 1. Ddoes not include events occuring at the Moscone Center
- 2. SF Area Special Event dates are subject to change
- 3. AC34 2012 Events have not yet been deterermined, however they will occur in July and August
- 4. AC34 2013 Events are tentative and are subject to change

Leaend:

2011 dates of known events occuring in San Francisco 2011 dates of San Francisco Giants home games:AT&T Park 2013 AC 34 tentative event day schedule



Regional Construction Project Schedule

DRAFT 06/29/11 dates are approximate estimates

Time Frame:	Summer & Fall 2012 & 2013		Ju	ly			Au	gust		S	epte	emb	er		Oc	tobe	:	Win	ıter 2	012/S	pring2	2013]	uly				Aug	ust		s	ept	embe	er		Oc	tobe	r
Project	Task/Event	2	9	16	30	6	13	20	27	3	10	17	24	1 8	3 1	15 22	29						1	8	15	22	29	5	12	19	26	2 9	9 1	.6 2	3	30 7	14	21	28
AC 34	Racing days																																						
	Race related activities																																				Ţ	L	
² Van Ness BRT																																							
Central Subway	Construction Period																																						
	Road Closures and lane reductions along Stockton Street-4th Street, from Post St. to Bryant Street.																																						
⁴ CPMC	Construction Period																																						
⁵ Transbay Transit Center	Construction Period																																						
	Periodic road and pedestrian path reductions are anticipated; dates TBD First, Fremont, Beale streets between Mission/Howard will be three lanes Natoma and Minna streets between Beale/Second streets will be one lane Howard Street between First/Second streets will have lane reconfigurations																																						
SFBB	Construction Period 72 hour weekend road closures (exact date TBD)																															otential							
⁷ Doyle Drive	Construction Period																																						
	NB Doyle Dr to SB Park Presidio/HWY 1																																						
	Temporary bypass with one less traffic lane																																						
	Extended weekend closure - none during the AC-34 event																																						
	= Race = Road/Pedestrian Path Closure = Construction = Lane Reduction = No AC Race Related Activities	No 1 2 3 4	Ema Al H Per	il fro Ierce Devy	m Ch ema /ani	harle il to Jain,	s Riv Peter	aspla Albe to the	tas to rt on EIR	Pete 06/15 certifi	er All 5/11 icatio	oert - on dat	SFM te and	TA on	06/	<u>14/11</u> that th					sit Age												of 20	12			-		

- Email from Charles Rivasplatas to Peter Albert SFMTA on 06/14/11
- All Herce email to Peter Albert on 16/15/11
 Per Devyani Jain, due to the EIR certification date and the fact that the BOS will not take action until at least Fall 2011, construction will start during first quarter of 2012 to go on through 2015. Meeting with Monica Pereira on 06/29/11
 - ${\bf 5}\quad {\rm Email\ from\ Joyce\ Oishi\ to\ Monica\ Pereira\ on\ 06/21/11\ -\ Transbay\ Program\ Coordination}$
 - 6 Correspondence between Monica Pereira and Yatman Kwan Caltrans response: I:\Cases\2010\2010.0493E_Americas_Cup\Transportation\Regional Transit Agencies Correspondence\042811
 - 7 Correspondence between Monica Pereira and Yatman Kwan Caltrans response: I:\Cases\2010\2010.0493E Americas Cup\Transportation\Regional Transit Agencies Correspondence\042812
 - 8 Dates are presented in week dates: aka. July 2 = the week of July 2nd

National Park Service

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Golden Gate National Recreation Area GGNRA Fort Mason, Bldg. 201 San Francisco, CA 94123

Golden Gate National Recreation Area
For Immediate Release
June 28, 2010

Press Release

Media Contact: Howard Levitt 415-561-4730, howard_levitt@nps.gov

PLAN AHEAD FOR PARK ACTIVITIES DURING FOURTH OF JULY HOLIDAY AT GOLDEN GATE NATIONAL RECREATION AREA

Golden Gate National Recreation Area, Calif. Golden Gate National Recreation Area expects heavy use of beaches, trails, and historic sites this Fourth of July weekend. There are several special activities offered. The National Park Service would like to pass on these tips for a safe and enjoyable holiday.

Marin Headlands—

Conzelman and East Roads in the Marin Headlands have limited access due to construction.

Project Headlands is progressing, however closures and restrictions continue due to ongoing construction. In the interest of public safety, East Road at Fort Baker will be closed to vehicular and bicycle traffic for the Fourth of July weekend. This closure is subject to change as conditions dictate. Conzelman Road remains closed to vehicles, bicycles and pedestrians from McCullough Road to Field Road. As in previous years, the open portion of Conzelman Road will be strictly controlled to maintain emergency vehicle access and safe conditions.

There are many activities and attractions in the Marin Headlands that do not require the use of Conzelman Road. On July 3, the Nike Missile Site will have an open house from 12:30 until 3:30 PM featuring the two authors of "The Last Missile Site," Stephen A. Haller and John A. Martini. The Point Bonita Lighthouse will be open Saturday through Monday from 12:30 PM until 3:30 PM. On July 4, Battery Townsley, San Francisco's most extensive and most secret World War II military fortification, will be open for public tours from noon until 4:00 PM. Visitors to these areas are encouraged to use the Bunker Road access. On July 4, MUNI 76 will operate throughout the Marin Headlands. Please check www.511.org and follow links for the schedule.

San Francisco-

Ranger programs in the Presidio. On July 4 from 11:00 AM until 3:00 PM, come and learn about the last operational gun of its kind at Battery Chamberlin located on the north end of the Baker Beach parking lot. Another option is a ranger-led walk through the historic Presidio while listening to soldiers' stories from the past. This walk is moderately strenuous, beginning at 2:00PM and ending at 4:00PM. Meet at the Officers

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Club, 50 Moraga Avenue.

Fireworks

The use of personal fireworks is prohibited at Golden Gate National Recreation Area, including at Ocean Beach. There are many reasons for this prohibition including public safety and the negative effects of fireworks on wildlife. The Bay Area is home to many species of birds, and July is nesting season for many of them, including Bank Swallows, Double-Crested Cormorants, Great Blue Herons, and American Avocets. Many fledglings have left the nest yet remain vulnerable to disturbance. Birds may abandon their nests due to illegal fireworks explosions. Park Police and Park Rangers patrolling GGNRA will confiscate, and issue citations for using, illegal fireworks.

Ocean Safety

With sunshine and warm temperatures predicted for the weekend, the water may look tempting. Beware of dangerous rip currents, cold water, and high waves at ocean beaches. Stinson Beach is the park's only designated beach for ocean swimming. Please do not swim at other beaches, including Ocean Beach and Baker Beach. In case of an emergency, call 911 or 415-561-5656.

Beach Fires

Be considerate of neighbors, especially if you use a beach at night. Fires are allowed at Muir Beach and between Lincoln Way and Fulton at Ocean Beach. Remember that beach fires must be smaller than three feet in diameter and extinguished with water, not sand, until it is cold to the touch. Pack out all of your trash when you leave.

Use Public Transportation to the Park

The National Park Service urges visitors to use public transportation to get to the park's many sites. Take MUNI, Golden Gate Transit, SamTrans, or the PresidioGo shuttle to avoid full parking lots (which will fill up early in the day) and to spend more time having fun in the national park. For information on transit options, go to www.511.org and follow links for transit providers. Many transportation agencies will be providing extra buses and rail service.

Glass and Alcohol on the Beaches

For your safety, glass bottles and containers are prohibited on all beaches and will be confiscated. Glass containers are also prohibited on the sidewalks and seawall at Ocean Beach. Consumption of alcohol is not allowed at Ocean Beach, Sutro Baths, and some other park areas. Please practice "Leave No Trace" ethics by packing out what you pack in.

For information on activities in Golden Gate National Recreation Area, visit the park's website: www.nps.gov/goga.

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Golden Gate National Recreation Area Park Headquarters Bldg. 201 Fort Mason San Francisco CA 94123

Golden Gate National Recreation Area NEWS RELEASE

For Immediate Release October 4, 2010

Media Contact: Alexandra Picavet 415-786-8021

Fleet Week "Blue Angels" Traffic Advisory

Fleet Week "Blue Angels" activities usually bring traffic to a standstill in and around the waterfront areas of Golden Gate National Recreation Area (GGNRA). Due to traffic congestion from Fleet Week, parking will be extremely limited on October 9 and 10. It is highly recommended to use public transit (MUNI), bicycle, taxi or carpool when visiting these areas. All parking at Fort Point is reserved on a first-come, first-served basis for people with a valid ADA state placard or license plate.

The areas most affected include **Crissy Field, Fort Point** and **Lands End** (San Francisco), **Conzelman Road** (Marin Headlands), and **East Road** and **Sommerville Road** (Fort Baker). The National Park Service (NPS) Law Enforcement is coordinating with the California Highway Patrol, CalTrans and other law enforcement agencies to protect visitors, manage traffic and parking, and protect the resources during this very popular event.

As in past years, many access roads will be closed to vehicle traffic for visitor safety, and some park areas closed to protect sensitive habitat and historic structures. The closures include Marina Eoulevard and various parking areas along Crissy Field and upper Fort Mason. This year, Conzelman Road from McCullough Road to Field Road will remain closed to all traffic because of ongoing construction as part of Project Headlands. The event closures in San Francisco as well as on the section of Conzelman Road from Alexander Avenue to McCullough Road and Fort Baker roadways generally go into effect approximately one hour before the Blue Angels perform (around 3:00 PM) and last approximately 45-minutes after the end of each air show.

For same day traffic information, please call 5-1-1.

To plan your trip:

San Francisco MUNI: www.sfmuni.com (415) 673-6864

Bay Area-Wide: www.511.org or call 817-1717 or 511 from any area code

East Bay BART: www.bart.gov (510) 465-2278

North Bay Golden Gate Transit: www.goldengate.org (415) 455-2000 Peninsula/South Bay CalTrain: www.caltrain.com (800) 660-4287 Project Headlands- construction updates: www.projectheadlands.gov Doyle Drive construction and traffic updates: www.presidioparkway.org Golden Gate National Recreation Area: www.nps.gov/goga

-NPS-

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SF Municipal Railway

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REVISED OPERATIONS ORDER

SUNDAY STREETS STREET CLOSURE **SUNDAY, MARCH 14, 2010** 10:00AM to 3:00PM

This Order replaces 10-011. Changes: Revised F-line reroute – service extended to Pier 39 switchback; additional Inspector and PCO at Pier 39; revised personnel assignments.

EVENT INFORMATION: There are nine "Sunday Streets" events in 2010. Event routes are open to pedestrians and bicyclists and will be available for recreational activities. Event dates and routes are as follows: March 14 – Embarcadero; April 11 & August 22 - Great Highway; April 18 & May 23 - Bayview; June 20 & July 11 - Mission; September 19 - Western Addition; and October 24 - Central City/Civic Center. Event times and street closures are from 10:00AM to 3:00PM. This event is free to all participants. The number of attendees is not known.

Today's Embarcadero route (a 3.3 mile route) will close streets from Pier 39 to Mariposa & 16th St along the waterfront, via Northbound Embarcadero to the Fisherman's Wharf Triangle Lot (ending at Mason St.).

FARES: Regular fares apply.

OTHER EVENTS: Daylight Saving Time

EXTRA EQUIPMENT: None.

STREET CLOSURE INFORMATION: Northbound Embarcadero between King St and westerly Terminus: Southbound Embarcadero between Powell & Taylor: Northbound King between 3rd & Northbound Embarcadero; 3rd St (northbound lanes only) between King & 4th; Terry Francois between 3rd & Mariposa; Mission Rock between TF & 3rd; China Basin between 3rd & TF; Mission Rock between 3rd & TF; Mission Bay between 3rd & TF; South St. between Illinois & Terry Francois. The closures will be in effect from 10:00AM until 3:00PM.

INTERSECTIONS: Intersections along the closed streets will remain open. Traffic will be controlled by SFPD and DPT personnel.

MAJOR ACTIVITY CENTERS:

Activity Centers will feature dancing, yoga, skating, bicycling and other activities. The locations are as follows: Triangle Lot/Fisherman's Wharf; Pier 39; East Park (Embarcadero at Kearny); Harry Bridges Plaza (main hub, near the Ferry); Justin Herman Plaza, Rincon Park (Cupid's Span); South Beach Park; China Basin; and Pier 52 and Marina.

LINES AFFECTED: (see next section for reroutes)

SC K/T – Traffic; Normal Operation

SC F - Switchback Inbound to Outbound at Pier 39 (with Inspector)

TC 1 - Traffic - Drumm St.

MC 2 - Traffic - Market St: Steuart St.

TC 5 - Traffic - Market St.

TC 6 - Traffic - Market St; Steuart St.

MC 9 - Traffic - Market St.

MC 8X - Traffic - Downtown/Fisherman's Wharf

MC 10 – Traffic - Downtown

MC 12 - Traffic - Downtown

TC 14 - Traffic - Downtown: Steuart St.

TC 21 - Traffic - Market St. Steuart St.

TC 30 - Traffic - 4th & Townsend

TC 31 - Traffic - Market St: Steuart St.

TC 45 - Traffic – 4th & Townsend

TC 38 - Traffic - Downtown

MC 39 - Traffic - Fisherman's Wharf

MC 47 - Traffic - Fisherman's Wharf

MC 71 - Traffic - Market St.

MC 76 - Traffic – 4th & Townsend: Downtown

CC 59 - Traffic - Fisherman's Wharf

CC 60 - Traffic - Fisherman's Wharf

SUNDAY STREETS EMBARCADERO OPERATIONS ORDER-REV - SUNDAY, MARCH 14, 2010 Page 1 of 4

SUNDAY STREETS EMBARCADERO OPERATIONS ORDER-REV - SUNDAY, MARCH 14, 2010 Page 2 of 4

1) REROUTES

F-MARKET/WHARVES: FROM 9:00AM UNTIL FURTHER INSTRUCTIONS
SWITCHBACK INBOUND TO OUTBOUND AT PIER 39 (WITH INSPECTOR).

OPERATIONAL ASSIGNMENTS BEGIN BELOW

DUTY MANAGER: SEE EVENT CONTACT LIST

ALL UNITS: ADD COMMENTS ON LAST PAGE OF THIS ORDER AND FORWARD TO THE SUPERINTENDENT OF SPECIAL EVENTS

STREET SUPERVISION:

1-M-1: 0800HRS - END OF EVENT

Citywide duty; monitor event and respond as needed.

<u>1-T-60/1-T-61 A/B:</u> Traffic and detours will impact service. Monitor lines and adjust service in your districts.

METRO RAIL OPERATIONS:

4-C-55A 0830HRS- END OF EVENT = FERRY/COMMAND POST AS NEEDED

The F-line will switchback IB to OB at Pier 39 beginning at 0900hrs. A PCO and 4-C-56 will be positioned at Pier 39. Work with 4-C-56 to coordinate F line service. Familiarize yourself with the event contact list; you may be required to respond to the Command Post throughout the event to coordinate with other city departments. The CP is located at Pier 1 in the Port offices, Embarcadero Room, and will be active as of 0900hrs. Inform the F operators to operate with caution on the Embarcadero due to event participants on the roadway, and to wait at Pier 39 for Inspector instructions before initiating the switchback. Coordinate service with 4-C-56. Call Sgt Nestor and Martha Cohen on their cell phones not later than 1430hrs to verify event clearance time and ensure route is clear before the F line resumes regular service. Communicate with OCC, and with 4-C-56, working together to put the F line back on schedule after they return to regular route.

4-C-56A 0830HRS - END OF EVENT = PIER 39

A PCO will be positioned at Pier 39. Work with them to maintain clearance for the F cars to switchback safely. Ensure the F line begins switching back IB to OB at 0900hrs at Pier 39. Operators are instructed to wait for your direction before initiating the switchback. Work with 4-C-55A to coordinate service. The line is to switchback from 0900hrs until SFPD re-opens the Embarcadero. 4-C-55A will verify that the event/closure has cleared; work with him to put the line back on schedule.

SUNDAY STREETS EMBARCADERO OPERATIONS ORDER-REV - SUNDAY, MARCH 14, 2010 Page 3 of 4

Contact 4-C-55A, OCC, 1-M-1, Sgt Nestor and Martha Cohen immediately if any circumstances warrant operational changes to this switchback plan.

2) CENTRAL CONTROL SHIFT MANAGER/LEAD DISPATCHER:

Ensure that Central Control Dispatchers work with Inspectors assigned to this Operations Order in making the necessary ALL CALL announcements as required to implement and terminate the F line switchbacks. Coordinate with F line Inspectors and Field units for this event. Contact 4-C-55A, 4-C-56, 1-M-1, Sgt Nestor and Martha Cohen immediately if any circumstances warrant operational changes to this switchback plan.

Send a copy of this Operations Order with Section 3 & 4 completed to the Special Events Superintendent.

3)	CLEARANCES: Reroutes commenced at: = Embarcadero (F, All Clear)
4)	INSPECTOR: or CENTRAL CONTROL () FILL IN THE APPROPRIATE SECTION BELOW () = NO PROBLEMS ENCOUNTERED. () = THE FOLLOWING CHANGES WERE MADE AND/OR RECOMMENDATIONS FOR CHANGES FOR FUTURE EVENTS ARE AS FOLLOWS:
_	
	SUNDAY STREETS EMBARCADERO DEV - SUNDAY: 14 March 2010

SUNDAY STREETS EMBARCADERO OPERATIONS ORDER-REV - SUNDAY, MARCH 14, 2010 Page 4 of 4



INDEPENDENCE DAY FIREWORKS SUNDAY: 04 July 2010

The annual Independence Day Fireworks display will commence at **2130hrs** from the Municipal Pier and from a barge near Pier 39. Entertainment at Pier 39, Aquatic Park, and Ghirardelli Square will commence at 2:00PM. As many as 200,000 people may attend this event.

OPERATIONAL ASSIGNMENTS BEGIN ON THE NEXT PAGE:

ALL PERSONNEL WITH ASSIGNMENTS ON THIS ORDER ARE TO <u>COMPLETE</u>
<u>SECTION 11</u> AND RETURN IT TO THE SUPERINTENDENT OF SPECIAL EVENTS,
WITH ANY COMMENTS CONCERNING THE EFFECTIVENESS OF THEIR
PORTION, AND ANY RECOMMENDATIONS FOR NEXT YEAR'S EVENT.

SUPPLEMENTAL MOTOR COACH SERVICE

SERVICE AREA HOURS
Ferries to Fisherman's Wharf 1400 to 2030hrs
CalTrain to Fisherman's Wharf 1400 to 2030hrs
Van Ness & Market to Van Ness & Chestnut 1400 to 2030hrs

TOTAL SPECIAL COACHES AVAILABLE FOR THE BREAK = 60

SUPPLEMENTAL LRV/REGULAR SERVICE

Ten supplemental two-car trains are scheduled beginning at 1400hrs
Supplemental 108 service
Motor coach substitution on 30 (Potrero) and 49 Lines

The following streets may be closed to traffic as early as 1500hrs, with closures expanding southward throughout the day as ordered by SFPD and DPT:

EMBARCADERO: Bay to Taylor HYDE: Beach to Jefferson JEFFERSON: Embarcadero to Hyde **LEAVENWORTH:** Beach to Jefferson BEACH: Hyde to west of Polk JONES: Beach to Jefferson Beach to Jefferson TAYLOR: Beach to Embarcadero MASON: POLK & LARKIN: North Point to Beach POWELL: Beach to Jefferson North Point to MUNI Pier VAN NESS:

FOURTH OF JULY FIREWORKS OPERATIONS ORDER - SUNDAY, JULY 4, 2010 Page 1 of 11

EXTRA EQUIPMENT: 86 MC and 20 LRV

OTHER EVENTS: Fillmore St. Jazz Festival (Fillmore/Jackson-Eddy);

Stern Grove Concert 2:00PM

SERVICE SCHEDULE: Sunday Schedule.
REROUTE INFORMATION: SEE NOTICE 10-193

SUPPLEMENTAL SERVICE INFORMATION: SEE NOTICE 10-195

COMMUNICATIONS: HIGH-BAND CHANNEL 4

NOTE: Use paper window signs for 'Market St" destination. Electronic signs can be

used as noted in section 2, pg. 9.

DO NOT USE "AQUATIC PARK' DESTINATION SIGNS.

OPERATIONAL ASSIGNMENTS ARE LISTED BELOW

INSPECTORS PRIMARY ASSIGNMENT

1-C-5 1300hrs=CALTRAIN DEPOT: CalTrain is on a Sunday schedule; trains are scheduled to arrive 36 minutes after the hour, every hour, until 1036PM (with an additional arrival at 12:01AM). Confirm these times with the Station Master.

You should receive five pull-out shuttle coaches, (Woods runs 281 -285), You should have paper window signs for 'CalTrain" destinations. Electronic signs can be used as noted in section 2, pg. 9. Give window signs to runs. Bank them on Townsend, nearside 4th, facing east, and load as South Bay trains arrive. Make sure Operators understand the Safety Guidelines for Right-of-Way operation and have re-route Notice 10-193 and Supplemental Service Summary Notice 10-195. Coaches are to run express to Embarcadero & Mission and see 1-C-23. If full, he will have them continue to the wharf; if not, they will be loaded with passengers transferring from the F-line. Tell the operators to deadhead back to you after unloading at the Wharf. Ask the Ferry Inspectors to send you more coaches if yours don't return in time for the next train.

Revenue personnel will be on site to sell transfers from 2:30PM to 9:30PM.

Take an individual pre-count of passengers utilizing shuttles from your location and enter total in Section 9. All shuttles have a 10-hour range and should be used until maximum hours.

Monitor the lines, affected by Wharf area traffic, and have been turned short of their northern terminals. Adjust their schedules as necessary.

Caltrain leaving times are 11:00PM, 11:15PM, 11:30PM, and 12:01AM. Communicate with 1-C-23 at the Ferry and 1-C-26 at Bay & Embarcadero before 11:30PM to make sure they dispatch the CalTrain coaches to the Depot in time for the last train. Remain here until the last coach arrives to meet the last CalTrain.

FOURTH OF JULY FIREWORKS OPERATIONS ORDER - SUNDAY, JULY 4, 2010 Page 2 of 11

SHUTTLE ROUTE INFORMATION:

<u>INBOUND</u>: Via Townsend, L-Embarcadero to Mission and see Inspector. If sent to the wharf, continue on Embarcadero on the F-line tracks to Bay, then L-Bay, R-Kearny and unload. They are to make stops for passengers at any F-line loading island.

<u>OUTBOUND:</u> Deadhead to CalTrain via Kearny, R-Embarcadero into the right-of-way, *leave right-of-way at Mission*, continue on Embarcadero, R-Brannan, L-5th, L-Townsend to 4th and line up behind leading coaches.

1-C-23 1300hrs=EMBARCADERO & MISSION: Stand-by to receive Thirty-five (35) coaches, Kirkland runs 571-585, Woods runs 286-295, Presidio runs 501-505. and Potrero runs 951-955.

PRE-EVENT

All sign, radio, and fare information is located in Sections 2-4. Make sure all shuttle operators have re-route Notice 10-193 and Supplemental Service Summary Notice 10-195. You should have paper window signs for 'CalTrain' destination. Electronic signs can be used as noted in section 2, pg. 9. Make sure runs have correct signs.

Bank coaches on the Embarcadero south of Mission on the F-line tracks. Make sure Operators understand the Safety Guidelines for Right-of-Way operation. We will be loading coaches on Don Chee Way, at the F-line stop. Communicate with 1-C-25 at that location and send him coaches as needed. Help coaches make the left turn from Embarcadero on to Mission, then R-Steuart, and R-Don Chee Way.

Check for intending patrons standing by the Ferry Building, and send coaches there if needed.

Five shuttles will be working between the CalTrain Depot and the Ferry. Get the coach numbers from 1-C-5. If these coaches arrive full, send them up to the Wharf, if not, send them to 1-C-25 for more passengers. They are to deadhead back to CalTrain to meet the next train. If 1-C-5 needs additional coaches, the unit should call you. Help the unit make sure CalTrain has sufficient coaches to meet trains.

POST-EVENT

<u>1-C-23</u>: Post-event coaches should unload at the F-line stop across from the Ferry Building. Move to that location and assist. Tell operators to exit the right-of-way at Mission and deadhead back to Bay. Instruct all <u>shuttle</u> coaches to return for additional trips. All shuttles have a 10-hour range and should be used until maximum hours.

CalTrain patrons should have been put on dedicated coaches at Bay. If there are CalTrain passengers on other coaches, have them get off at the Ferry. When you get a bus load of people, pull a coach and send it to 1-C-5, with orders to deadhead back to Bay after unloading at the Depot. The last bus to

FOURTH OF JULY FIREWORKS OPERATIONS ORDER – SUNDAY, JULY 4, 2010 Page 3 of 11

Caltrain should leave by 11:40PM in order to meet the last train leaving at 12:01AM

1-C-25 1300hrs=DON CHEE WAY: Passengers will be getting off the F-line cars on Steuart St and walking over to the stop on Don Chee Way.

NOTE: ALL MOTOR COACHES NEAR EMBARCADERO & DON CHEE MUST USE CAUTION - F LINE CARS WILL BE ON THE RIGHT-OF-WAY.

ACCESSIBLE PASSENGERS MAY BE TRANSFERING FROM THE F CAR ON THE OUTBOUND PLATFORM TO THE MOTOR COACHES LOADING ON THE INBOUND PLATFORM.

Make sure all shuttle operators have re-route Notice 10-193 and Supplemental Service Summary Notice 10-195. You should have paper window signs for 'CalTrain" destinations. Electronic signs can be used as noted in section 2, pg. 9. Make sure runs have correct signs. Set up a system with 1-C-23 at Mission to send you coaches. Load coaches at the F-line stop on Don Chee Way and send them left on to the Embarcadero and into the right-of-way. Standing loads are not required; however, strive for a short headway so the coaches return in a timely manner. Revenue personnel will be on site to sell transfers from 2:30PM to 9:30PM. Transit Fare Inspectors will be on site.

Communicate with Inspectors at Embarcadero & Bay and relay run and coach numbers as coaches are dispatched. Instruct operators to deadhead back to 1-C-23 (Embarcadero & Mission).

SHUTTLE ROUTE INFORMATION:

<u>INBOUND</u>: From Don Chee Way, L-Embarcadero on the F-line tracks to Bay, then L-Bay and see Inspector.

<u>OUTBOUND:</u> Deadhead to the Ferry via Bay, R-Kearny, R-Embarcadero into the right-of-way, *leave right-of-way at Mission*, continue on Embarcadero, R-Howard, L-Spear, L-Folsom, L-Embarcadero and line up behind leading coaches.

Pre-event service has been advertised as from 2:00PM – 8:30PM. Call 1-C-26 or 28 as coaches make their last scheduled trips. **Dispatch last coach at 2030hrs (inbound).**

Take an individual pre-count of passengers utilizing shuttles from your location and enter total in Section 9.

POST-EVENT

<u>1-C-25</u>: At 2030hrs, move to Embarcadero & Bay and help with post-event loading. You should have paper window signs for 'CalTrain" destinations. Electronic signs can be used as noted in section 2, pg. 9. Make sure runs have correct signs.

FOURTH OF JULY FIREWORKS OPERATIONS ORDER - SUNDAY, JULY 4, 2010 Page 4 of 11

1-C-26 130hrs= BAY & EMBARCADERO: Work with Police to keep the triangle of Bay, Kearny, and Embarcadero clear for the coaches. Extra service to and from your location is being provided by motor coaches from Kirkland and Woods. Make sure all shuttle operators have re-route Notice10-193 and Supplemental Service Summary Notice10-195. You should have paper window signs for 'CalTrain" destinations. Electronic signs can be used as noted in section 2, pg. 9. Make sure runs have correct signs. Communicate with 1-C-23 at the Ferry to keep track of the coaches. After unloading, have the operators immediately dead head (DH) back to the Ferry for another trip.

PRE-EVENT

1-C-26 SERVICE ROUTE: From the Ferry via Embarcadero on the F-line tracks to Bay, then L-Bay and see Inspector.

<u>DEADHEAD ROUTE</u>: Via Bay, R-Kearny, R-Embarcadero via the F-line right-of-way, *leave right-of-way at Mission*, continue on Embarcadero, R-Howard, L-Spear, L-Folsom, L-Embarcadero to Mission and line up behind leading coaches.

Pre-event service has been advertised as from 2:00PM – 8:30PM. Inspector 1-C-23 will call you as coaches make their last trips. Bank them on the northbound trackway, on Bay, and on Kearny for post-event loading.

POST-EVENT

Load on Embarcadero in the right-hand traffic lane. 1-C-25 will be coming from the Ferry to assist. Try to load two coaches at a time. Patrons who haven't purchased a round-trip fare special transfer (see below) need to pay regular fare. Have operators keep the rear door closed. One Inspector should monitor the banked coaches on the right-of-way and on Bay to make sure the coaches are moving up. You should have paper window signs for 'CalTrain' destinations. Electronic signs can be used as noted in section 2, pg. 9. Make sure runs have correct signs.

Park two dedicated CalTrain coaches away from the Ferry coaches, either in front of the first coach to be loaded, or on the right-of-way. One Inspector should direct Caltrain patrons to these coaches, and crush load. Tell operators to deadhead back immediately upon leaving the station. Pull other coaches from your queue when CalTrain passengers start to accumulate.

Last CalTrain is at 12:01AM, so be sure to get their passengers boarded by 11:20PM – 11:30PM.

Take an individual pre-count of passengers utilizing shuttles from your location and enter total in Section 9.

Tell all shuttle coaches to deadhead back for additional trips. All shuttles have a 10-hour range and should be used until maximum hours.

Stay until crowds are dispersed.

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1-C-45 1300hrs=VAN NESS & MARKET: *Stand-by* to receive twenty coaches (20), Flynn runs 761-780. Load on Van Ness by the Rite-aid.

PRE-EVENT

All sign, radio, and fare information is located in Sections 2-4. Make sure all shuttle operators have re-route Notice 10-193 and Supplemental Service Summary Notice10-195. Electronic signs can be used as noted in section 2, pg. 9.

DO NOT USE "AQUATIC PARK' DESTINATION SIGNS.

Make sure runs have correct signs.

<u>SERVICE ROUTE VAN NESS</u>: From Van Ness & Market via Van Ness, making all 47-line stops, to zone far side Chestnut and unload.

<u>DEADHEAD ROUTE</u>: From Van Ness via R-Francisco, R-Polk, cross Market to 10th, R-Mission, R-South Van Ness, cross Market to load.

Dispatch coaches as loaded. Standing loads are not required unless returning coaches are late and you are running short of coaches. Communicate with 1-C-41 at Van Ness & Francisco about trip times and coach numbers.

Take an individual pre-count of passengers utilizing shuttles from your location and enter total in Section 9.

POST-EVENT

- **1-C-45:** Dispatch last shuttle at 2030hrs and move to Polk & Francisco to help with post-event loading. Electronic signs can be used as noted in section 2, pg. 8. Make sure runs have correct signs.
- **1-C-7:** Dispatch last shuttle at 2030hrs. Move to zone in front of 25 Van Ness to unload post-event coaches and deadhead them back to Francisco.

<u>DEADHEAD ROUTE</u>: From Van Ness & Market via R-Market, R-Franklin, R-Greenwich, L-Polk, L-Chestnut and line up behind leading coaches. Instruct all *shuttle* coaches to return for additional trips.

DO NOT USE "AQUATIC PARK' DESTINATION SIGNS.

All shuttles have a ten-hour range and should be used until maximum hours. Communicate with 1-C-41 and find out which is his last shuttle. Stay until that coach arrives.

1-C-41 1330hrs= VAN NESS & CHESTNUT: SFPD has towed Polk and

1-C-49 Francisco for the coaches. If cars are parked illegally, call Central Control to arrange for tow trucks. Extra service to and from Van Ness & Chestnut is

FOURTH OF JULY FIREWORKS OPERATIONS ORDER – SUNDAY, JULY 4, 2010 Page 6 of 11

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being provided by motor coaches from Flynn. Make sure all shuttle operators have re-route Notice 10-0193 and Supplemental Service Summary Notice10-195. Electronic signs can be used as noted in section 2, pg. 9. Make sure runs have correct signs.

Communicate with 1-C-45 at Van Ness & Market to keep track of the coaches. After unloading, ensure that operators immediately **DH** back to Van Ness & Market and line up behind leading coaches for another trip.

<u>SERVICE ROUTE</u>: From Van Ness & Market via Van Ness, making all 47-line stops, to zone far side Chestnut and unload.

<u>DEADHEAD ROUTE</u>: From Van Ness via R-Francisco, R-Polk, cross Market to 10th, R-Mission, R-South Van Ness, cross Market to loading area.

The last trip for the extra Van Ness & Chestnut shuttle coaches should be made at 2030hrs. Maintain contact with Inspector assigned to 1-C-45 at Van Ness & Market. As coaches make their last scheduled trips, bank them on Chestnut, Van Ness, and Francisco for post-event loading.

POST-EVENT

Move to Polk, far side Francisco. Bring 2 coaches at a time around the corner from Francisco to Polk and load. 1-C-45 will be coming from Market to assist. One Inspector should circle the block to make sure coaches are moving up. Electronic signs can be used as noted in section 2, pg. 9. Make sure runs have correct signs.

<u>SERVICE ROUTE</u>: From Polk & Francisco via Polk, R-Hayes, L-Van Ness to zone nearside Oak and unload.

<u>DEADHEAD ROUTE</u>: From Van Ness & Market via R-Market, R-Franklin.

R-Greenwich, L-Polk, L-Chestnut and line up behind leading coaches.

Regular 47-line coaches will be terminating at Van Ness and Francisco on the west side of the street. Help guide the wharf patrons to the shuttle coaches rather than the line coaches. **Instruct all** <u>shuttle</u> coaches to return for additional trips. All shuttles have a 10-hour range and should be used until maximum hours.

Take an individual pre-count of passengers utilizing shuttles from your location and enter total in Section 9. If there is passenger demand, some of the extra Van Ness & Chestnut shuttle coaches can be assigned to the 49-VAN NESS or 30-STOCKTON runs. See Section 2 for destination sign numbers. Tell 1-C-7 when you are sending your last coach.

1-T-68 1900hrs=MARINA GREEN AREA: People have traditionally used the area of the Marina Green to watch the fireworks. Although the SFPD will try to keep the area clear, crowds and traffic will persist. Note that the 22 line is motorized for the Fillmore Jazz Festival: monitor the 22 & 30-line terminals

FOURTH OF JULY FIREWORKS OPERATIONS ORDER – SUNDAY, JULY 4, 2010 Page 7 of 11

and ensure the coaches are not impeded. The 22-line can be switched back at Union: the 30-line can turn at Broderick & Francisco.

MRO / CABLE CAR INSPECTORS

8-T-54 1600hrs=BEACH & HYDE: Monitor traffic and pedestrian flow at Aquatic Park. When it becomes too dense for the cars to operate safely, send them down to Powell and have them come back outbound on the Mason line. Go to Powell & Washington after the last car leaves Beach & Hyde, and work the switch so they can get onto the Mason line.

Work with 8-T-43 to manage the line. Return to Beach & Hyde after the break of the event (9:50PM) and when the area is clear enough, get the Hyde cars back on their line and on time

8-T-43 1500hrs=BAY & TAYLOR TERMINAL: Heavy travel is expected in the northern waterfront both pre-event and post-event. Beginning at 1500hrs, bank five (5) cars at Beach and Hyde and the rest of the 60-line cars will be re-routed out the 59-line. Cars should not sit at the terminal lest they become blocked in. Give them headways from Powell & Market.

Attempt to keep the cars running. Work with SFPD and PCO's to keep the turntable area clear of pedestrians. The fireworks are scheduled for 9:30PM. Have at least 4 cars banked at Bay & Taylor for the break of the event, approximately 9:50PM. Communicate with 8-T-54 and send the Hyde cars back to him when Beach & Hyde is clear.

4-C-30B 1700hrs=EMBARCADERO STATION: Ten extra 2-car trains
(Fireworks runs 971-980) have been scheduled beginning at 1330hrs. Most people will disembark at the Embarcadero and board a motor coach shuttle at the Ferry to get to the wharf area. Motor coaches are also scheduled for 4th & Townsend for fireworks-bound CalTrain patrons.

Fireworks are scheduled for 9:30PM. Work with the CCO and 4-C-53 to have the extra cars banked at 6th St and available for OB service from Embarcadero by 2200hrs.

4-C-55

1300hrs=FERRY TERMINAL: Begin switching the F-line IB to OB at the Ferry beginning at 1400hrs or whenever the motor coach shuttles begin arriving. They will be using the right-of-way to transport people to the wharf activities. Provide headways for your cars and have the operators take all their recovery at Castro. Make sure all F cars have re-route Notice 10-195 and Supplemental Service Summary Notice10-195. Street Operations Inspectors will route the Fireworks shuttle coaches through Don Chee Way to pick up F-line passengers. Cars should stop on Steuart, near side Don Chee Way, and unload passengers. Passengers with accessibility needs may continue on the car while it makes the switchback loop and disembark on the outbound platform on Don Chee).Cars then continue on Steuart and turn on

FOURTH OF JULY FIREWORKS OPERATIONS ORDER - SUNDAY, JULY 4, 2010 Page 8 of 11

Mission to get back outbound. Help unload cars on Steuart and show passengers where to board the motor coach. Cars turning off the Embarcadero on to Don Chee Way need to watch for motor coaches on the right-of-way.

4-C-53 1400hrs=4TH **& KING**: Ten extra 2-car trains (Fireworks runs 971-980) will be operating today to supplement service for the fireworks. Work with the West Portal and Embarcadero Inspectors to headway these cars. CalTrain is on a Sunday schedule with arrivals at 36 minutes past the hour until 10:36PM (with one additional arrival at 12:01 AM). Attempt to bank some cars for these arrivals.

> Post-event, CalTrain will send trains southbound at 11:00PM, 11:15PM, 11:30PM with a last train at 12:01AM. Communicate with the Station Master and 1-C-5 to ensure all the cars and coaches carrying CalTrain passengers arrive for the last train.

SERVICE CHANGES AND ADDITIONAL INSTRUCTIONS

RE-ROUTES: (See Notice 10-193 for all reroutes)

LINE	RR START	RR END
F 8X		
19 30(Pres)TC		
30(Pres)TC 30 (Pot) MC 39		
47		
49(MC) 60		

LINE & DESTINATION SIGNS:

The following Line & Destination Signs can be used pre and post-event:

Chestnut/ Van Ness (9913)Shuttle (9914) Embarcadero (9912)Market (9918)

Paper Window Signs for "CalTrain" will be provided to the Inspectors for the fireworks runs. DO NOT USE 'AQUATIC PARK" DESTINATION SIGNS.

- RADIO PROGRAMMING: All shuttle coaches are to programs their radios as "584" plus run number.
- FARES: Regular fares apply. See Revenue Bulletin #10-021; revenue personnel will be selling transfers at CalTrain and the Ferry. Passengers can buy a round-trip fare at \$4.00, which is a full-length

FOURTH OF JULY FIREWORKS OPERATIONS ORDER - SUNDAY, JULY 4, 2010 Page 9 of 11

vellow 'I' transfer.

The following runs will be available for both Pre & Post Fireworks service:

FLYNN Runs 761 - 780 = Van Ness & Market via Van Ness **KIRKLAND** Runs 571 - 585 = Ferry Building **PRESIDIO** Runs 501 - 505 = Ferry Building WOODS Runs 281 - 285 = CalTrain Runs 286 - 295 = Ferry Building Runs 951 - 955 = Ferry Building **POTRERO** Runs 971 - 980 = SFC to CALTRAIN **GREEN**

- 6) CALTRAIN ARRIVALS / CALTRAIN DEPARTURES: Sunday schedule has trains arriving at 36 minutes after the hour until 10:36 PM (with one additional arrival at 12:06AM). Extra post-event trains have been added and will depart at 11:00PM, 11:15PM, 11:30PM and 12:01AM.
- SFPD COMMAND POST: Will be mobile and located at Taylor & Jefferson: it will open at 1700hrs.
- **SHOP TRUCKS:** Diesel maintenance shop trucks will be stationed at Market & Van Ness and at the Ferry, pre-event, then at Polk & Francisco and Embarcadero & Bay, post-event.

")	PASSENGER AND TRIP COUNTS:	
	PASSENGER PRE-COUNT: From CalTrain	
	From the Ferry	
	From Van Ness & Market	

TOTAL PASSENGER PRE-COUNT =	

TOTAL PASSENGER PRE-COUNT -
COACHES DISPATCHED: From Polk From Embarcadero
POST-FIREWORKS TRIPS :
FIREWORKS OVER AT: FINAL LOADING COMPLETED AT:

10) CENTRAL CONTROL SHIFT MANAGER /LEAD DISPATCHER:

FOURTH OF JULY FIREWORKS OPERATIONS ORDER - SUNDAY, JULY 4, 2010 Page 10 of 11

<u>Ensure</u> that all Central Control Dispatchers are aware of the extra service being provided, the special routes and re-routes that will be employed, and that they assist the Inspectors assigned to this Operations Order in making adjustments, "ALL CALL" announcements and otherwise help provide a smooth operation. There is no assigned MRO unit at West Portal; coordinate any switchbacks with designated MRO unit.

Send a copy of this Operations Order with Sections 9 & 11 completed to the Special Events Superintendent.

11) INSPECTOR: or CENTRAL CONTROL () FILL IN THE APPROPRIATE SECTION BELOW () =NO PROBLEMS ENCOUNTERED. () =THE FOLLOWING CHANGES WERE MADE AND/OR RECOMMENDATIONS FOR CHANGES FOR NEXT YEARS EVENT ARE AS FOLLOWS:

4TH OF JULY FIREWORKS = SUNDAY: 04 JULY 2010

FOURTH OF JULY FIREWORKS OPERATIONS ORDER – SUNDAY, JULY 4, 2010 Page 11 of 11



U.S.NAVY FLEET WEEK SATURDAY-SUNDAY, OCTOBER 9-10, 2010

Weekend events for the U.S. Navy Fleet Week begin Saturday with a Parade of Ships at 1000hrs and an Air Show from 1300hrs to 1600hrs. The Air Show repeats on Sunday. Ships will be docked at various piers and are available for visits Sunday-Monday, 0900hrs to 1500hrs. Over 300,000 are expected each weekend day. Supplemental service will be added to the 47-Van Ness and F-Market both days.

NOTE: THIS IS A MULTI DAY OPERATIONS ORDER

OPERATIONAL ASSIGNMENTS ARE AS FOLLOWS:

ALL PERSONNEL WITH ASSIGNMENTS ON THIS OPERATIONS ORDER ARE TO <u>COMPLETE SECTION 4</u>, AND RETURN IT TO THE SUPERINTENDENT OF SPECIAL EVENTS, WITH ANY COMMENTS CONCERNING THE EFFECTIVENESS OF THEIR PORTION, AND ANY RECOMMENDATIONS FOR NEXT YEAR'S EVENT.

SERVICE IMPACT: On both days there will be extreme traffic congestion in and around the northern waterfront from mid-morning until early evening. The Italian Heritage Parade is on Sunday beginning at 1230hrs.

<u>LINES AFFECTED</u>: All lines serving the Embarcadero and Northern Waterfront will be affected by heavy traffic.

EXTRA EQUIPMENT: Kirkland = 6 for 47 Supplemental Service, each day Woods = 4 for F Supplemental Service, each day

OTHER EVENTS:

Saturday: J Line Construction.

Sunday: Football (Candlestick, 5:20PM), Italian Heritage Parade, Burning Man Decompression (Dog Patch Area), J Line Construction, Ten Ten Parade.

EVENT COMMUNICATIONS: HIGH-BAND CHANNEL 4.

INSPECTOR PRIMARY ASSIGNMENT

1-T-52 0700hrs=POWELL & BEACH: Monitor Powell & Beach for the six extra 47-line line coaches pulling out of Kirkland. The first coach is scheduled to arrive at 0728hrs, the last at 1059hrs.

Check the North Point/Van Ness loop. Traffic congestion and pedestrian traffic in this area will be heavy. In the past we have been able to maintain our operation in the loop. Ask for assistance from SFPD and PCO's. If unable to maintain operation in the loop, instruct Potrero 30 & 49-line operators to re-route From NB Van Ness to Chestnut, and use the short loop at Francisco.

Be aware of the Sunday reroutes for the Italian Heritage Parade. Stay at North Point for most of the day. If the supplemental 47-line coaches are not able to use North Point due to gridlock, have them turn short, making a loop around Galileo.

The Air Show will break at 1600hrs. Bank the extra 47-line coaches for the break to clear the area quickly. If there is a big crowd, load them like football. Coaches should continue to serve the wharf area until their scheduled pull in time.

- 1-C-7

 0900hrs=VAN NESS & MARKET: Kirkland will supply six extra
 47-line runs to handle the heavy loads on the waterfront. In the morning, if
 they are coming from CalTrain with very few people, you can turn them short
 at Van Ness & Market. When they arrive in the afternoon after the air show,
 and everyone gets off at Market, switch them at your location. You will have
 to readjust their headways and give them new leaving times. Communicate
 with 1-T-52 about any adjustments. These coaches may be assigned to
 other lines or banked for the break of the Air Show.
- 1-C-2 0900hrs=UNION & COLUMBUS: Note that the North Point loop may become impassable this weekend, as well as North Point itself. If informed by 1-T-52 or Central Control that the 30-line needs to re-route, work with 1-T-52 to switch them to avoid gridlock. Be aware of the Sunday 30/45 line re-routes due to the Italian Heritage Parade.
- 1-T-61 0800hrs=4TH & TOWNSEND: The 47-line will be heavily utilized this weekend, and six runs have been added. Check the terminal at 0800hrs and make sure the first one arrived. Be aware of the Sunday 47 line reroute and relief point change due to the Italian Heritage Parade. Monitor the 47-line throughout your shift.
- **1-C-1 0900hrs=TRANSBAY TERMINAL**: Check the 108-line periodically for schedule adherence. Traffic to TI will be very heavy.

1-T-66	place them in the 22- our turn. Order tows a If unable to maintain ousing EPU. Help then Monitor the Marina G assist you with traffic coaches for shuttles.	ine turnaround to dis as needed. clearance, have 22-lin n with this maneuver. reen area. Police Offi	4) INSPEC	CTOR: FILL IN TH NO PROBLE THE FOLLOY DATIONS FOR CH	MS ENCO	OPRIATI DUNTERE ANGES W	E SECTIC D. /ERE MAD	ON BELC DE AND/O	OR .) S:		
4-C-55	0730hrs=BEACH Woods to supplement Beach & Jones. Meet according to what you Beach, and turn cars switching at Pier 39 d turn short of Jeffersor	t service on the F-line each one there and need. Check the cro at Pier 39 if necessal ue to the Italian Herit	e. They are sched give them orders bwding along Jeffe ry. (On Sunday, thage Parade).The	uled to be at for the day erson and ey will be coaches can								
OTHER	R CHANGES, COM	MENTS, ASSIGN	NMENTS									
4) CEN	NTDAL CONTDOL	CUIET MANACE	D/LEAD DICE	ATCHED.		·						 _
	NTRAL CONTROL various Inspector assig											
with Insp	pectors to maintain servi	ce. Have Inspectors t										_
	copy of this Order, with S		eted to the Superi	ntendent of								
Special I												
2) EYI	TRA SERVICE: Fou	r outra matar accab	una Maada: (SAT	T-074 075 077								 _
279; SUI	N = 274, 275, 276, 292)	have been added to	the F-line and will	supplement								
	rom 0730-2100hrs. Six 6 5, 557, 559) will supplem			JN=553, 554,								 _
333, 330	i, 337, 339) will supplett	ent the 47-line nom	7730-20001115.									 _
3) CLE	EARANCES:	Re-route began	Concluded	Not used								
· —	ILLMORE	-										
	TOCKTON											
47-V	AN NESS											

49-MISSION/VAN NESS

F-MARKET



NEW YEAR'S EVE FESTIVITIES EMBARCADERO - CASTRO – BROADWAY UNION STREET FRIDAY, DECEMBER 31, 2010

Various celebrations of the New Year will take place this evening in the Castro, North Beach, Cow Hollow, and South of Market areas. A free, City-sponsored event with fireworks will occur on the Embarcadero south of the Ferry Building.

EXTRA LATE NIGHT SERVICE:

- 1. LRV Shuttles between West Portal and Caltrain from approximately 8:00PM until 2:15AM; between West Portal and Embarcadero until 4:02AM, outbound.
- Extra OWL service on Lines TC 5 TC 14 TC 22 TC 24 MC 38 MC 90 -MC 91 - MC L - MC N, reducing headways from 30 to 15 minutes. One additional coach on Line MC 108

COMMUNICATIONS: METRO: HB Channel 1

TC: HB Channel 3
MC: HB Channel 4
CABLE CAR: HB Channel 2

EXTRA EQUIPMENT: FLY=3; GRN=20; KIRK=7; POT=8; PRE=2; WDS=14

MC SUBSTITUTION: F-MARKET NIGHT RUNS

FARE, EXTRA SERVICE & ROUTE INFORMATION: NOTICE 10-420.

OTHER EVENTS: Fireworks – 12:00 Midnight to 12:15AM; Events at Bill Graham Auditorium and City Hall.

NEW YEAR'S EVE OPERATIONS ORDER 2010 PAGE 1 OF 16

FARES: Free fares from 2000Hrs Friday, December 31, 2010 until 0600Hrs Saturday, January 1, 2011 (including Cable Cars).

POWER CONTROL: Feeder D-26 (Embarcadero) de-energize at 8:00pm. OCC Clearance Permit will be provided to 1-T-91.

BART: Station "Skip Stop" Operation Plan:

Beginning at 8:00PM, trains going into SF from Pittsburgh/Baypoint and Richmond will not stop at Embarcadero; however, those trains will make all other stops. Passengers should exit at Montgomery Station for the Fireworks Show. After the fireworks end at approx. 12:20AM, use Montgomery Station for Pittsburg/Bay Point and Richmond trains; those trains will not stop at Embarcadero Station.

Beginning at 8:00PM, trains going into SF from Dublin/Pleasanton and Fremont will not stop at Montgomery Station; however, these trains will make all other stops. Passengers should exit at Embarcadero Station for the Fireworks Show. After the fireworks end at approx. 12:20AM, use Embarcadero Station for Dublin/Pleasanton and Fremont; those trains will not stop at Montgomery Station.

From 8:00PM until 12:20AM, trains going into SF from Millbrae, SFO and Daly City will stop at all SF stations. After 12:20AM, these trains will stop at all SF stations; however boarding at Montgomery Station is preferred to help ease overcrowding.

BART will close some of the station entries/exits at these stations.

Last trains from Embarcadero: To Dublin/Pleasanton at 3:16AM; To
Pittsburgh/Bay Point at 3:26AM; To Millbrae at 3:32AM; TO SFO at 4:02AM
(Note: Last OB LRV from Embarcadero at 4:02AM).

Last trains from Montgomery: To Dublin/Pleasanton at 3:15AM; To Pittsburgh/Baypoint at 3:24AM: To Millbrae at 3:33AM: To SFO at 4:04AM.

CALTRAIN: Southbound trips at 7:15PM, 8:15PM, 9:15PM, 10:15PM, 12:01AM, 12:45AM, 1:15AM, 1:45AM and 2:15AM.

SUMMARY PERSONNEL ASSIGNMENTS: OCC/MRO/Street Operations/Station Operations/Embarcadero Command/POP/Security.

Most Market and Mission Street surface service will turn inbound to outbound at 4th Street as traffic demands

NEW YEAR'S EVE OPERATIONS ORDER 2010 PAGE 2 OF 16

ACTUAL OR CONTINGENCY RE-ROUTES AND/OR SWITCHBACKS may be

required for the following lines: (See Summary of Re-routes on last pages)

SC F-MARKET: motor coach substitution for night runs; contingency reroute

TC 1-CALIFORNIA: contingency reroute MC 2-CLEMENT: contingency reroute

TC 5 FULTON: additional owl service (15 min headway), contingency reroute

TC 6-PARNASSUS: contingency reroute

MC 8X-BAYSHORE EXPRESS: contingency reroute

MC 9-SAN BRUNO - contingency reroute

MC 10-TOWNSEND: contingency reroute

MC 12-FOLSOM/PACIFIC: contingency reroute

TC 14-MISSION: additional owl service (15 min headway); contingency reroute

TC 21-HAYES: contingency reroute

TC 22 FILLMORE: additional owl service (15 min headway)

TC 24-DIVISADERO: additional owl service (15 min headway); contingency reroute

TC 31-BALBOA: contingency reroute MC 35-EUREKA: contingency reroute

MC 38-GEARY: additional owl service (15 min headway); contingency reroute

TC 45-UNION: contingency reroute

CC 61-CALIFORNIA: contingency switchback

MC 71-HAIGHT-NORIEGA: contingency reroute

MC 90-OWL: additional service (15 min headway)

MC 91-OWL: additional service (15 min headway)

MC 108-TREASURE ISLAND: one additional run

MC L-OWL: additional service (15 min headway); contingency reroute MC N-OWL: additional service (15 min headway); contingency reroute

SC METRO SHUTTLE: 10-two car trains - West Portal to Caltrain until 2:15AM, WP to

Embarcadero, SO until last OB LRV at Embarcadero at 4:02AM.

PRIMARY ASSIGNMENTS INSPECTOR

ALL PERSONNEL WITH ASSIGNMENTS ON THIS OPERATIONS ORDER ARE TO COMPLETE SECTION T, AND RETURN IT TO THE SUPERINTENDENT OF SPECIAL EVENTS, WITH ANY REMARKS CONCERNING THE EFFECTIVENESS OF THEIR PORTION, AND ANY RECOMMENDATIONS FOR NEXT YEAR'S EVENT.

EMBARCADERO

EVENT INFORMATION: The City-sponsored civic event consists of fireworks set off from two barges in the Bay between Mission and Howard at midnight, for a 15-minute display. No other activities in the vicinity are scheduled this year. Additional events will take place at Bill Graham Auditorium and at City Hall. Variable Message Signs will be displayed on the Embarcadero advising motorists to expect delays from 11:00PM to 1:00AM.

NEW YEAR'S EVE OPERATIONS ORDER 2010 PAGE 3 OF 16

1-T-91 1900hrs=MARKET & STEUART:

When you come on duty, obtain the OCC Clearance Permit for the D-26 Feeder kill from your office: you will need the permit number in contacting Central Control. The SFPD's Embarcadero Command Post is located in Embarcadero #4 on the promenade. Introduce yourself to the Captain McEachern and tell him you are the event Lead Inspector and in charge of MUNI's Lower Market Street Operations. You will be working with 4-M-6 who will be in the Command Post, and exchanging information throughout the evening.

Work with the MRO units to maintain F-line service on the Embarcadero as long as possible. All night runs should have pulled out with motor coaches. The last streetcar through the Steuart Loop is Run 174 at 7:45pm. 4-C-55 must switchback Run 176 at Don Chee on its IB time of 7:30pm before the feeder is de-energized. When both cars pass, call the Central Control Manager and tell him you are ready to have Power Control open Feeder D-26. He will give you an identification number to use when you talk to Power Control. When the feeder has been de-energized, call Martha Cohen, the event manager, cell 987-4059, and inform her. The Event Producers know that we need the power back before 0400hrs. Call Central to re-energize D-26 before you go off duty, and then call Martha Cohen, 987-4059, when power has been restored.

You can begin the re-routes for the F motor coaches whenever the Embarcadero starts getting crowded, or if PD are closing the street. Familiarize yourself with the BART Station Switching Plan on pg. 2 of this Order regarding changes that will affect Embarcadero and Montgomery stations.

Make sure all F-line motor coaches have the re-route Notice and route sheet. turn off the Embarcadero outbound at Broadway, and know to run in the track lane and make all regular stops on the Embarcadero. When the re-route begins, check in with the PCO at Market & Sutter and make sure they are helping the F motor coaches eastbound on Market make the left to northbound Sansome. Advise 4-M-6 at the Command Post if there is any problem with this.

The following lines will start contingency switchbacks at 4th & Market by 10:00pm or as conditions require: 5, 6, 21 & 31; and the 14 from Misison & 3rd to Market to 4th to Mission. Note: The overhead wires on 1st St. between Mission & Howard can be used as an alternate switchback plan for the Market St. trollevs if needed: 1st to Howard to 3rd).

NEW YEAR'S EVE OPERATIONS ORDER 2010 PAGE 4 OF 16

Go to 4th St and coordinate this operation with the team of Inspectors stationed at Market & 4th IB (1-C-40), Mission & 3rd (1-C-41), Market & 3rd (1-C-42), and Market & 4th OB (1C43). All coaches should take their layover at the outer terminals. The key areas of concern are:

- * Inspector at Market & 4th IB will have to change poles of inbound 21 & 31-lines to curbside wires in order to use the switch to turn on to 4th St (the 5 & 6-lines will be on the curbside wires);
- * The Inspector at Mission & 3rd needs to stand at the switch on Mission between 3rd & 4th and help coaches get on to the 3rd St wires and make the left turn against oncoming traffic;
- * The Inspector at Market & 3rd St needs to monitor this problematic switch; direct 5, 21 & 31-lines to the curbside wires, and the 6-line to the center wires:
- * The Inspector at Market & 4th OB needs to help the OB 14 TC make the left turn onto SB 4th St:
- * Enlist aid from PCO's at 3rd & 4th/Market to help coaches turn.

The 9, 38 and 71 lines will use 1st St to Mission to Fremont to Market, taking layover at outer end; and if Steuart St is not clear by 1:30AM, the N and L-Owls will use 2nd St. for their temporary teminal. Assist 1-C-44 (1st & Market) and 1-C-45 (Fremont & Mission) as needed. Have 1-C-44 call you if any problems arise; you can have OCC send coaches via 2nd St. if 1st. St gets too crowded (only the 1st St. contingency reroute is listed on the operator Notice).

Coaches are not able to layover downtown and will be gaining a lot of time. District Inspectors can headway them from the outer terminals.

Union Square will be closed for cleaning from 5:00PM to 6:00AM, and should not be a focal point of activity. Go into the Tenderloin Police Station on Jones Street, introduce yourself and tell them you are in charge of MUNI operations in this area, and give them your phone number. Tell them that we intend to keep the Mason and Hyde lines running and enlist their aid in doing so. Monitor turntable operation and keep the cars moving. They can take their recovery at the other end if Powell & Market gets too crowded.

Supplemental service on the 5, 14 and 38-line Owls is scheduled to begin at 10:00PM. These coaches are subject to orders and can be used wherever needed. Get their coach numbers and use them to plug gaps on any line. One additional coach has been scheduled for the 108-line.

Fifteen minutes of fireworks will be set off at midnight, and police will begin dispersing the crowd after that. Go to the Temporary Transbay Terminal and help 1-C-1 manage the crowd. When the contingency re-routes are implemented, the 14-Mission will switchback at 3rd St. via Mission to 3rd to Market to 4th. Due to the change from TBT to TTBT, passengers looking for East Bay buses may cause crowding and confusion. Direct passengers to the temporary terminals for our lines. Ask for assistance from a PCO if the area

NEW YEAR'S EVE OPERATIONS ORDER 2010 PAGE 5 OF 16

gets unmanageable. Remain at this location until the venue is clear. Go to the Embarcadero Station and help POP manage the crowd and remain at this location until the venue is clear. Provide clearances in Section 7.

1-C-40 2000hrs=MARKET & 4TH IB: You will be working in a team with 1-T-91, 1-C-41 (Mission & 3rd) and 1-C-42 (Market & 3rd) to get the 5, 6, 21, and 31-line coaches out of the celebration area; and with 1-C-43 (Market & 4th OB) to help the OB TC 14 coaches make the left turn from Market to SB 4th St. No street closures on lower Market or the Embarcadero are scheduled, but they may occur depending on crowds, traffic, weather, etc.

When you get the order from 1-T-91, begin your switchback operation at Market & 4^{th} St. The 6, 21 and 31-line coaches will be coming to you on the outside wire and you will have to switch their poles to the curbside wire in order to turn on to 4^{th} . The 5-line coaches should be on the curbside wires and will be able to make the right turn on to 4^{th} St if that switchback is implemented. Instruct each operator how to make the mid-block switch on 4^{th} to Mission. Enlist aid of PCO's if necessary to help the coaches turn.

Remain at your location, switching back coaches until the venue is clear.

- 1-C-41 2000hrs=MISSION & 3RD: You will be working in a team with 1-T-91, 1-C-40 (Market & 4th IB), and 1-C-42 (Market & 3rd) to get the 5, 6, 21, and 31-line coaches out of the celebration area. and with 1-C-43 (Market & 4th OB) to help the TC 14 coaches make the switchback from Mission to 3rd to Market to SB 4th St. No street closures on lower Market or the Embarcadero are scheduled, but they may occur dependent on conditions.
 - 1-T-91 will advise you when the switchback operation will begin at Market & 4th St. Position yourself inbound on Mission St at the switch for the 3rd St wire and help coaches traveling east on Mission to make the switch to go north on 3rd. Try to hold westbound Mission traffic so the coaches can turn. Ask 1-T-91 to ask for PCO assistance if the turn becomes too difficult. Remain at your location, switching back coaches until the venue is clear.
- 1-C-42 2000hrs=MARKET & 3RD: You will be working in a team with 1-T-91, 1-C-40 (Market & 4th IB), and 1-C-41 (Mission & 3rd) to get the Market St trolley coaches out of the celebration area, and with 1-C-43 (Market & 4th OB) to help the TC 14 coaches make the switchback from Mission to 3rd to Market to SB 4th St. No street closures on lower Market or the Embarcadero are scheduled, but they may occur depending on crowding, traffic, weather, etc.
 - 1-T-91 will advise you when the switchback operation will begin at Market & 4th St. Position yourself on Market where the 3rd St wire comes into Market and help coaches get on the proper wire: 5, 2 & 31-lines to the curbside wire, and the 6-line to the outside wire; be prepared to reset their poles. The Line Dept checked this crossover switch earlier, but it frequently malfunctions.

Remain at your location, switching back coaches until the venue is clear.

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- 1-C-43 2000hrs=MARKET & 4TH OB: You will be working in a team with 1-T-91, 1-C-40 (Market & 4th IB), and 1-C-41 (Mission & 3rd) to get the Market St trolley coaches out of the celebration area, and to help the TC 14 coaches make the switchback from Mission to 3rd to Market to SB 4th St. No street closures on lower Market or the Embarcadero are scheduled, but they may occur depending on crowding, traffic, weather, etc.
 - 1-T-91 will advise you when the switchback operation will begin at Market & 4th St. Position yourself on Market near 4th St and help the 14-line coaches make the left turn to SB 4th St. Enlist the assistance of the PCO if you need help with the traffic. Remain at your location, switching back coaches until the venue is clear.
- 1-C-44

 2000hrs=MARKET & 1

 ST

 You will be working in a team with
 1-T-91 and 1-C-45 (Fremont & Mission) to get the 9, 38 & 71-lines out of the
 celebration area. 1-T-91 will advise you and 1-C-45 when the reroutes will
 begin. Use the near side island stop, rather than the curb. 1-C-45 will help the
 coaches make the left turn from EB Mission to NB Fremont.
 No street closures on lower Market or the Embarcadero are scheduled, but
 they may occur depending on crowding, traffic, weather, etc. Enlist the
 assistance of the PCO if you need help with the traffic. Remain at your
 location, rerouting coaches until the venue is clear.
- 1-C-45 2000hrs=MISSION & FREMONT: You will be working in a team with 1-T-91 and 1-C-44 (Market & 1st) to get the 9, 38 & 71-lines out of the celebration area. 1-T-91 will advise you and 1-C-44 when the reroutes will begin. Help the coaches make the left turn from EB Mission to NB Fremont. No street closures on lower Market or the Embarcadero are scheduled, but they may occur depending on crowding, traffic, weather, etc. Enlist the assistance of the PCO if you need help with the traffic. Remain at your location, rerouting coaches until the venue is clear.
- 1-T-46 2000hrs=CLAY & DRUMM: The area around the Embarcadero Centers, Hyatt Regency, and Embarcadero BART / MUNI Stations will be very congested. Ensure that the turns are clear for coaches; cite and order tows as needed. As soon as Drumm becomes impassable, move to Clay & Davis and direct the 1-California to either EPU or push them south on Davis, R-Sacramento and back under the wire. Have them take recovery at 33rd. Stay until the venue is clear, or the end of service.

1-C-1 **2000hrs=TEMPORARY TRANSBAY TERMINAL**: No street closures on lower Market or the Embarcadero are scheduled, but they may occur depending on crowding, traffic, weather, etc. When lower Market gets too crowded, 1-T-91 will begin the contingency reroutes: the 5, 6, 14, 21 & 31-lines will switchback at 4th St; the 9, 38 & 71-lines will reroute via 1st St. When advised that re-routes have begun, tell your operators to begin them on their next inbound trip. There is one additional run for the 108 line.

Passengers looking for East Bay buses may cause crowding and confusion. If our coaches are still using the TTBT, help them get across Howard and across Folsom onto Main and onto Beale. 1-T-91 will come assist you if he is able. Direct passengers to the temporary terminals for our lines. Ask for assistance from the PCO if the area gets unmanageable. Remain at this location until the crowd disperses.

4-M-6

1900hrs=EMBARCADERO COMMAND: Ensure that 1-T-91 has a copy of the OCC Clearance Permit for the D-26 Feeder kill from the office. The SFPD's Embarcadero Command is located in Embarcadero #4, on the promenade level. Report to this location and introduce yourself to Captain McEachern, who is the Event Commander. You will act as the information conduit between Police and MUNI operations. 1-T-91 will come to the Command Post after 2000hrs; establish a telephone/radio system to communicate with each other

The key information we need is:

- 1. When the last F-line car clears Market & Steuart and Feeder D-26 can be de-energized;
- When lower Market Street closes/becomes congested so all Market St. trolley coaches can begin switching at Market 4th:
- 3. The ability to keep the 1 and 61-lines operating on Drumm Street;

When 1-T-91 confirms that all the F-line cars are off the Embarcadero (last Run, 174, scheduled OB from Market & Steuart at 7:45PM and Run 176 has switched back at Don Chee Way at 7:30PM and cleared Steuart Loop), he will call the Central Control Manager and tell him he is ready to have Power Control open Feeder D-26.

- 1-T-91 will be in charge of switchback operations at Market & 4th and will re-route coaches from their downtown terminals. Communicate with him, and if he needs Police assistance, relay this information to the officer in charge. 1-C-44 and 1-C-45 will handle the reroute operations at 1st & Market/Fremont & Mission, with 1-T-91's assistance as needed.
- 1-T-46 will be directing 1-line operation at Clay & Drumm, and will need the information about Drumm Street. He will begin switching the 1-California via Davis when Drumm gets too crowded. 8-T-54 will have the 61-line use the

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Kearny switch if Drumm is blocked (if the 61 line is motorized, he will initiate the reroute if necessary).

Fifteen minutes of fireworks will be set off at midnight and police will begin dispersing the crowd after that. 1-T-91 will go to the Embarcadero Station and help POP manage the crowd and remain at this location until the venue is clear.

The SFPD will be not be using Motor Coaches for the event, however they may contact OCC if need arises. Be aware of BART station skipping plan noted on page 2 of this Order.

1-L-3 2000hrs=CITYWIDE: You are the Lead Inspector for citywide coverage. Familiarize yourself with this Order and assist 4-M-6 and 1-T-91 as needed.

CASTRO AREA

EVENT INFORMATION:

1-T-63 2300hrs=CASTRO & 18TH STREET: The SFPD does not anticipate huge crowds or disruptions to our service in the Castro. Two extra TC 24-line OWLS have been scheduled to supplement service. All 24-line runs should be equipped with ETI coaches, if not, trade them off before midnight.

Make contact with units from Mission Station when they come on duty and advise them that the 24 & 33-line coaches are not motorized. Ask for their assistance in creating a lane for these trolleys if they allow a street closure. Standby to have the 24-line re-route using EPU if Police inform you they will close the 400 block of Castro for longer than 20 minutes. Have Central make an ALL CALL:

24-DIVISADERO:

INBOUND: From Castro & 18th via R-18th, L-Noe, L-Market, R-Castro to regular route.

OUTBOUND: From Castro & Market via R-Market, L-Diamond, L-18th, R-Castro and regular route.

35-EUREKA: From Eureka & 18th via L-18th, R-Douglass, R-Market and

take layover. Then via Market, R-Eureka to 20th, regular

route

Remain until the venue is clear and coaches are returned to schedule

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COW HOLLOW - UNION STREET AREA

EVENT INFORMATION:

1-T-62 2230hrs=UNION BETWEEN GOUGH & FILLMORE: Monitor traffic conditions in this area. Make contact with any Northern Station PD units and see if they have any plans to close the street. If necessary, re-route the 45-UNION line as follows, requesting Central Control to make the necessary "LISTEN GROUP" announcements:

INBOUND: From Union & Fillmore via L-Fillmore, R-Chestnut,

R-Van Ness, L-Union and regular route.

OUTBOUND: From Union & Van Ness via R-Van Ness, L-Chestnut,

L-Fillmore (rack poles & EPU), R-Union to regular route.

Remain until the venue is clear and coaches are returned to schedule.

NORTH BEACH-BROADWAY AREA

EVENT INFORMATION:

BROADWAY CLOSED FROM APPX 0030-0200HRS

1-T-68 2000hrs=COLUMBUS & BROADWAY: Monitor this area and watch for increasing congestion due to New Year's Eve festivities. The Police Command Post for this sector is located at 400 Broadway (Command Van). Introduce yourself and tell them you are in charge of MUNI operations in this

If the PD closes Broadway & Columbus, you can have Central make ALL CALLS to re-route coaches out of the area:

8X-BAYSHORE EXPRESS:

INBOUND: From Kearny & Sutter, via L-Sutter, R-Stockton,

L-Columbus to regular route.

NOTE: USE 30/45 LINE STOPS.

10-TOWNSEND/12-FOLSOM/PACIFIC:

OUTBOUND: Regular route to Pacific & Powell, then R-Powell, L-Clay, R-Sansome to regular route.

Remain until the venue is clear and coaches are returned to schedule.

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RAIL OPERATIONS

4-C-32 1900hrs=WEST PORTAL STATION: MUNI Metro will extend subway operations until approximately 0400hrs. Ten extra two-car trains, Runs 961-970, are scheduled to begin operating at about 2000hrs between West Portal and Caltrain until 0215hrs, and between West Portal and Embarcadero until approx. 0400hrs. OCC will have the last OB LRV leave Embarcadero at 4:02AM.

Additional motor coach owls on the 91-line have been scheduled as well as one extra motor coach Owl for the L-Taraval (run 275) running between 46th & Wawona and West Portal for increased outbound service. They are Subject to Orders and can be used on any line.

Maintain contact with Inspectors at Embarcadero and Church & Duboce. The last car must leave Embarcadero to arrive at Embarcadero at 4:02AM so BART can close the stations. Remain here until the last OB car has cleared.

4-C-30 1930hrs=EMBARCADERO STATION: Note that MUNI Metro will extend subway operations until approximately 0400hrs. Ten extra two-car trains, Runs 961-970, are scheduled to begin operating at approximately 2000hrs between West Portal and Embarcadero/Caltrain until 0215hrs, and between West Portal and Embarcadero until approx. 0402hrs. Fare Inspectors are assigned at Embarcadero and other downtown stations to assist as needed. Familiarize yourself with the BART station skipping plan affecting Embarcadero and Montgomery Stations on page 2 of this Order. Work with POP to make this a smooth transition for the passengers.

The last Caltrain will leave at 2:15AM. Work with 4-C-53 to make sure a train leaves Embarcadero in time to make the connection. Have the Agent begin making announcements by 1:30AM, advising patrons to catch a car before 2:00AM to make their connection.

The last car must be outbound at Embarcadero no later than 0402hrs so BART can close the stations. Remain here until the last OB car has cleared

4-C-33 1900hrs=CHURCH & DUBOCE: MUNI Metro will extend subway operations until approximately 0400hrs. Ten extra two-car trains are scheduled to begin operating at about 2000hrs between West Portal and Embarcadero/Caltrain until 0215hrs, and between West Portal and Embarcadero until approx. 0400hrs. If you need some of these cars, call 4-C-30 at Embarcadero and have them send some outbound on the N-line.

Two extra motor coach Owls are scheduled for the N-Judah (runs 273 & 276) running between La Playa and Church & Duboce for increased outbound service. They have schedules, but use them as needed.

4-T-42

1500hrs=MARKET & VAN NESS: Late night runs on the F-Market need to pull out motor coaches due to anticipated crowds near the Ferry and possible closure on the Embarcadero. Stand at the relief point and help operators with their switchbacks and pull-in trips. There should be no gaps in service between the streetcars pulling in and the motor coaches pulling out. The Schedules Department has prepared ranges, paddles and T-1s for all work. The MC runs will also have F line route sheets. Use your rotation for service. When the seven motor coaches are out, put them on time if necessary. Run 174 is the last streetcar scheduled to clear Steuart Loop OB at 1945hrs before the feeder is de-energized. Run 176 is NOT motorized and must switchback at Don Chee Way on it's IB trip at 1930hrs and leave before the overhead is de-energized. Coordinate with 4-C-55 to adjust service.

4-C-55 will call you if the PD closes the Embarcadero or when congested. Tell our motor coaches to start their re-route.

4-C-53 1900hrs=CALTRAIN: Ten extra two-car trains will serve as subway shuttles between West Portal and Caltrain from approximately 2000hrs until 0215hrs, and from West Portal to Embarcadero until approximately 0400hrs. Variable Message Signs will be displayed on the Embarcadero advising motorists to expect delays from 11:00PM to 1:00AM.

Check in with the Caltrain Station Master and give him your phone number. Caltrain has scheduled three special trains after their last regular train, leaving at 12:01AM, 12:45AM, 1:15AM and 2:15AM. Communicate with the Embarcadero Inspectors and make sure a train leaves from Embarcadero to Caltrain no later than 1:50AM, and that announcements are made on the platform that this will be the last train to connect to Caltrain service.

4-C-55

1900hrs=STEUART & MARKET: All night runs on the F-line will pull out motor coaches, and the PCCs will pull in. The Police are prepared to close the Embarcadero to traffic between Washington and Harrison if necessary, depending on the crowd size and traffic. They will let streetcars through until the last one leaves Steuart at 7:45PM. Inspector 1-T-91 will have Central de-energize feeder D-26 after the last car has cleared.

If SFPD close the Embarcadero, call 4-T-42 at Van Ness and have him start re-routing the IB coaches. Go to **EMBARCADERO** and **BROADWAY** where the F-line motor coaches will be turning. Work with PD and DPT units to keep the turn clear for these coaches.

8-T-54

1900hrs=CAL & DRUMM: The area around the Embarcadero Centers, Hyatt Regency, and Embarcadero BART and MUNI Stations will be very congested. As soon as Drumm becomes impassable, move to California & Kearny and unplug the switch so the 61-line can switchback there. Make sure all crews release the cable before crossing over. Help clear traffic for them so they can get to Montgomery and pick up the rope. Have them take all

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recovery at Van Ness. Do not allow any cars to get trapped at Drumm. Note: if the 61 line is motorized, implement the re-route if necessary.

STATION OPERATIONS SUPERVISOR

4-C-94 2000hrs=EMBARCADERO STATION: The area around the Embarcadero Centers, Hyatt Regency, and Embarcadero BART and MUNI Stations will be very congested. Familiarize yourself with the BART station switching plan on pg. 2 of this Order. Monitor activities at Embarcadero and Montgomery Stations, in addition to the others. POP will utilize track dept. stanchions at Embarcadero and Montgomery Stations to assist with overcrowding.

OTHER ASSIGNMENTS, CHANGES, COMMENTS

1. CENTRAL CONTROL SHIFT MANAGER/LEAD DISPATCHER:

Ensure that Central Control Dispatchers are aware of the operational changes outlined in this order, and that LISTEN GROUP announcements are made periodically to implement the re-routes and switchbacks. Dispatchers are to work with Event Inspectors and make other adjustments as necessary.

The SFPD will be not be using Motor Coaches for the event, however they may contact OCC if need arises. Be aware of BART station skipping plan noted on page 2 of this Order. Send a copy of this Operations Order with Section 6 & 7 completed to the Superintendent of Special Events.

2. <u>CCO</u>: Ensure that CCOs are aware of the operational changes outlined in this order. PCC cars will be replaced by motor coaches as the night runs pull out. 1-T-91 will call Central to have Power Control de-energize D-26 when all cars are clear of the Embarcadero. 4-M-6 will be at Embarcadero Command. Tim Lipps is available by cell for OHL and feeder matters.

The last LRV must leave Embarcadero OB by 0402hrs so BART can close the stations. Work with Inspectors at Caltrain and Embarcadero so cars are clear in time.

3. POLICE COMMAND:

ASST. CITY-WIDE COMMAND	3X400	Asst Chief Godown
TACTICAL COMMAND	4T300	
SOUTHERN COMMAND	3B204	Lt. McNaughton
EMBARCADERO COMMAND	3B300	Captain McEachern
TRAFFIC COMMAND	4B300	Captain Casciato
CENTRAL/BROADWAY COMMAND	3A300	Captain Brown

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4) STATION OPERATIONS: Metro service will be extended to approximately 0400hrs with extra trains providing service between West Portal & Caltrain from approximately 2000 hrs until 0215hrs and between West Portal and Embarcadero until approx. 0400hrs. The last car must leave Embarcadero by 0402hrs so BART can close the stations. Work with Metro Inspectors at Embarcadero to notify passengers of the last train. The Station Agent Supervisor, 4-C-94, will be at/near Embarcadero Station after 2000hrs.

BART has a station skipping operation plan in effect for Embarcadero and Montgomery Stations in an attempt to spread the crowd. Familiarize yourself with affected entrances and exits at these stations. Agents and Supervisors should work with POP to make this a smooth transition for the passengers.

5. POP INSPECTORS/SECURITY/TRACK DEPT: Celebrants will be lining the Embarcadero between Mission and Folsom. Cypress Security will standby at the Ferry Portal so that no one breaches the perimeters to ensure LRVs can operate. Fare Inspectors are assigned to Embarcadero and Montgomery Station conducting fare inspections before 2000hrs and assisting with crowd control after 2000hrs. Any track matters will be handled by OCC per standard procedures, notifying Ted Aranas (primary) or Wai Tom (secondary).

6. CLEARANCES:

Re-route Commenced: Re-route Concluded: Re-route Not Used ()	Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()
1-CALIFORNIA Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()	24-DIVISADERO Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()
2-CLEMENT Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()	31-BALBOA Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()
5-FULTON Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()	35-EUREKA Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()
6-PARNASSUS Re-routes Commenced: Re-routes Concluded: Re-routes Not Used ()	38-GEARY Re-route Commenced: Re-route Concluded: Re-route Not Used ()

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8X-BAYSHORE EXPRESS	45-UNION/STOCKTON	
Re-routes Commenced:	Re-route Commenced:	
Re-routes Concluded:	Re-route Concluded:	
Re-routes Not Used ()	Re-route Not Used ()	
110 104100 1101 0004 ()	110 10410 1101 0004 ()	
9-SAN BRUNO	61-CALIFORNIA	
Re-routes Commenced:	Re-route Commenced:	
Re-routes Concluded:	Re-route Concluded:	
Re-routes Not Used ()	Re-route Not Used ()	
110 104100 1101 0004 ()	110 10010 1101 0000 ()	
10-TOWNSEND	7-HAIGHT/NORIEGA	
Re-routes Commenced:	Switchback Commenced:	
Re-routes Concluded:	Switchback Concluded:	
Re-routes Not Used ()	Switchback Not Used ()	
ric rodies not osca ()	Ownormal Not Osca ()	
12-FOLSOM/PACIFIC	L-OWL MC	
Re-routes Commenced:	Re-route Commenced:	
Re-routes Concluded:	Re-route Concluded:	
Re-routes Not Used ()	Re-route Not Used ()	
110 104100 1101 0004 ()	no route not occu ()	
14-MISSION	N-OWL MC	
Re-route Commenced:	Re-route Commenced:	
Re-route Concluded:	Re-route Concluded:	
Re-routes Not Used ()	Re-routes Not Used ()	
, 10 .00.00 .101 0000 ()	110 104100 1101 0004 ()	
7) INSPECTOR:	or CENTRAL CONTROL ()	
	PROPRIATE SECTION BELOW	
() = NO PROBLEMS ENCOU		
	IGES WERE MADE AND/OR RECOMMENDATIONS	
FOR CHANGES FOR NEXT YEARS E	EVENT ARE AS FOLLOWS:	
		<u></u>
		NEW YEAR'S EVE OPERATIONS ORDER - FRIDAY: 31 December 2010

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8.7 Cruise Terminal Planning Code Compliance

James R. Herman Cruise Terminal - Planning Code Compliance Chart 91,200 gross square feet

Zoning Category	M-1	Proposed Project
Off-street parking spaces (§151)	Other manufacturing and industrial uses	0 provided
	1 space per 1,500 sf of occupied floor area, where the occupied floor area exceeds 7,500 square feet	(compliant per Planning Code Section 240.1 process)
	Piers 27-31 fall within the Waterfront Special Use District #1, and special allowances are made for parking provisions in this district.	
	Planning Code Section 240.1 allow parking requirements to be modified pursuant to Section 161(f) for projects within the Waterfront Special Use District #1. Section 161 (f) permits the Planning Department or Planning Commission to reduce the off-street parking requirements in recognition of the following: policies set forth in the Northeastern Waterfront Plan, the unique nature of the area, and the difficulty in providing vehicular access to the area.	
Car-Share (§166)	0 to 24 parking spaces provided = 0 spaces (0 parking spaces = 0 required)	NA
Accessible Vehicle Parking Standards §155(i)	One space per 25 off-street parking spaces 0 parking spaces provide = 0 required	NA
Off-Street Freight Loading (§152.1)	Retail stores, . primarily engaged in handling of goods60,000 - 100,000 sf = 2 (92,200 sf = 2 required)	Total of 3 provided (compliant)
Showers and Lockers (§155.3(c))	Where the gsf of the floor area exceeds 50,000 square feet, 4 showers and 8 clothes lockers are required	4 showers and 8 lockers
Bicycle Parking (§155.4(d))	Where the gsf of the floor area exceeds 50,000 square feet, 12 bicycle spaces are required	12 spaces.