FINAL REPORT

TECHNICAL MEMORANDUM – I-710 EIR/EIS INITIAL FEASIBILITY ANALYSIS (IFA) – TECHNICAL APPENDIX

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FOREWORD

The purpose of this technical appendix is to provide detailed technical information on the approach and results of the Initial Feasibility Analysis (IFA) for the I-710 EIR/EIS, and to supplement the I-710 EIR/EIS IFA Report.

1.0 PORT CARGO GROWTH SCENARIOS

Three primary future port cargo growth scenarios and one secondary scenario were analyzed as part of the IFA. These scenarios were developed in recognition of the fact that the port/rail infrastructure is likely to constrain both port cargo growth and the amount of cargo that can be handled by rail. This in turn could have significant impacts on the amount of cargo that is handled by trucks on the I-710. These scenarios are described below.

1.1 PRIMARY PORT CARGO GROWTH SCENARIOS

2.1.1 Scenario 1. Port High Cargo Growth Scenario (HG)

This scenario assumes that marine terminal capacity at the ports is expanded based on current plans to accommodate growth to 43 million Twenty Foot Equivalent Units (TEUs). Along with marine terminal expansion, it assumes that the ports will expand their existing on-dock rail terminal capacity to allow 30 percent of total cargo to be loaded onto rail at the ports. It assumes that the Union Pacific (UP) and Burlington Northern Santa Fe (BNSF) will both be unsuccessful in getting their near-dock expansion plans approved (Environmental Impact Reports (EIRs) are just beginning for these projects.). These plans, if approved, would expand UP's Intermodal Container Transfer Facility (ICTF), and build a new BNSF terminal, the Southern California International Gateway (SCIG). As a result of not being able to make these near-dock terminal expansions, the railroads will be forced to pursue strategies that would involve a combination of expanded operations at existing downtown yards (mostly through changes in operating practices), expansion of selected existing rail yards where they have available property that they already own, and development of new intermodal terminals in locations such as Victorville. It also assumes that the railroads will be able to accommodate this growth in cargo volume on their mainline tracks after completing ongoing capacity expansion projects, and by increasing the length of trains.

2.1.2 Scenario 2. Port High Cargo Growth plus Near Dock Intermodal Yard Expansion Scenario (HG + ND)

This scenario is the same as Scenario 1, except that it assumes that the UP will expand its existing near-dock intermodal terminal ICTF, and that the BNSF will build a new near-dock intermodal terminal SCIG. This will reduce truck traffic on I-710 as compared with Scenario 1.

2.1.3 Scenario 3. Low Port Cargo Growth Scenario (LG)

This scenario assumes that the ports are unable to expand marine terminals beyond their existing terminal footprint, but they are able to achieve some improved operating efficiencies. This would result in growth to 28.5 million TEUs. Because marine terminals are not expanded, associated on-dock rail projects are not built, limiting the amount of containers that can be loaded on-dock to 5.6 million TEUs. As in Scenario 1, it is assumed that ICTF will not be expanded and SCIG will not be built. Both railroads will need to expand their existing intermodal terminal capacity, and they will do so in the same ways, as described in Scenario 1. In this scenario, it is further assumed that the large volume of train growth will make it difficult for the railroads to continue their practice of operating longer trains, and that they will have right-of-way constraints that limit their ability to build new track beyond what is currently under construction.

A summary of forecasts for these scenarios is presented in Table 1.

Table 1. Forecasts for Primary Scenarios (in Million TEUs)

Scenario	Port Cargo Volume Forecast	40% Direct Rail	Projected		Remaining Off-Dock Capacity Needed	Container Movements by Truck Likely to Occur on I-710 North of PCH
			On-Dock Terminal Throughput	Near-Dock Terminal Throughput		
HG	43	17.1	12.8	1.4	2.9	28.5
HG+ND	43	17.1	12.8	4.3	0.0	25.6
LG	28.5	11.4	5.6	1.4	4.4	21.5

1.2 SECONDARY PORT CARGO GROWTH SCENARIO

2.2.1 Scenario 3b. Low Port Cargo Growth Plus Inland Warehouse Locations Trips (LG+Reg'l Trucks)

This scenario is exactly the same as Scenario 3 in terms of the total port container throughput of 28.5 million TEUs. This scenario is different from Scenario 3 in the consideration of longer-haul trips from the ports to the inland warehouse locations. Scenario 3 does not consider any capacity constraints in warehousing land uses in the Gateway Cities, west Los Angeles County, and Orange County region in the allocation of local truck trips generated from the ports. This warehousing capacity constraint issue is explicitly addressed in this scenario, wherein overflow of trips (based on warehousing capacity constraints in the Gateway Cities, Los Angeles County, and Orange County region) is assumed to be destined to new inland warehouse locations north and/or east of the I-710 study area (these trips are referred to as the longer-haul inland trips). The consulting team determined that the consideration of these longer-haul inland trips was critical, particularly in the analysis of the feasibility of an Advanced Goods Movement Technology System (AGMTS) alternative, since these longer-haul inland trips could serve as a potential market for the AGMTS, in addition to the near-dock and off-dock intermodal markets. In the IFA, this scenario is analyzed for the No Build and the AGMTS alternatives, to assess the relative impacts of the AGMTS on roadway congestion performance (in terms of V/C) compared to the No Build alternative.

2.0 ALTERNATIVES FOR THE IFA

The alternatives evaluated as part of initial screening for the IFA are described below.

2.1 PRIMARY ALTERNATIVES

3.1.1 Alternative 1. Transportation System No-Build (No Build)

This alternative includes all the planned projects in the study area included in the Southern California Association of Governments (SCAG) 2008 RTP and expected to be operational by the study horizon year of 2035, except those projects that are included in the set of alternatives being analyzed as part of the I-710 EIR/Environmental Impact Statement (EIS). Additionally, this alternative also includes all the planned projects outside the study area that directly connect to major study area corridors, since these projects may have an impact on traffic conditions along these corridors.

All projects (ongoing, or planned) included in the baseline model for the IFA are shown in **Appendix A – *Projects Included in the Baseline (No-Build) Model***.

3.1.2 Alternative 2: Transportation Systems Mgmt./Travel Demand Management (TSM/TDM)

This alternative both increases the effective capacity of the corridor through combinations of traffic management, intelligent transportation systems (ITS), parking management, and advanced logistics practices (TSM) and manages demand through combinations of increased transit services and port operating hours (TDM). The strategies assumed for this analysis are presented below. Note that a number of strategies are discussed in the *Multimodal Review Report* but transportation agencies in the I-710 corridor already have incorporated many of these strategies in the 2035 Baseline Alternative. Where this is the case, the baseline assumptions for these strategies are noted below.

- ***Freeways***
    - Adaptive ramp metering at approximately 13 sites along I-710, providing an eight percent capacity improvement over No-Build; and
    - ITS Corridor Management implementation on I-710, I-110, and I-605 providing capacity improvement of six percent.
- ***Interchanges/Arterials***
    - Peak period parking restrictions on key arterials (Atlantic Blvd., Cherry Ave., Garfield Ave., Eastern Ave., and Long Beach Blvd.) providing additional capacity increases over No-Build of 700 passenger car equivalents (PCEs) per hour per lane;
    - Additional ITS implementation on Atlantic Ave., Cherry Ave., Eastern Ave., and Long Beach Blvd. providing an additional effective capacity increase of 23 percent over No-Build; and
    - Additional ITS implementation on all other arterials crossing each screenline, providing an additional effective capacity increase of six percent over No-Build.
- ***Goods Movement Strategies***
    - Empty Container Management (ECM): This would involve internet-based systems to match importers and exporters so that empty containers could be moved directly between the two without the need for additional trips to store the empty containers at the marine terminals. Though the ports' initial experiment

with an ECM program has been largely unsuccessful, there is some reason to believe that this was caused by institutional (rather than technical) problems. Assuming that these institutional issues can be addressed in the future, ECM could be considered as part of the TSM/TDM alternative for the IFA. However, the baseline assumptions provided by the ports for all cargo growth scenarios already provide for a very aggressive ECM strategy (20 percent reuse levels for empty containers as compared to 5-10 percent today). Prior studies for the ports suggest that this is the maximum practical limit for this strategy.

- Expanded Off Peak Program (PierPASS): With significant growth in port truck traffic volumes in the future, the ability of night time terminal gates to handle this growth would necessitate expansion of the existing PierPASS, Inc. program, Off Peak, to allow for greater use of port terminal gates for both night shifts (2nd shift from 6 PM to 3 AM, and Hoot shift from 3 AM to 8 AM), through mechanisms such as appointment systems. The baseline assumptions provided by the ports already assume a very aggressive use of night gates (60% for the Day shift, 20% for the 2nd shift, and 20% for the Hoot shift as compared to a combined 30-35% in the 2nd and Hoot shifts today). Since the 2nd shift is the same duration as the Day shift, it is theoretically possible to handle as much traffic in the 2nd shift as in the Day shift.

  The ports believe that they may not have the legal authority at present to require this type of operation as a condition of their lease agreements. There are also questions as to whether or not there are any programs that could be implemented by PierPASS, Inc. that would be effective in increasing the share of night gate operations beyond what is assumed in the baseline. Nonetheless, a sensitivity analysis was conducted in the IFA to determine the traffic impact of a future operation of 40% in the Day shift, 40% in the 2nd shift, and 20% in the Hoot shift.

- ***Transit***

  - Additional bus shuttles (as part of the Blue/Green Lines);
  - Expanded Metro Blue Line and Green Line service;
  - Expanded local, express, and Metro Rapid Bus services; and
  - Enhanced community bus service (e.g. local circulators in Long Beach, Commerce, and Paramount).

  Transit service increases resulting in a 25 percent increase in transit trips over the baseline were assumed for these TSM/TDM transit strategies which produces a study

area-wide auto trip reduction of 3 percent. It should be noted that the baseline travel forecasts predict an approximate 10 percent transit mode share of home-based work trips in the study area (among the highest work trip transit shares in the Southern California region).

3.1.3 Alternative 3. Alternative Goods Movement Technology System (Alt Tech)

The goods movement technology systems assumed in this analysis are based on the results of the Alternative Goods Movement Technology Feasibility Study draft report. This alternative includes an advanced technology system to move containers between the Ports of Los Angeles and Long Beach and the intermodal rail yards in Commerce and Vernon.

The portion of this system within the I-710 Corridor study area (approximately 18 miles) could serve some share of the projected 2035 near-dock and off-dock rail intermodal container markets demand, with no intermediate stops between the northern and southern termini of the system.

Additional market demand assumptions include:

- The on-dock market will continue to be served by rail and therefore would not be served by the Alternative Technology;
- In addition to the combined current near and off-dock rail intermodal markets, the alternative technology application within the study area could be considered an initial segment of a future, larger, regional network that could be used to transport containers to regional warehousing, distribution and intermodal facilities elsewhere in the Los Angeles Basin and outside of the 710 corridor area.

The total potential cargo container trip market demand identified for the alternative technology is shown in Tables 2, 3 and 4. These tables also relate the beyond I-710 market estimates to the primary port forecast growth scenarios and demand conditions, in addition to the near-dock and off-dock estimates.

Table 2. Alt Tech Market Analysis for Scenario 1 (HG)

HG High Demand No SCIG and ICTF	TEU Annual (in Millions)	40-Foot Cargo Container Equivalents Annual (in Millions)
Off Dock Rail	2.9	1.57
Near Dock Rail	1.4	0.76
Beyond I-710 Corridor	6.8	3.7

Table 3. Alt Tech Market Analysis for Scenario 2 (HG+ND)

HG+ND High Demand With SCIG and ICTF	TEU Annual (in Millions)	40-Foot Cargo Container Equivalents Annual (in Millions)
Off Dock Rail	0.0	0.0
Near Dock Rail	4.3	2.32
Beyond I-710 Corridor	6.8	3.7

Table 4. Alt Tech Market Analysis for Scenario 3 (LG)

LG Low Demand	TEU Annual (in Millions)	40-Foot Cargo Container Equivalents Annual (in Millions)
Off Dock Rail	4.4	2.38
Near Dock Rail	1.4	0.76
Beyond I-710 Corridor	4.5	2.4

2.2 SECONDARY ALTERNATIVES

3.2.1 Alternative 2b: TSM/TDM plus Expanded Evening use of PierPASS (TSM/TDM + Exp PP)

The PierPASS program at the San Pedro Bay ports is an essential element being analyzed in the IFA as part of the Goods Movement component of the TSM/TDM alternative. In the original definition of the TSM/TDM alternative (Alternative 2) for the IFA, a PierPASS gate truck traffic distribution of 60%-20%-20% (i.e., 60% truck traffic in the day gate shift, 20% in the night shift, and 20% in the hoot-owl shift) was assumed. In order to analyze the sensitivities of time of day roadway congestion resulting from changes in gate truck traffic distributions from potential expansion of the PierPASS program in the future, Alternative 2b has been separately analyzed in the IFA, which considers an expanded PierPASS program resulting in a new gate shift distribution of 40%-40%-20% ((i.e., 40% truck traffic in the day gate shift, 40% in the night shift, and 20% in the hoot-owl shift).

3.2.2 Alternative 3b: Alt Tech with Long Haul Inland Warehouse Locations Trips

This alternative is different from Alternative 3 in the consideration of the long haul trips to new inland warehouse market locations for an Advanced Goods Movement Technology System (AGMTS) in addition to the near-dock and the off-dock intermodal markets for the AGMTS.

Clearly, in accordance with the market definition under this alternative, this alternative can only be analyzed with Scenario 3b, since that is the only scenario that considers the existence of longer-haul trips to new inland warehouse locations. The purpose of including this alternative in the IFA was to assess a potentially realistic market condition involving longer-haul trips to new inland locations resulting from warehousing capacity constraints in the Gateway Cities region, and the roadway congestion mitigation benefits from implementing an AGMTS that could capture this long-haul truck market, in addition to the near-dock and off-dock intermodal markets.

3.0 BASELINE MODEL RESULTS BY SCREENLINE AND HIGHWAY FACILITY

This section of the report includes results from the no-build (baseline 2035) model run for each of the selected screenlines and roadway facilities in terms of the selected traffic system performance measures. The screenlines, facilities, and performance measures selected for the IFA are also described below.

3.1 TRAFFIC SCREENLINES FOR THE IFA

As part of the IFA, a "screening" analysis, which compared traffic conditions in the study area for each of the 3 alternatives under each of the 3 port cargo growth scenarios, was conducted. To perform these comparisons, a set of screenlines was first defined across which the traffic conditions on facilities crossing each screenline were estimated.

The selection of screenline locations for the IFA was based on the following key criteria:

- Places along the I-710 corridor where traffic volumes change significantly, such that they may affect the freeway capacity requirements. These include locations along the freeway where truck volumes or auto volumes change significantly from adjacent segments; and

- Places along the I-710 corridor where there are significant changes in proposed configurations of truck lanes or mixed flow lanes (or significant changes in capacity) where relative increases or decreases in traffic volumes would make a difference in whether or not the Locally Preferred Strategy (LPS) is considered feasible or not.

Based on the above criteria, the following screenlines were selected for the IFA:

- Screenline 1: Just north of the Pacific Coast Highway (PCH);
- Screenline 2: Just north of Del Amo Blvd (between I-405 and SR-91);
- Screenline 3: Just south of Rosecrans Avenue (between SR-91 and I-105); and
- Screenline 4: Just north of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards).

Figure 1 shows a map of the screenlines selected for the IFA.

Figure 1. Screenlines Selected for the IFA

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3.2 PARALLEL ROADWAYS/FACILITIES ACROSS SCREENLINES

At each screenline, auto and truck volumes on the major freeways and arterials generated by the baseline traffic forecasting model were analyzed, and those roadways with large shares of total screenline auto and truck volumes were selected for the IFA analyses. At least three arterials (one on either side of I-710) were selected at each screenline even if the arterial

volumes at the screenlines were significantly lower compared to freeway volumes (in order to ensure that arterial traffic conditions were also analyzed as part of the IFA).

Table 5 below shows the selected set of facilities across each screenline for the IFA.

Table 5. Selected Set of Facilities Across Screenlines for the IFA

Screenline	Freeways				Arterials			
1 (n/o PCH)	I-710	I-110	I-605	SR 47/103 (TI Freeway)	Alameda Street	Atlantic Ave	Long Beach Blvd	Avalon Blvd
2 (n/o Del Amo)	I-710	I-110	I-605		Alameda Street	Atlantic Ave	Long Beach Blvd	Cherry Ave
3 (s/o Rosecrans)	I-710	I-110	I-605		Garfield Ave	Atlantic Ave	Long Beach Blvd	Lakewood Blvd
4 (s/o Rosecrans)	I-710	I-110	I-605		Alameda Street	Garfield Ave	Eastern Ave	Avalon Blvd

3.3 Traffic System Performance Measures

The following set of traffic system performance measures will be forecast in the IFA for Alternatives 1, 2 and 3 [volumes converted to Passenger Car Equivalents (PCEs)]:

- Volume by vehicle class (autos and trucks) (as well as total PCE volume) and by time-period (AM Peak, Mid-day, and PM Peak) for each screenline
  - By individual facility;
  - By facility class; and
  - Screenline total.
- Volume-Capacity Ratio (V/C) (peak period) for each screenline
  - By individual facility; and
  - By facility class.

3.4 Baseline Traffic Forecasting Model Results

A full model run was performed for the no-build(baseline) alternative, which was based on the SCAG 2008 RTP Baseline Forecast. This model run was based on a port cargo forecast of 43 million TEUs, and assumes no expansion of UP Railroad's ICTF near-dock intermodal

facility, and that BNSF's SCIG off-dock intermodal facility is not constructed. In terms of transportation system facilities, this model run includes all the planned projects in the study area included in the SCAG 2008 RTP and expected to be operational by the study horizon year of 2035, except those projects that are included in the set of alternatives being analyzed as part of the I-710 EIR/EIS. Additionally, this alternative also includes all the planned projects outside the study area that directly connect to major study area corridors, since these projects may have an impact on traffic conditions along these corridors.

Estimates for Volume/Capacity (V/C) ratios were generated at each screenline for the selected roadway facilities. Tables 6, 7 and 8 show V/C ratios for the AM Peak, Mid-day and PM Peak time periods respectively for the I-710.

Table 6. I-710 V/C Ratios for the AM Peak Period (6:00 a.m. to 9:00 a.m.)

	Southbound			Northbound		
Screenline	**2008**	**2035**	**% Change**	**2008**	**2035**	**% Change**
1 (n/o PCH)	1.15	1.40	22%	0.92	1.24	34%
2 (n/o Del Amo)	0.89	1.07	20%	0.74	1.17	58%
3 (s/o Rosecrans)	0.98	1.20	23%	0.85	1.10	30%
4 (n/o Atlantic)	0.85	1.24	46%	0.93	1.26	35%

Table 7. I-710 V/C Ratios for the Mid-Day Period (9:00 a.m. to 3:00 p.m.)

	Southbound			Northbound		
Screenline	**2008**	**2035**	**% Change**	**2008**	**2035**	**% Change**
1 (n/o PCH)	1.00	1.42	42%	1.00	1.47	47%
2 (n/o Del Amo)	0.84	1.10	31%	0.62	1.20	94%
3 (s/o Rosecrans)	0.83	1.11	34%	0.67	1.02	52%
4 (n/o Atlantic)	0.67	1.07	60%	0.70	1.11	59%

Table 8. I-710 V/C Ratios for the PM Peak Period (3:00 p.m. – 7:00 p.m.)

	Southbound			Northbound		
Screenline	**2008**	**2035**	**% Change**	**2008**	**2035**	**% Change**
1 (n/o PCH)	0.90	1.05	17%	0.92	1.06	15%
2 (n/o Del Amo)	0.70	0.83	18%	0.81	1.15	42%
3 (s/o Rosecrans)	0.97	1.21	25%	0.97	1.26	30%
4 (n/o Atlantic)	0.99	1.22	23%	0.96	1.30	35%

4.0 POST-PROCESSING APPROACH

In lieu of conducting separate model runs for each of the alternatives under the various port cargo growth scenarios, a post-processing approach based on spreadsheet tools was adopted for the IFA. This involved adjustments to the baseline model results according to expected changes in traffic conditions for each of the alternatives under the various port cargo growth scenarios. This approach was adopted because extensive time requirements for incorporating the TSM/TDM and Alternative Goods Movement Technology alternatives in the traffic forecasting model framework, as well as high average model run times of over 50 hours, made conducting individual model runs prohibitive under the time constraints of the IFA. The proposed analytical post-processing approach was deemed sufficient to meet the objectives of the IFA "screening" analysis.

The following key inputs were first estimated to support the post-processing of baseline model results:

- Share of truck trips (productions and attractions) for each port terminal moving on the various highway facilities: This is an important input in the post-processing to assess how changes in each terminal's truck trips under each of the port cargo growth scenarios and alternatives will affect traffic conditions on the various highway facilities at each of the screenlines, compared to the baseline. These shares for each terminal were determined by conducting a select-zone analysis in the baseline model. The select-zone analysis involved selecting zones in the model representing each of the terminals and estimating the share of truck trip productions and attractions at these zones moving on the various highway facilities for each of the screenlines.

The next step involved creation of the screening spreadsheet tool which was then applied to post-process the baseline model results reflecting changes in port cargo demand and mode shares associated with the port cargo growth scenarios, as well as changes in traffic conditions associated with alternatives 2 (TSM/TDM) and 3 (Alternative Goods Movement Technology). A total of 12 port cargo growth scenarios and alternatives were analyzed in the IFA, which included the following:

1. HG with No Build;
2. HG with TSM/TDM;
3. HG with Alt Tech.;
4. HG+ND with No Build;
5. HG+ND with TSM/TDM;
6. HG+ND with Alt Tech;
7. LG with No Build;
8. LG with TSM/TDM;
9. LG with Alt Tech;
10. LG with TSM/TDM+Exp PP
11. LG+Reg'l Trucks with No Build; and
12. LG+Reg'l Trucks with Alt Tech+IE

For the combinations including Alt Tech, the change in port truck trips associated with the implementation of Alt Tech were modeled directly in the port QuickTrip (QT)[1] files by increasing the on-dock rail mode shares for each terminal as a surrogate to reflect the diversion of containers away from trucks, consistent with the assumption on total container throughput on the Alt Tech between the ports and the intermodal yards in Commerce and Vernon that is currently being finalized.

[1] The Port QuickTrip files are spreadsheet models (separate for each port terminal) for port truck trip generation. Using inputs on terminal peak monthly container throughput, mode shares (on-dock, off-dock, local trucking), terminal gate shift truck traffic distribution, etc., these spreadsheets generate outputs in terms of hourly truck trip generation for each terminal (truck origins and destinations) and by truck type (bobtails, chassis, loaded containers, and empty containers). The QT inputs used for the IFA were provided by the Ports of Los Angeles and Long Beach for the three port cargo growth scenarios.

The screening spreadsheet tool was also used to post-process baseline model results for truck volumes on each roadway facility (using inputs on terminal truck trip shares by facility), and V/C based on the revised volumes.

For the combinations including TSM/TDM measures, the following analyses were conducted:

- The impacts on truck trips associated with port-related TSM/TDM strategies, including ECM and expanded PierPASS, were accounted for directly within the QT files for each terminal. The ECM strategy was modeled by using an input of 10% for the import/export empty container re-use factor in the QT files, while the expanded PierPASS strategy was modeled by changing the gate truck traffic distribution shares (for Day, 2nd, and Hoot gate shifts) in the QT files. Percent of empty container re-use and truck traffic distribution by port gate shift are direct inputs into QT that can be altered by the user to produce different truck trip generation results (both total number of truck trips and time of day distribution of truck trips).

- Additionally, for some of the TSM/TDM strategies applied on the roadway system (freeway and arterial improvements, and transit), the traffic system performance measures were post-processed by applying factors derived from the ITS Deployment Analysis System (IDAS), the FHWA ITS Benefits Database, and other sources.

5.0 POST-PROCESSING RESULTS

This section includes the outputs of post-processing baseline model results (comparisons of traffic system performance measures across the various alternatives and port cargo growth scenarios), and findings of the lane requirement analysis. These results were used to:

- Analyze congestion conditions under the three port cargo growth scenarios, and identify any growth scenarios which would result in traffic volumes for which acceptable level-of-service (LOS) could not be provided by the LPS or any of the other identified alternatives; and

- Analyze the LOS and congestion conditions under the three alternatives, and determine if these alternatives can contribute to meeting the overall regional mobility thresholds (as stipulated under regional planning documents such as the RTP).

Post-Processing results were estimated using the methodology described in Section 5.0. The results of the post processing provide key information on traffic volumes by vehicle type across both growth scenarios and alternatives, and encompassing the four selected screenlines.

V/C ratios for the different scenario-alternative combinations for each time-period are shown in the following tables. In addition, **Appendix B** presents a corresponding set of tables that provides the detailed traffic volume information by autos, port trucks and regional trucks for all of the facilities associated with the four screenlines, and across the three peak daily periods (AM, Mid-Day and PM).

Table 9. V/C Ratios for AM Peak Time Period – Northbound (Primary Scenarios)

	No Build			TSM/TDM			TSM/TDM + Exp PP	Alt. Tech		
	HG	HG+ND	LG	HG	HG+ND	LG	LG	HG	HG+ND	LG
Screenline 1										
I-710	1.21	1.12	1.14	1.13	1.04	1.06	1.03	1.06	1.06	0.92
I-110	0.86	0.86	0.86	0.80	0.80	0.79	0.78	0.86	0.86	0.86
I-605	0.84	0.84	0.84	0.77	0.77	0.77	0.77	0.84	0.84	0.84
SR 47/103 (TI Freeway)	0.43	0.56	0.41	0.40	0.52	0.38	0.36	0.37	0.37	0.36
Alameda St	0.52	0.65	0.53	0.48	0.60	0.49	0.47	0.46	0.46	0.47
Atlantic Ave	0.10	0.10	0.10	0.06	0.06	0.06	0.06	0.10	0.10	0.10
Long Beach Blvd	0.11	0.11	0.10	0.06	0.06	0.05	0.05	0.11	0.11	0.10
Avalon Blvd	0.27	0.27	0.26	0.24	0.24	0.24	0.24	0.27	0.27	0.26
Screenline 2										
I-710	0.93	0.84	0.90	0.86	0.77	0.83	0.80	0.84	0.84	0.76
I-110	1.10	1.10	1.09	1.01	1.01	1.00	0.99	1.10	1.10	1.09
I-605	1.08	1.08	1.08	0.99	0.99	0.99	0.99	1.08	1.08	1.08
Alameda St	0.68	0.68	0.66	0.62	0.62	0.60	0.61	0.68	0.68	0.66
Atlantic Ave	0.21	0.21	0.21	0.12	0.12	0.12	0.12	0.21	0.21	0.21
Long Beach Blvd	0.54	0.54	0.54	0.29	0.29	0.29	0.29	0.54	0.54	0.54
Cherry Ave	0.71	0.71	0.71	0.38	0.38	0.38	0.38	0.71	0.71	0.71
Screenline 3										
I-710	0.99	0.91	0.96	0.92	0.84	0.89	0.87	0.91	0.91	0.84
I-110	1.09	1.09	1.08	1.00	1.00	0.99	0.98	1.09	1.09	1.08
I-605	1.06	1.06	1.06	0.97	0.97	0.97	0.97	1.06	1.06	1.06
Atlantic Ave	0.35	0.35	0.35	0.18	0.18	0.18	0.18	0.35	0.35	0.35
Garfield Ave	0.60	0.60	0.60	0.37	0.37	0.37	0.37	0.60	0.60	0.60
Lakewood Blvd	0.55	0.55	0.55	0.51	0.51	0.51	0.51	0.55	0.55	0.55
Long Beach Blvd	0.41	0.41	0.40	0.21	0.21	0.21	0.21	0.41	0.41	0.40
Screenline 4										
I-710	1.04	0.95	1.00	0.97	0.88	0.92	0.91	0.95	0.95	0.86
I-110	1.15	1.15	1.17	1.06	1.06	1.07	1.07	1.15	1.15	1.17
I-605	1.14	1.14	1.13	1.04	1.04	1.04	1.03	1.14	1.14	1.13
Alameda St	1.33	1.33	1.33	1.22	1.22	1.22	1.22	1.33	1.33	1.33
Avalon Blvd	0.45	0.45	0.45	0.40	0.40	0.40	0.40	0.45	0.45	0.45
Eastern Ave	0.82	0.82	0.82	0.39	0.39	0.39	0.39	0.82	0.82	0.82
Garfield Ave	1.29	1.29	1.29	0.80	0.80	0.80	0.80	1.29	1.29	1.29

Table 10. V/C Ratios for AM Peak Time Period – Northbound (Secondary Scenario)

	LG+Reg'l Trucks – No Build	LG+Reg'l Trucks – Alt Tech (IE)
Screenline 1		
I-710	1.21	0.86
I-110	0.84	0.84
I-605	0.84	0.84
SR 47/103 (TI Freeway)	0.38	0.33
Alameda St	0.47	0.42
Atlantic Ave	0.10	0.10
Long Beach Blvd	0.10	0.10
Avalon Blvd	0.26	0.26
Screenline 2		
I-710	0.94	0.72
I-110	1.07	1.07
I-605	1.08	1.08
Alameda St	0.65	0.65
Atlantic Ave	0.21	0.21
Long Beach Blvd	0.54	0.54
Cherry Ave	0.71	0.71
Screenline 3		
I-710	1.02	0.82
I-110	1.07	1.07
I-605	1.06	1.06
Atlantic Ave	0.35	0.35
Garfield Ave	0.60	0.60
Lakewood Blvd	0.55	0.55
Long Beach Blvd	0.39	0.39
Screenline 4		
I-710	1.02	0.86
I-110	1.17	1.17
I-605	1.19	1.13
Alameda St	1.33	1.33
Avalon Blvd	0.45	0.45
Eastern Ave	0.82	0.82
Garfield Ave	1.29	1.29

Table 11. V/C Ratios for AM Peak Time Period – Southbound (Primary Scenarios)

	No Build			TSM/TDM			TSM/TDM + Exp PP	Alt. Tech		
	HG	HG+ND	LG	HG	HG+ND	LG	LG	HG	HG+ND	LG
Screenline 1										
I-710	1.11	1.01	1.05	1.03	0.94	0.97	0.89	0.94	0.94	0.81
I-110	0.71	0.71	0.70	0.65	0.65	0.65	0.63	0.71	0.71	0.70
I-605	0.86	0.86	0.86	0.78	0.78	0.78	0.78	0.86	0.86	0.86
SR 47/103 (TI Freeway)	0.41	0.55	0.39	0.38	0.52	0.36	0.35	0.35	0.35	0.33
Alameda St	0.40	0.54	0.40	0.37	0.50	0.37	0.34	0.34	0.34	0.34
Atlantic Ave	0.10	0.10	0.10	0.06	0.06	0.06	0.06	0.10	0.10	0.10
Long Beach Blvd	0.19	0.19	0.16	0.10	0.10	0.09	0.08	0.19	0.19	0.16
Avalon Blvd	0.26	0.26	0.25	0.24	0.24	0.23	0.23	0.26	0.26	0.25
Screenline 2										
I-710	0.96	0.85	0.92	0.89	0.78	0.85	0.80	0.85	0.85	0.75
I-110	0.98	0.98	0.97	0.90	0.90	0.90	0.87	0.98	0.98	0.97
I-605	1.16	1.16	1.16	1.06	1.06	1.06	1.06	1.16	1.16	1.16
Alameda St	0.70	0.70	0.70	0.65	0.65	0.65	0.64	0.70	0.70	0.70
Atlantic Ave	0.21	0.21	0.21	0.12	0.12	0.12	0.12	0.21	0.21	0.21
Long Beach Blvd	0.54	0.54	0.54	0.29	0.29	0.29	0.29	0.54	0.54	0.54
Cherry Ave	0.71	0.71	0.71	0.38	0.38	0.38	0.38	0.71	0.71	0.71
Screenline 3										
I-710	1.07	0.98	1.05	0.99	0.91	0.97	0.93	0.98	0.98	0.91
I-110	0.98	0.98	0.98	0.90	0.90	0.90	0.88	0.98	0.98	0.98
I-605	1.22	1.22	1.22	1.12	1.12	1.12	1.11	1.22	1.22	1.22
Atlantic Ave	0.34	0.34	0.34	0.18	0.18	0.18	0.18	0.34	0.34	0.34
Garfield Ave	0.60	0.60	0.60	0.37	0.37	0.37	0.37	0.60	0.60	0.60
Lakewood Blvd	0.56	0.56	0.56	0.51	0.51	0.51	0.51	0.56	0.56	0.56
Long Beach Blvd	0.52	0.52	0.50	0.27	0.27	0.26	0.25	0.52	0.52	0.50
Screenline 4										
I-710	1.20	1.10	1.18	1.10	1.01	1.09	1.07	1.10	1.10	1.09
I-110	1.02	1.02	1.02	0.94	0.94	0.94	0.94	1.02	1.02	1.02
I-605	1.19	1.19	1.18	1.10	1.10	1.09	1.07	1.19	1.19	1.18
Alameda St	1.34	1.34	1.34	1.23	1.23	1.23	1.23	1.34	1.34	1.34
Avalon Blvd	0.45	0.45	0.45	0.42	0.42	0.42	0.42	0.45	0.45	0.56
Eastern Ave	0.83	0.83	0.83	0.39	0.39	0.39	0.39	0.83	0.83	0.83
Garfield Ave	1.34	1.34	1.34	0.83	0.83	0.83	0.83	1.34	1.34	1.34

Table 12. V/C Ratios for AM Peak Time Period – Southbound (Secondary Scenario)

	LG+Reg'l Trucks- No Build	LG+Reg'l Trucks – Alt Tech (IE)
Screenline 1		
I-710	1.11	0.73
I-110	0.68	0.68
I-605	0.86	0.86
SR 47/103 (TI Freeway)	0.37	0.31
Alameda St	0.36	0.31
Atlantic Ave	0.10	0.10
Long Beach Blvd	0.15	0.15
Avalon Blvd	0.25	0.25
Screenline 2		
I-710	0.97	0.71
I-110	0.95	0.95
I-605	1.16	1.16
Alameda St	0.69	0.69
Atlantic Ave	0.21	0.21
Long Beach Blvd	0.54	0.54
Cherry Ave	0.71	0.71
Screenline 3		
I-710	1.11	0.90
I-110	0.97	0.97
I-605	1.21	1.21
Atlantic Ave	0.34	0.34
Garfield Ave	0.60	0.60
Lakewood Blvd	0.56	0.56
Long Beach Blvd	0.48	0.48
Screenline 4		
I-710	1.21	1.09
I-110	1.02	1.02
I-605	1.24	1.18
Alameda St	1.34	1.34
Avalon Blvd	0.45	0.45
Eastern Ave	0.83	0.83
Garfield Ave	1.34	1.34

Table 13. V/C Ratios for Mid-Day Time Period – Northbound (Primary Scenarios)

	No Build			TSM/TDM			TSM/TDM + Exp PP	Alt. Tech		
	HG	HG+ND	LG	HG	HG+ND	LG	LG	HG	HG+ND	LG
Screenline 1										
I-710	1.18	1.06	1.08	1.10	0.99	1.01	0.83	0.98	0.98	0.79
I-110	0.66	0.66	0.66	0.61	0.61	0.60	0.57	0.66	0.66	0.66
I-605	0.64	0.64	0.64	0.59	0.59	0.59	0.59	0.64	0.64	0.64
SR 47/103 (TI Freeway)	0.43	0.60	0.40	0.40	0.56	0.37	0.30	0.36	0.36	0.33
Alameda St	0.54	0.71	0.55	0.51	0.66	0.52	0.40	0.48	0.48	0.48
Atlantic Ave	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Long Beach Blvd	0.08	0.08	0.08	0.07	0.07	0.06	0.06	0.08	0.08	0.08
Avalon Blvd	0.20	0.20	0.20	0.18	0.18	0.18	0.17	0.20	0.20	0.20
Screenline 2										
I-710	0.86	0.74	0.81	0.80	0.69	0.76	0.61	0.74	0.74	0.64
I-110	0.85	0.85	0.83	0.79	0.79	0.77	0.73	0.85	0.85	0.83
I-605	0.83	0.83	0.83	0.76	0.76	0.76	0.76	0.83	0.83	0.83
Alameda St	0.60	0.60	0.57	0.56	0.56	0.53	0.52	0.60	0.60	0.57
Atlantic Ave	0.16	0.16	0.16	0.12	0.12	0.12	0.12	0.16	0.16	0.16
Long Beach Blvd	0.38	0.38	0.38	0.30	0.30	0.30	0.30	0.38	0.38	0.38
Cherry Ave	0.51	0.51	0.51	0.40	0.40	0.40	0.40	0.51	0.51	0.51
Screenline 3										
I-710	0.97	0.86	0.92	0.90	0.80	0.86	0.74	0.86	0.86	0.77
I-110	0.86	0.86	0.84	0.79	0.79	0.77	0.75	0.86	0.86	0.84
I-605	0.81	0.81	0.80	0.74	0.74	0.74	0.73	0.81	0.81	0.80
Atlantic Ave	0.26	0.26	0.26	0.20	0.20	0.20	0.20	0.26	0.26	0.26
Garfield Ave	0.44	0.44	0.44	0.41	0.41	0.41	0.41	0.44	0.44	0.44
Lakewood Blvd	0.39	0.39	0.39	0.36	0.36	0.36	0.36	0.39	0.39	0.39
Long Beach Blvd	0.33	0.33	0.32	0.26	0.26	0.26	0.24	0.33	0.33	0.32
Screenline 4										
I-710	0.95	0.84	0.89	0.89	0.77	0.82	0.75	0.84	0.84	0.71
I-110	0.88	0.88	0.90	0.81	0.81	0.83	0.81	0.88	0.88	0.90
I-605	0.92	0.92	0.92	0.85	0.85	0.85	0.80	0.92	0.92	0.92
Alameda St	0.98	0.98	0.98	0.90	0.90	0.90	0.90	0.98	0.98	0.98
Avalon Blvd	0.34	0.34	0.34	0.31	0.31	0.31	0.31	0.34	0.34	0.34
Eastern Ave	0.61	0.61	0.61	0.48	0.48	0.48	0.48	0.61	0.61	0.61
Garfield Ave	0.94	0.94	0.94	0.86	0.86	0.86	0.86	0.94	0.94	0.94

Table 14: V/C Ratios for Mid-Day Time Period – Northbound (Secondary Scenario)

	LG+Reg'l Trucks- No Build	LG+Reg'l Trucks – Alt Tech (IE)
Screenline 1		
I-710	1.17	0.72
I-110	0.63	0.63
I-605	0.64	0.64
SR 47/103 (TI Freeway)	0.36	0.29
Alameda St	0.47	0.41
Atlantic Ave	0.07	0.07
Long Beach Blvd	0.07	0.07
Avalon Blvd	0.19	0.19
Screenline 2		
-710	0.87	0.59
I-110	0.81	0.81
I-605	0.83	0.83
Alameda St	0.56	0.56
Atlantic Ave	0.16	0.16
Long Beach Blvd	0.38	0.38
Cherry Ave	0.51	0.51
Screenline 3		
I-710	0.99	0.74
I-110	0.83	0.83
I-605	0.80	0.80
Atlantic Ave	0.26	0.26
Garfield Ave	0.44	0.44
Lakewood Blvd	0.39	0.39
Long Beach Blvd	0.32	0.32
Screenline 4		
I-710	0.92	0.71
I-110	0.90	0.90
I-605	0.99	0.92
Alameda St	0.98	0.98
Avalon Blvd	0.34	0.34
Eastern Ave	0.61	0.61
Garfield Ave	0.94	0.94

Table 15. V/C Ratios for Mid-Day Time Period – Southbound (Primary Scenarios)

	No Build			TSM/TDM			TSM/TDM + Exp PP	Alt. Tech		
	HG	HG+ND	LG	HG	HG+ND	LG	LG	HG	HG+ND	LG
Screenline 1										
I-710	1.01	0.89	0.94	0.94	0.83	0.87	0.70	0.80	0.80	0.65
I-110	0.61	0.61	0.61	0.57	0.57	0.56	0.53	0.61	0.61	0.61
I-605	0.66	0.66	0.66	0.61	0.61	0.61	0.61	0.66	0.66	0.66
SR 47/103 (TI Freeway)	0.46	0.64	0.43	0.43	0.60	0.40	0.32	0.39	0.39	0.36
Alameda St	0.37	0.54	0.36	0.34	0.50	0.34	0.28	0.30	0.30	0.30
Atlantic Ave	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Long Beach Blvd	0.12	0.12	0.11	0.09	0.09	0.08	0.07	0.12	0.12	0.11
Avalon Blvd	0.20	0.20	0.20	0.18	0.18	0.18	0.18	0.20	0.20	0.20
Screenline 2										
I-710	0.84	0.71	0.80	0.79	0.66	0.74	0.61	0.71	0.71	0.60
I-110	0.79	0.79	0.78	0.73	0.73	0.72	0.67	0.79	0.79	0.78
I-605	0.90	0.90	0.90	0.83	0.83	0.83	0.83	0.90	0.90	0.90
Alameda St	0.63	0.63	0.62	0.58	0.58	0.58	0.55	0.63	0.63	0.62
Atlantic Ave	0.16	0.16	0.16	0.12	0.12	0.12	0.12	0.16	0.16	0.16
Long Beach Blvd	0.38	0.38	0.38	0.30	0.30	0.30	0.30	0.38	0.38	0.38
Cherry Ave	0.51	0.51	0.51	0.40	0.40	0.40	0.40	0.51	0.51	0.51
Screenline 3										
I-710	0.88	0.77	0.85	0.82	0.72	0.79	0.70	0.77	0.77	0.69
I-110	0.74	0.74	0.74	0.68	0.68	0.68	0.65	0.74	0.74	0.74
I-605	0.98	0.98	0.97	0.90	0.90	0.89	0.87	0.98	0.98	0.97
Atlantic Ave	0.25	0.25	0.25	0.20	0.20	0.20	0.20	0.25	0.25	0.25
Garfield Ave	0.44	0.44	0.44	0.41	0.41	0.41	0.41	0.44	0.44	0.44
Lakewood Blvd	0.40	0.40	0.40	0.37	0.37	0.37	0.37	0.40	0.40	0.40
Long Beach Blvd	0.42	0.42	0.40	0.34	0.34	0.32	0.28	0.42	0.42	0.40
Screenline 4										
I-710	0.98	0.86	0.96	0.90	0.79	0.89	0.84	0.86	0.86	0.86
I-110	0.79	0.79	0.79	0.73	0.73	0.73	0.72	0.79	0.79	0.79
I-605	0.96	0.96	0.95	0.89	0.89	0.88	0.84	0.96	0.96	0.95
Alameda St	0.99	0.99	0.99	0.91	0.91	0.91	0.91	0.99	0.99	0.99
Avalon Blvd	0.34	0.34	0.34	0.31	0.31	0.31	0.31	0.34	0.34	0.34
Eastern Ave	0.62	0.62	0.61	0.49	0.49	0.49	0.49	0.62	0.62	0.61
Garfield Ave	1.04	1.04	1.04	0.96	0.96	0.96	0.93	1.04	1.04	1.04

Table 16. V/C Ratios for Mid-Day Time Period – Southbound (Secondary Scenario)

	LG+Reg'l Trucks- No Build	LG+Reg'l Trucks – Alt Tech (IE)
Screenline 1		
I-710	1.02	0.57
I-110	0.58	0.58
I-605	0.66	0.66
SR 47/103 (TI Freeway)	0.38	0.30
Alameda St	0.32	0.25
Atlantic Ave	0.07	0.07
Long Beach Blvd	0.10	0.10
Avalon Blvd	0.19	0.19
Screenline 2		
I-710	0.86	0.54
I-110	0.75	0.75
I-605	0.90	0.90
Alameda St	0.60	0.60
Atlantic Ave	0.16	0.16
Long Beach Blvd	0.38	0.38
Cherry Ave	0.51	0.51
Screenline 3		
I-710	0.93	0.67
I-110	0.73	0.73
I-605	0.96	0.96
Atlantic Ave	0.25	0.25
Garfield Ave	0.44	0.44
Lakewood Blvd	0.40	0.40
Long Beach Blvd	0.38	0.38
Screenline 4		
I-710	0.99	0.86
I-110	0.79	0.79
I-605	1.02	0.95
Alameda St	0.99	0.99
Avalon Blvd	0.34	0.34
Eastern Ave	0.61	0.61
Garfield Ave	1.04	1.04

Table 17. V/C Ratios for PM Peak Time Period – Northbound (Primary Scenarios)

	No Build			TSM/TDM			TSM/TDM + Exp PP	Alt. Tech		
	HG	HG+ND	LG	HG	HG+ND	LG	LG	HG	HG+ND	LG
Screenline 1										
I-710	1.29	1.21	1.22	1.20	1.12	1.13	1.09	1.15	1.15	1.02
I-110	0.78	0.78	0.77	0.71	0.71	0.71	0.70	0.78	0.78	0.77
I-605	0.87	0.87	0.87	0.80	0.80	0.80	0.80	0.87	0.87	0.87
SR 47/103 (TI Freeway)	0.51	0.63	0.49	0.47	0.59	0.45	0.42	0.46	0.46	0.44
Alameda St	0.55	0.66	0.56	0.51	0.62	0.52	0.50	0.50	0.50	0.51
Atlantic Ave	0.16	0.16	0.16	0.09	0.09	0.09	0.09	0.16	0.16	0.16
Long Beach Blvd	0.11	0.11	0.11	0.06	0.06	0.06	0.06	0.11	0.11	0.11
Avalon Blvd	0.43	0.43	0.43	0.39	0.39	0.39	0.39	0.43	0.43	0.43
Screenline 2										
I-710	1.10	1.02	1.07	1.02	0.94	0.99	0.95	1.02	1.02	0.95
I-110	1.02	1.02	1.00	0.94	0.94	0.92	0.91	1.02	1.02	1.00
I-605	1.17	1.17	1.17	1.07	1.07	1.07	1.07	1.17	1.17	1.17
Alameda St	0.96	0.96	0.94	0.89	0.89	0.87	0.87	0.96	0.96	0.94
Atlantic Ave	0.32	0.32	0.32	0.17	0.17	0.17	0.17	0.32	0.32	0.32
Long Beach Blvd	0.59	0.59	0.59	0.32	0.32	0.32	0.32	0.59	0.59	0.59
Cherry Ave	0.93	0.93	0.93	0.49	0.49	0.49	0.49	0.93	0.93	0.93
Screenline 3										
I-710	1.19	1.12	1.16	1.10	1.03	1.07	1.04	1.12	1.12	1.05
I-110	1.10	1.10	1.08	1.01	1.01	0.99	0.99	1.10	1.10	1.08
I-605	1.17	1.17	1.16	1.07	1.07	1.07	1.06	1.17	1.17	1.16
Atlantic Ave	0.52	0.52	0.52	0.27	0.27	0.27	0.27	0.52	0.52	0.52
Garfield Ave	0.85	0.85	0.85	0.52	0.52	0.52	0.52	0.85	0.85	0.85
Lakewood Blvd	0.83	0.83	0.83	0.76	0.76	0.76	0.76	0.83	0.83	0.83
Long Beach Blvd	0.75	0.75	0.76	0.39	0.39	0.40	0.39	0.75	0.75	0.76
Screenline 4										
I-710	1.26	1.18	1.21	1.16	1.08	1.11	1.10	1.18	1.18	1.09
I-110	1.16	1.16	1.17	1.06	1.06	1.08	1.07	1.16	1.16	1.17
I-605	1.33	1.33	1.33	1.22	1.22	1.22	1.21	1.33	1.33	1.33
Alameda St	1.66	1.66	1.66	1.52	1.52	1.52	1.53	1.66	1.66	1.66
Avalon Blvd	0.62	0.62	0.62	0.55	0.55	0.55	0.55	0.62	0.62	0.62
Eastern Ave	1.18	1.18	1.18	0.56	0.56	0.56	0.56	1.18	1.18	1.18
Garfield Ave	1.71	1.71	1.71	1.06	1.06	1.06	1.06	1.71	1.71	1.71

Table 18. V/C Ratios for PM Peak Time Period – Northbound (Secondary Scenario)

	LG+Reg'l Trucks- No Build	LG+Reg'l Trucks – Alt Tech (IE)
Screenline 1		
I-710	1.29	0.97
I-110	0.75	0.75
I-605	0.87	0.87
SR 47/103 (TI Freeway)	0.45	0.40
Alameda St	0.50	0.45
Atlantic Ave	0.16	0.16
Long Beach Blvd	0.10	0.10
Avalon Blvd	0.42	0.42
Screenline 2		
I-710	1.11	0.91
I-110	0.99	0.99
I-605	1.17	1.17
Alameda St	0.93	0.93
Atlantic Ave	0.32	0.32
Long Beach Blvd	0.59	0.59
Cherry Ave	0.93	0.93
Screenline 3		
I-710	1.22	1.03
I-110	1.08	1.08
I-605	1.16	1.16
Atlantic Ave	0.52	0.52
Garfield Ave	0.85	0.85
Lakewood Blvd	0.83	0.83
Long Beach Blvd	0.75	0.75
Screenline 4		
I-710	1.23	1.09
I-110	1.17	1.17
I-605	1.38	1.33
Alameda St	1.66	1.66
Avalon Blvd	0.62	0.62
Eastern Ave	1.18	1.18
Garfield Ave	1.71	1.71

Table 19. V/C Ratios for PM Peak Time Period – Southbound (Primary Scenarios)

	No Build			TSM/TDM			TSM/TDM + Exp PP	Alt. Tech		
	HG	HG+ND	LG	HG	HG+ND	LG	LG	HG	HG+ND	LG
Screenline 1										
I-710	1.15	1.08	1.11	1.06	1.00	1.02	1.06	1.03	1.03	0.95
I-110	0.89	0.89	0.89	0.82	0.82	0.82	0.82	0.89	0.89	0.89
I-605	0.90	0.90	0.90	0.82	0.82	0.82	0.82	0.90	0.90	0.90
SR 47/103 (TI Freeway)	0.58	0.68	0.55	0.54	0.63	0.51	0.51	0.54	0.54	0.52
Alameda St	0.39	0.48	0.39	0.36	0.45	0.36	0.37	0.35	0.35	0.35
Atlantic Ave	0.16	0.16	0.16	0.09	0.09	0.09	0.09	0.16	0.16	0.16
Long Beach Blvd	0.09	0.09	0.09	0.05	0.05	0.05	0.05	0.09	0.09	0.09
Avalon Blvd	0.42	0.42	0.42	0.39	0.39	0.38	0.39	0.42	0.42	0.42
Screenline 2										
I-710	0.93	0.85	0.90	0.85	0.78	0.83	0.86	0.85	0.85	0.79
I-110	1.14	1.14	1.13	1.04	1.04	1.04	1.04	1.14	1.14	1.13
I-605	1.21	1.21	1.21	1.11	1.11	1.11	1.11	1.21	1.21	1.21
Alameda St	0.96	0.96	0.96	0.88	0.88	0.88	0.89	0.96	0.96	0.96
Atlantic Ave	0.32	0.32	0.32	0.17	0.17	0.17	0.17	0.32	0.32	0.32
Long Beach Blvd	0.59	0.59	0.59	0.32	0.32	0.32	0.32	0.59	0.59	0.59
Cherry Ave	0.93	0.93	0.93	0.49	0.49	0.49	0.49	0.93	0.93	0.93
Screenline 3										
I-710	0.99	0.93	0.97	0.91	0.86	0.90	0.91	0.93	0.93	0.89
I-110	1.15	1.15	1.15	1.06	1.06	1.05	1.06	1.15	1.15	1.15
I-605	1.24	1.24	1.24	1.14	1.14	1.13	1.14	1.24	1.24	1.24
Atlantic Ave	0.51	0.51	0.51	0.27	0.27	0.27	0.27	0.51	0.51	0.51
Garfield Ave	0.85	0.85	0.85	0.52	0.52	0.52	0.52	0.85	0.85	0.85
Lakewood Blvd	0.84	0.84	0.84	0.77	0.77	0.77	0.77	0.84	0.84	0.84
Long Beach Blvd	0.78	0.78	0.77	0.41	0.41	0.40	0.40	0.78	0.78	0.77
Screenline 4										
I-710	1.22	1.16	1.21	1.12	1.06	1.11	1.13	1.16	1.16	1.16
I-110	1.17	1.17	1.17	1.07	1.07	1.07	1.08	1.17	1.17	1.17
I-605	1.20	1.20	1.19	1.10	1.10	1.09	1.11	1.20	1.20	1.19
Alameda St	1.67	1.67	1.67	1.53	1.53	1.53	1.53	1.67	1.67	1.67
Avalon Blvd	0.62	0.62	0.62	0.56	0.56	0.56	0.56	0.62	0.62	0.62
Eastern Ave	1.19	1.19	1.19	0.56	0.56	0.56	0.56	1.19	1.19	1.19
Garfield Ave	1.80	1.80	1.80	1.12	1.12	1.12	1.12	1.80	1.80	1.80

Table 20. V/C Ratios for PM Peak Time Period – Southbound (Secondary Scenario)

	LG+Reg'l Trucks- No Build	LG+Reg'l Trucks – Alt Tech (IE)
Screenline 1		
I-710	1.16	0.91
I-110	0.88	0.88
I-605	0.90	0.90
SR 47/103 (TI Freeway)	0.51	0.47
Alameda St	0.36	0.32
Atlantic Ave	0.16	0.16
Long Beach Blvd	0.09	0.09
Avalon Blvd	0.42	0.42
Screenline 2		
I-710	0.93	0.76
I-110	1.12	1.12
I-605	1.21	1.21
Alameda St	0.94	0.94
Atlantic Ave	0.32	0.32
Long Beach Blvd	0.59	0.59
Cherry Ave	0.93	0.93
Screenline 3		
I-710	1.02	0.87
I-110	1.14	1.14
I-605	1.23	1.23
Atlantic Ave	0.51	0.51
Garfield Ave	0.85	0.85
Lakewood Blvd	0.84	0.84
Long Beach Blvd	0.76	0.76
Screenline 4		
I-710	1.23	1.16
I-110	1.17	1.17
I-605	1.23	1.19
Alameda St	1.67	1.67
Avalon Blvd	0.62	0.62
Eastern Ave	1.19	1.19
Garfield Ave	1.80	1.80

6.0 IFA LANE REQUIREMENTS ANALYSIS APPROACH AND RESULTS

Lane requirements for each of the scenario-alternative combinations were analyzed using the following approach:

- Peak hour volumes by vehicle class were calculated from the peak period model volumes into Passenger Car Equivalents to determine peak hour V/C ratios and to develop lane requirements (autos, trucks, and total);
- Capability of general purpose (GP) lanes to absorb overflow truck volumes during the peak hours, especially during the mid-day peak period, was analyzed; and
- Potential impact of longer trips to new inland warehouse locations was considered.

Peak hour volumes (AM, Mid-Day, and PM) were calculated by applying a peak hour percentage of the peak period factor to the peak period volumes.

Freeway mainline traffic counts were manually collected in May/June 2008 at five locations along I-710: 3rd Street, Willow Street, Long Beach Boulevard, Alondra Boulevard, and Slauson Avenue. The counts were recorded by lane and collected on a 12-hour period between 7:00 a.m. and 7:00 p.m. to capture peak hourly traffic data. The raw data for these existing freeway mainline traffic counts are contained in the Technical Memorandum – Traffic Data And Forecasting Analysis Report. This data was used to determine the peak hour percentage to be applied to each of the three peak periods.

The average hourly volume during the AM peak period was calculated and applied for the 6:00 to 7:00 a.m. time period in order to correspond to the 13-hour combination of the AM, Mid-Day and PM peak periods of the model. The automobile peak hour percentage was calculated by dividing the peak hourly auto volumes by the sum of the total auto volumes within each peak period. Table 21 presents the peak period percentage results.

Table 21. Automobile Peak Hour Percentages of the Peak Periods

Mainline Count Location	AM Peak (6-9)	Mid-Day Peak (9-3)	PM Peak (3-7)
1 3rd St	37	22	28
2 Willow St	36	22	29
3 Long Beach Bl	38	21	29
4 Alondra Bl	38	22	27
5 Slauson Ave	35	22	28
Average	**37**	**22**	**28**

The hourly distribution of arrivals and departures provided by the Ports of Los Angeles and Long Beach were used for calculation the peak hour percentages to be applied to the Port truck volumes. The percentages are listed below by peak hour.

- AM peak hour percentage of the peak period: 40%
- Mid-Day peak hour percentage of the peak period: 20%
- PM peak hour percentage of the peak period: 37%

The non-Port truck volumes within each peak hour were calculated using the same percentages calculated for the automobiles presented in the table above.

Once the peak hour volumes were calculated for automobiles, Port trucks and non-Port trucks, a PCE factor was applied to each vehicle classification using 1.0 for automobiles and 2.0 for all trucks. The peak hour volumes (AM, Mid-Day, and PM) shown in the Lane Requirement Analysis contained in **Appendix C** were derived by multiplying the peak period volume by the appropriate peak hour percentage multiplied by the PCE factor and rounded to the nearest 25 vehicles. It should be noted that the total automobile volumes for Alternative 2 were reduced by three percent to account for TDM improvements within the corridor.

Volume-to-capacity ratios were calculated by dividing the peak hour volumes (in PCEs) by the mainline lane capacity, which is the number of lanes multiplied by a basic lane capacity of 2,000 vehicles per hour per lane to be consistent with the SCAG model. The 2,000 vphpl basic lane capacity was used for Alternatives 1 and 3. The basic lane capacity for Alternative 2 was increased by six percent to 2,120 vphpl (2000*1.06=2120) to account for the TSM improvements within the corridor. Table 22 presents the lane capacities used in the analysis by

Screenline location in the Northbound/Southbound directions along I-710. Auxiliary lanes were analyzed assuming a half lane capacity.

Table 22. Lane Capacities by Screenline Location

Screenline Location	Mainline Lanes	Auxiliary Lanes	Total Lanes	Alt 1 Capacity	Alt 2 Capacity	Alt 3 Capacity
1 n/o PCH	3 / 3	- – / --	3 / 3	6,000 / 6,000	6,360 / 6,360	6,000 / 6,000
2 n/o Del Amo Bl	4 / 4	1 / --	4.5 / 4	9,000 / 8,000	9,540 / 8,480	9,000 / 8,000
3 s/o Rosecrans Ave	4 / 4	2 / 2	5 / 5	10,000 / 10,000	10,600 / 10,600	10,000 / 10,000
4 n/o Atlantic Bl	4 / 4	1 / 1	4.5 / 4.5	9,000 / 9,000	9,540 / 9,540	9,000 / 9,000

The detailed results of the Lane Requirements Analysis for each of the 12 growth scenarios/ alternatives combinations are presented in **Appendix C**. **Appendix D** presents the summary results from the Lane Requirements Analysis comparing the peak-hour V/Cs and lane requirements at each I-710 screenline across all the growth scenarios and alternatives. In these tables, the High Port Cargo Growth with Near-Dock Expansion scenario represents HG + ND, the High Port Cargo Growth without Near-Dock Expansion scenario represents HG, the Low Port Cargo Growth scenario represents LG, the Low Port Cargo Growth scenario with New Warehouse Locations represents LG + Reg'l Trucks, and the Low Port Cargo Growth scenario with Expanded PierPASS represents the LG scenario with TSM/TDM + Exp PP.

APPENDIX A. PROJECTS INCLUDED IN THE BASELINE (NO-BUILD) MODEL

RTIP/RTP ID	PROJECT/ ROUTE NAME	FROM	TO	PROJECT DESCRIPTION	ADDITIONAL PROJECT DETAILS, IF AVAILABLE
17190	I-710	Atlantic Blvd	Bandini Blvd	Between Atlantic Bl & Bandini Bl - Undercrossings- Phase I: Reconfig Nb 710 On-Ramp – Construct ~400 Mtr Loop Ramp Located ~300 Mtrs N/O Atlantic/Bandini, New Ramp Crosses Atlantic On New Bridge Structure Connecting To Existing On-Ramp W/O Atlantic; Relocate Nb On-Ramp; Extend Sb On-Ramp @ Atlantic ~120 Mtrs W/O Existing Ramp Terminus And 2-Ln Facility W/O Divergence Pt And Nb Off-Ramp At Bandini; Extend Nb Ramp To 2 Lanes	Reconfiguration Of The Northbound 710 On-Ramp From Atlantic/Bandini Blvd – Construct Approx 400 Meter-Long Loop Ramp, Located Approx 300 Meters North Of The Atlantic/Bandini Intersection. The New Ramp Crosses Atlantic Blvd On A New Bridge Structure Connecting To The Existing On-Ramp West Of Atlantic Boulevard And Relocate I-710 Northbound On Ramp
17860	I-5	Sonora Ave	Allen St	On Rte 5 Between Sonora Ave And Allen St – Modify Rte 5/Western Ave Interchange (Realigning The 8 Existing On & Off Ramps).Rte.5/Western Ave Access Program Glendale. Ppno 2120a. Realign/Modify Nb I-5 On/Off Ramps At Western: Remove Existing 1 Ln Exit That Splits To Eb/Wb Western; Replace With New 2-Ln Hook Off-Ramp That Widens To 4 Lns At Fower St	Realign And Modify The Nb I-5 On-And Off-Ramps At Western Avenue The Existing 1-Lane, Loop Off-Ramp To Eb Western Avenue And 1-Lane, Loop Off-Ramp To Wb Western Avenue Will Be Realigned To A 2-Lane Hook Off-Ramp – Which Will Widen To 4 Lanes At The End Of The Ramp And Terminate At Flower Street. No Additional Through Lanes Will Be Constructed. The Current 1 Lane Exit To Off-Ramp That Splits To Both Wb And Eb Western Avenue-Will Be Removed; New Two Lane Off-Ramp Exit Will Be Constructed And Widen To Four Lanes At Flower Street
927835SS	I-405	At Del Amo Blvd		In Carson City At Del Amo Boulevard – New 6 Lane Overcrossing (Tea21-#1173)	Add New 6 Lane Overcrossing
LA000359	I-10	Baldwin Avenue	Route 605	In El Monte And Baldwin Park From Baldwin Ave To Route 605 HOV Lanes (8+0 To 8+2) And Tos Projects. (Ea# 10695, 22350, 22340 Ppno 0295m, Ppno 2969,Ppno 2968)	Add 1 HOV In Each Direction
LA01342	I-10	Route 605	Puente Avenue	Rt 10 From Rt 605 To Puente Ave Hov Lanes (8+0 To 8+2) (Ea# 117070, Ppno 0306h) Ppno 3333 3382 Ab 3090 Rep	Add 1 Hov In Each Direction

LA0C40	VALLEY BLVD / WEST MISSION ROAD	I-710 Alignment		Valley Blvd/West Mission Road I-710 Connector: Construct Frontage Rd In I-710 Alignment From Valley Blvd & West Mission Rd In The Exis.T State Row & Build Grade Sep, 2 Ln Ea Dir.	Add Frontage Road
LA0C8037	SOTO ST	Over Mission Road & Huntington Drive		Soto St Bridge Over Mission Rd & Huntington Dr Demolition Project Will Realign The Street To Increase Traffic Flow Adding A Bike Lane. Ppno 3093 3380 (53c0013). Add Sb Lane.	Add Southbound Lane
LA0C8087	MAGNOLIA BL	Cahuenga Blvd	Vineland Avenue	Magnolia Blvd Widening-Cahuenga Blvd To Vineland Avenue From The Existing Roadway Standard To Secondary Hwy Standard. From 1 Lane To 2 Lanes In Each Direction. (Ppno 3110).	Widen From 1 To 2 Lanes In Each Direction
LA0C8095	CHERRY AVE	19th	Pacific Coast Hwy	Cherry Avenue Widening Project. Bet 19th St And Pacific Coast Highway By Widening The Arterial From One To Two Lanes In Each Direction.(Ppno 3128). Safetea-Lu #3203	Widen From 1 To 2 Lanes In Each Direction
LA0D169	BROADWAY	Main Street	Griffith Street	Broadway Improvements From Main St To Griffith St. Construct Raised Concrete Medians With Landscape And Hardscape, Add Curb & Gutter And Sidewalk. Add One Lane Each Direction.	Widen Broadway And Add 1 Lane On Each Side Of Existing Roadway; Existing:1 Lane In Each Direction; Future- 2 Lanes Each Direction
LA0D190	ATLANTIC BL	Newmark Avenue	Hillman Avenue	No. Atlantic Blvd – Newmark Ave To Hillman Ave – Channelization Widen To Six Lanes Of Operation To Include Acceleration & Decelaration Lane Oprtn Mdifction; From 4 To 6 Lns.	Widen North Atlantic Blvd To Six Lanes Of Operation To Include Acceleration & Decelaration Lane Oprtn Mdifction Widen From 4 Lanes Currently To 6 Lanes (Add 1 Lane In Each Direction)
LA0D328	110 (HARBOR FREEWAY)	12th Street	110/I-10 Connector	In Los Angeles-South Bound Harbor Freeway From 8th Street On Ramp To I-110/I-10 Connector, Construct Sb Auxiliary Lane And Modify Ramps Nb Harbor Freeway From The North End Of 12th Street Uc To The North End Of The 7th Street Uc; Add Auxiliary Lane And Reconstruct Ramp	-
LA0D332	I-405	La Tijera Blvd	Jefferson Blvd	In Los Angeles: From La Tijera Blvd To Jefferson Blvd; Add Auxiliary Lane Nb (Ppno: 3348 Ea: 24130). Widen Centinela &	Widening Centinela Ave Undercrossing & Sepulveda Blvd Undercrossing, Widening & Realigning On- & Off-Ramp At La Tijera Blvd, Sepulveda Blvd And Jefferson

				Sepulveda Undercrossing, Widen/Realign On/Off Ramps At La Tijera, Sepulveda, Jefferson.	Boulevard Existing – 4 Mf Each Dir + 1 Aux Ln Each Dir, Total 10 Lns; 1 Aux Ln Will Be Added Nb For A Total Of 11 Lns
LA0D390	HARBOR BL	I-110 / Sr-47		Arterial Street And Freeway-To-Freeway Interchange Improvements At Sr-47 (Vincent Thomas Bridge) And I-110; And Modification To I-110 Nb On-Off Ramps Termini At John S. Gibson Blvd	-
LA0D441	VALLEY BL	605 Freeway		Reconfiguration Of Valley Blvd On-And-Off-Ramps @ I-605. Wb Valley To Nb 605 From 1 To 2 Lns; Wb Valley To Sb 605 From 1 To 2 Lns; Eb Valley To Nb 605 From 1 To 2 Lns; Eb Valley To Sb 605 From 1 To 2 Lns	Wb Valley To Nb 605 -Increase 1 Lane, (From 1 Existing Lane To 2 Lanes) Wb Valley To Sb 605-Increase 1 Lane (From 1 Existing Lane To 2 Lanes) Eb Valley To Nb 605-Increase 1 Lane (From 1 Existing Lane To 2 Lanes) Eb Valley To Sb 605-Increase 1 Lane (From 1 Existing Lane To 2 Lanes)
LA0D73	I-5	Orange County Line	Route 605	La Mirada, Norwalk & Santa Fe Springs-Orange Co Line To Rte 605 Junction. Widen For Hov & Mixed Flow Lns, Reconstruct Valley View (Ea 2159a0, Ppno 2808).	Widen For Hov & Mixed Flow Lanes – 1 Lane In Each Direction
LA0D73B	I-5	At Carmenita Ic		In Norwalk: From Orange County Line To Route 605: Carmenita Interchange Improvement (Ea 2159c0, Ppno 2808a) Removal Of Existing 2 Lns Steel Structure And Construct New 8 Lns Concrete Structure, W/Tight Diamond Ramps And Improve Existing Frontage Roads.	Removal Of The Existing Two Lanes Steel Structure And Constructing A New Eight Lanes Concrete Structure, With Tight Diamond Ramps And Improve Existing Frontage Roads.
LA57000	OCEAN BL / TERMINAL ISLAND FREEWAY INTERCHANGE	Navy Mole Overhead	0.9 Km East Of The Terminal Island Freeway	Ocean Blvd/Terminal Island Freeway Interchange (Port Of Long Beach – Padp #30) (T21-#742) Split Diamond Interchange That Elevates Ocean Blvd; 2 Lns Ea Dir; Ramps 2 Lns Each Dir	Split Diamond Interchange That Elevates Ocean Blvd In Long Beach. 2 Lanes In Ea. Direction. Ramps 2 Lanes In Each Direction.
LA960150	SPRING ST	Long Beach Blvd	300' East Of Atlantic Ave	Spring St Ph. Ii – Long Beach Blvd To 300' E/O Atlantic Ave Widen Roadway Widen 2 To 4 Lanes	Widen From 2 To 4 Lanes
LA960168	SPRING ST	Long Beach Blvd	Orange Avenue	Spring Street – From Long Beach Blvd To Orange Avenue (2 To 4 Lanes)	Widen From 2 To 4 Lanes
LA98STIP4	U.S.-101	Los Angeles Street	Center Street	Rt. 101 Sb Imprvmnts From L.A. St To Center St Elmnate Hewitt St On /Off Ramps & Vignes Off Ramp. Add New On Ramp At Garey St. Ea 199u1,119911,Ppno 0567p (Ab3090rep $22599)	Eliminate Hewitt Street On/Off Ramps And Vignes Off Ramp
LA996137	SR-60	Route 605	Brea Canyon	Rte. 60 Hov Lns. From Rte. 605 To	Add 1 Hov In Each Direction

			Road	Brea Canyon Road – Construct One Hov Lane In Each Direction) (Cfp: 358, 4262, 6137=67,150+Iip: 5,100) (Ea#129410, 129421, Ppno 0482r,0482ra)	
LA996347	I-710	Firestone Blvd	Southern Ave	I-710/Firestone Blvd Over La River Bridge Widening On-Ramp Mod. & Soundwall Along I-710 From Firestone Boulevard To Southern Avenue Phase Iv (Hbrr: 53c1972) Widening From 4.7m To 6.4m. Widen Firestone Blvd From 2 To 3 Lns	Widening From 2 To 3 Lanes On Firestone Blvd
LA996348	FIRESTONE BL	At The Rio Hondo Channel Bridge	Garfield	Widen Firestone Blvd Brdge Over The Rio Hondo Channel And Minor Street Widening Between The Bridge And Garfield Avenue Add 1 Wb Ln (From 2 To 3 Lns). Ppno 2362. (53c1973)	Add One Westbound Lane From 2-3. This Project Involves Widening Both Sides Of Firestone Boulevard Bridge Over Rio Hondo Channel To Provide A Three Through Lanes In Each Direction With A Center Raised Median Island.
LA996415	UPPER 2ND ST	Grand Avenue	Olive Street	Upper 2nd St- Enhance Circulation W/In The Bunker Hill Area From Grand Ave To Olive St (From 0 To 2 Lane In Each Direction – 350 Ft.). Ppno 2375.	From 0 To 1 Lanes In Each Direction
LAE0688	WILMINGTON AVE / 223RD ST	I-405		Wilmington Ave/I-405 Interchange: Add 1 Lane On Wilmington Ave Nb From 223rd St To I-405 Nb Off-Ramp; Construct New 2-Ln Nb On-Ramp From Sb Wilmington Avenue Widen I-405 Sb On And Off Ramps From 2 To 3 Lns.	1-Construction Of An Additional Traffic Lane On Wilmington Avenue Northbound From 223rd Street To The Existing I-405 Nb Off-Ramp. (From 0 To 2) 2-Construction Of A New Two Lane I-405 Nb On-Ramp From Southbound Wilmington Avenue (From 0 To 2) 3-Construction Of Additional Lane To The Existing Two Lane I-405 Sb On-Ramp From Wilmington Ave (From 2 To 3) 4-Construction Of Additional Lane To The Existing Two Land I-405 Sb Off-Ramp To Wilmington Ave (From 2 To 3).
LAE1920	DEL AMO BL	Normandie Avenue	New Hampshire	Reconstruct And Widen Del Amo Boulevard To Four Lanes (2 Each Dir) Between Normandie Avenue And New Hampshire	Dd Four Lanes (Two Lanes Each Direction 10-12') Each Lane. Existing Is 1 Lane Each Direction. Propose To Widen To 2 Lanes Each Direction.
LAE2024	LA BREA AV / HILLCREST BL			Realignment La Brea Av To Reduce Congestion: Improvements At Intersection With Hillcrest Blvd (6-Leg To 4-Leg/Signalized) & With Tamarack Av (Add Signal)- No Capacity Increase. Close Market Street At La Brea; La Brea Will Become 3 Lns Each Dir Between Market And Hillcreast.	Realignment Of A Regional Arterial Surface Street(La Brea Avenue)-Does Not Involve Freeway Or Freeway Ramps— In Inglewood, La Brea Avenue Does Sort Of A Dogleg Bend At The Complicated Six-Legged Intersection Of La Brea Avenue, La Brea Drive, Spruce Avenue And Market Street [Thos Bros Map P. 703, Grid C-3]. South Of This Dogleg, La Brea Avenue Has 6 Through-Lanes (3 Per Direction)-A Capacity That Extends Down La Brea (And

					Down Its Reincarnation As Hawthorne Boulevard) All The Way Into The South Bay. Currently, The Three Northbound Lanes, As They Approach This 6-Legged Intersection, Do The Following: No. 1 Lane (Closest To Median) Becomes A Left-Only Lane, No. 2 Lane Splits Into Two Lanes And Becomes A Left-Only Land And A Through-Lane, And The No. 3 Lane Is A Through-Lane (Both Through-Lanes Continue Due North Onto Market Street). Additionally, From The No. 3 Lane, Motorists Can Turn Right Onto Spruce Avenue Or La Brea Drive. Currently, The Two Left-Turning Lanes Carry The La Brea Avenue Arterial "Through" Traffic Onto The Northerly Continuation Of La Brea Avenue (Which Is Currently A 4-Lane Roadway North Of This Point-2 Lanes Per Direction). The Realignment Project Will Close Market Street, So Northbound No. 1,2 And 3 Lanes Will All Curve Together Towards The Northerly Continuation Of La Brea Avenue (Hence, For The First Block, The Lanes Will Increase From 4 To 6 (From 2 To 3 In Each Direction). But At Hillcrest Boulevard, The No. 3 Lane Will Become A Right-Only Lane, Redirecting Traffic Along Hillcrest Boulevard Back To Market Street. North Of Hillcrest Boulevard, La Brea Avenue Will Remain A 4-Lane Roadway (2 Through-Lanes Per Direction). In Summary, Increasing One Block Of La Brea Avenue From 4 Lanes To 6 [A Net Gain Of 2 Lanes]. Concurrently Removing 4 Lanes From Adjoining Market Street By Fully Closing The Street As Part Of This Project [A Net Reduction Of 4 Lanes].
LAE3018	VALLEY BL	I-710	Marguerita	Valley Blvd Capacity Improvements Between 710 And Marguerita. Add 1 Ln Each Dir (Currently Parking Lns Convert To Travel Lanes During Peak)	And 1 Lane In Ea Dir. From 710 To Marguerita (Currently Parking Lane Converting To Travel Lanes During Peak Hours West Peak Is Morning And Eastbound Is Evening Peak).
LAE3085	WASHINGTON BL	Westerly City Boundary At Verno	I-5 Fwy At Telegraph Rd	Widen And Reconstruct Washington Blvd From Westerly City Boundary At Vernon To I-5 Fwy At Telegraph Road Road Will Be Widened From 2 Lanes To 3 Lanes In Each Direction, Increase Turn Radius And Medians, Upgrade Traffic Signals And	ONE NEW LANE WILL BE ADDED IN EACH DIRECTION, {MTA (From X To Y). Modeling Notes: Project Will Be Done In Three Phases: Phase 1 City Boundary At Vernon To I-710; Phase 2 I-710 To Atlantic Blvd; Phase 3 Atlantic Blvd To I-5 Freeway At Telegraph} EXISTING IS 2 LANES IN EACH DIRECTION; PROPOSED IS 3

				Medians, Upgrade Traffic Signals And Street Lighting And Improve Sidewalks.	LANES IN EACH DIRECTION THROUGH WIDENING
ORA000193	SR-22	I-405	I-605	Hov Connectrs On 22/405 Btwn Seal Bch Bl. & Valley View & On 405/605 Btwn Katella Ave & Seal Bch Bl. W/2nd Hov Ln In Ea Dir On 405 Btwn Connectrs Ea071631 Dual Ld Caltrans-Octa	Hov Connectors On 22/405 Btwn Seal Beach Blvd & Valley View, From Sb 405 To Eb 22 And Wb 22 To Nb 405. Hov Connectors On 405/605 Btwn Katella Ave & Seal Beach Blvd, From Nb 405 To Nb 605 And Sb 605 To Sb 405.
1M0132	SR-103	Pier B St / Terminal Island Fwy		Pier B St/Terminal Island Fwy Interchange Improvement – New Nb On-Ramp To Sr-103	-

APPENDIX B. DETAILED TRAFFIC VOLUME RESULTS

1. HG WITH NO BUILD

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	9,702	2,407	0	862	1,787
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	9,116	2,780	55		474
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	8,214	2,380	1,421		702
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	4,630	1,026	3,200		93
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	23,758	6,158	0	3,072	4,472
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	23,122	6,899	148		1,453
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	20,785	6,018	3,788		1,766
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	11,920	2,491	7,961		477
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	9,837	2,683	0	1,629	1,936
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	9,925	2,937	72		726
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	8,955	2,575	1,696		748
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	5,326	1,006	3,339		288
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

2. HG+ND with No Build

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	7,982	2,407	0	1,695	2,674
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	6,539	2,780	55		474
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	5,637	2,380	1,421		702
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	2,053	1,026	3,200		93
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	19,468	6,158	0	5,149	6,684
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	16,682	6,899	148		1,453
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	14,345	6,018	3,788		1,766
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	5,480	2,491	7,961		477
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	8,054	2,683	0	2,493	2,856
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	7,248	2,937	72		726
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	6,278	2,575	1,696		748
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	2,649	1,006	3,339		288
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

3. LG + No Build

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	8,497	2,281	0	765	1,739
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	8,197	2,509	48		398
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	7,383	2,150	1,283		570
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	3,774	1,298	3,018		78
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	20,690	5,775	0	2,694	4,384
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	20,686	6,172	128		1,242
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	18,546	5,369	3,412		1,542
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	9,618	3,189	7,499		430
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	8,561	2,520	0	1,421	1,954
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	8,931	2,624	63		632
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	8,020	2,280	1,536		724
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	4,286	1,355	3,180		262
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

4. LG + Reg'l Trucks with No Build

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	9,660	1,845	0	599	1,386
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	9,392	2,023	48		315
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	9,115	1,901	1,117		486
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	4,435	1,298	4,676		78
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	23,798	4,670	0	2,109	3,493
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	23,710	4,983	128		986
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	22,929	4,750	2,973		1,326
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	11,285	3,189	11,684		430
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	10,016	2,024	0	1,103	1,546
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	10,277	2,110	63		500
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	9,962	2,014	1,335		630
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	5,024	1,355	5,039		262
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

5. HG with TSM/TDM

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	9,702	2,407		862	1,787
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	9,116	2,780	55		474
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	8,214	2,380	1,421		351
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	4,630	1,026	3,200		93
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	23,758	6,158	0	3,072	4,472
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	23,122	6,899	148		1,453
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	20,785	6,018	3,788		883
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	11,920	2,491	7,961		477
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	9,837	2,683		1,629	1,936
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	9,925	2,937	72		726
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	8,955	2,575	1,696		374
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	5,326	1,006	3,339		288
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

6. HG+ND with TSM/TDM

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	7,982	2,407	0	1,695	2,674
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	6,539	2,780	55		474
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	5,637	2,380	1,421		702
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	2,053	1,026	3,200		93
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	19,468	6,158	0	5,149	6,684
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	16,682	6,899	148		1,453
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	14,345	6,018	3,788		1,766
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	5,480	2,491	7,961		477
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	8,054	2,683	0	2,493	2,856
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	7,248	2,937	72		726
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	6,278	2,575	1,696		748
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	2,649	1,006	3,339		288
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

7. LG with TSM/TDM

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	8,497	2,281	0	765	1,739
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	8,197	2,509	48		398
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	7,383	2,150	1,283		570
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	3,774	1,298	3,018		78
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	20,690	5,775	0	2,694	4,384
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	20,686	6,172	128		1,242
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	18,546	5,369	3,412		1,542
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	9,618	3,189	7,499		430
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	8,561	2,520	0	1,421	1,954
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	8,931	2,624	63		632
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	8,020	2,280	1,536		724
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	4,286	1,355	3,180		262
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

8. LG with TSM/TDM+Exp PP

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	7,422	1,974	0	634	1,545
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	7,046	2,113	44		391
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	6,407	1,837	1,069		454
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	3,389	1,160	2,654		75
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	13,987	3,868	0	1,735	2,997
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	13,218	3,917	85		917
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	11,910	3,462	2,165		988
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	6,353	2,123	4,841		280
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	8,444	2,446	0	1,298	1,893
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	8,617	2,563	55		703
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	7,715	2,257	1,524		750
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	4,256	1,351	3,206		284
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

9. HG with Alt Tech

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	6,775	2,407	0	522	1,425
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	6,539	2,780	55		474
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	5,637	2,380	1,421		702
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	2,053	1,026	3,200		93
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	16,439	6,158	0	2,224	3,568
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	16,682	6,899	148		1,453
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	14,345	6,018	3,788		1,766
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	5,480	2,491	7,961		477
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	6,795	2,683	0	1,276	1,560
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	7,248	2,937	72		726
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	6,278	2,575	1,696		748
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	2,649	1,006	3,339		288
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

10. HG+ND with Alt Tech

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	6,775	2,407	0	522	1,425
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	6,539	2,780	55		474
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	5,637	2,380	1,421		702
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	2,053	1,026	3,200		93
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	16,439	6,158	0	2,224	3,568
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	16,682	6,899	148		1,453
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	14,345	6,018	3,788		1,766
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	5,480	2,491	7,961		477
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	6,795	2,683	0	1,276	1,560
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	7,248	2,937	72		726
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	6,278	2,575	1,696		748
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	2,649	1,006	3,339		288
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

11. LG with Alt Tech

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	4,344	2,281	0	425	1,377
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	4,394	2,509	48		398
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	3,580	2,150	1,283		570
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	643	1,298	3,018		78
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	10,310	5,775	0	1,846	3,480
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	11,185	6,172	128		1,242
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	9,045	5,369	3,412		1,542
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	2,180	3,189	7,499		430
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	4,248	2,520	0	1,068	1,578
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	4,983	2,624	63		632
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	4,072	2,280	1,536		724
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	1,208	1,355	3,180		262
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

12. LG+Reg'l Trucks with Alt Tech+IE

	I-710	I-110	I-605	SR 47/103	All Arterials on Screenline
AM PEAK					
Screenline 1					
Port Trucks	3,188	1,845	0	259	1,024
Regional Trucks	756	1,409	1,273	78	45
Autos	20,847	30,090	37,739	3,139	6,917
Screenline 2					
Port Trucks	3,270	2,023	48		315
Regional Trucks	366	1,433	1,657		1,087
Autos	29,136	41,564	63,781		18,571
Screenline 3					
Port Trucks	2,993	1,901	1,117		486
Regional Trucks	2,814	787	1,994		336
Autos	39,906	61,946	75,360		15,010
Screenline 4					
Port Trucks	738	1,298	3,018		78
Regional Trucks	2,581	1,555	2,001		1,147
Autos	46,175	73,231	59,425		28,777
MID-DAY PEAK					
Screenline 1					
Port Trucks	7,566	4,670	0	1,261	2,589
Regional Trucks	1,938	3,719	3,375	214	118
Autos	27,375	41,605	71,663	4,151	9,501
Screenline 2					
Port Trucks	8,357	4,983	128		986
Regional Trucks	1,073	3,878	4,383		2,945
Autos	38,661	57,388	94,849		25,347
Screenline 3					
Port Trucks	7,576	4,750	2,973		1,326
Regional Trucks	7,919	2,133	5,355		883
Autos	53,467	89,104	110,296		20,956
Screenline 4					
Port Trucks	2,187	3,189	7,499		430
Regional Trucks	6,671	4,180	5,449		3,045
Autos	67,167	107,215	86,464		39,553
PM PEAK					
Screenline 1					
Port Trucks	3,107	2,024	0	750	1,170
Regional Trucks	307	1,469	2,026	69	82
Autos	38,226	45,102	66,912	5,370	12,389
Screenline 2					
Port Trucks	3,733	2,110	63		500
Regional Trucks	220	1,595	2,697		1,387
Autos	49,033	59,901	89,790		33,684
Screenline 3					
Port Trucks	3,418	2,014	1,335		630
Regional Trucks	1,816	882	2,891		632
Autos	65,765	91,999	106,377		30,935
Screenline 4					
Port Trucks	1,208	1,355	3,180		262
Regional Trucks	1,887	1,895	2,510		1,842
Autos	74,962	105,930	89,306		51,006

APPENDIX C. LANE REQUIREMENTS ANALYSIS RESULTS (2035 LANE REQUIREMENTS ON I-710)

1. HG with No Build

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	3.0	3,225	0.5	2,850	0.5	3.0	5,250	0.9	5,375	0.9	5.8	GP
Port Trucks	58,947	3,775		4,000			4,950		4,600			4,350		3,000			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	62,423	4,275	0.7	4,050	0.7	4.2	5,700	1.0	4,700	0.8	5.2	4,500	0.8	3,025	0.5	3.8	Truck
Total PCE	239,534	8,375	1.4	7,675	1.3	**9**	8,925	1.5	7,550	1.3	**9**	9,750	1.6	8,400	1.4	**10**	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,600	0.8	6,000	0.8	6.8	GP
Port Trucks	57,367	3,050		3,450			5,125		4,150			4,550		2,075			
Regional Trucks	1,931	125		150			200		275			50		75			
Total Trucks	59,301	3,975	0.4	3,600	0.5	3.8	5,325	0.6	4,425	0.6	4.9	4,600	0.5	2,950	0.4	3.8	Truck
Total PCE	266,033	9,575	1.1	8,800	1.1	**10**	9,775	1.1	8,550	1.1	**10**	12,200	1.4	8,950	1.1	**11**	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	190,687	6,050	0.6	8,725	0.9	7.4	4,850	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	51,610	3,700		2,075			4,075		3,475			4,300		2,400			
Regional Trucks	14,954	1,550		525			2,525		900			700		325			
Total Trucks	66,564	5,250	0.5	3,400	0.3	4.3	7,500	0.8	4,375	0.4	5.9	5,000	0.5	2,725	0.3	3.9	Truck
Total PCE	328,815	11,300	1.1	12,125	1.2	**12**	12,350	1.2	11,400	1.1	**12**	14,325	1.4	11,650	1.2	**13**	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	29,604	2,325		1,375			3,200		1,600			2,925		1,075			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	43,114	3,475	0.4	2,125	0.2	2.8	4,975	0.6	2,775	0.3	3.9	3,450	0.4	1,600	0.2	2.5	Truck
Total PCE	316,990	10,600	1.2	12,100	1.3	**12**	11,100	1.2	11,575	1.3	**12**	13,375	1.5	12,500	1.4	**13**	Total

2. HG+ND with No Build

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	3.9	3,225	0.5	2,850	0.5	3.0	5,250	0.9	5,375	0.9	5.3	GP
Port Trucks	48,330	3,100		3,275			4,100		3,725			3,600		2,425			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	51,806	3,600	0.6	3,325	0.6	3.5	4,850	0.8	3,825	0.6	4.3	3,750	0.6	2,450	0.4	3.1	Truck
Total PCE	218,300	7,700	1.3	6,950	1.2	**8**	8,075	1.3	6,675	1.1	**8**	9,000	1.5	7,825	1.3	**9**	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,600	0.8	6,000	0.8	6.8	GP
Port Trucks	41,435	2,875		2,375			3,850		2,850			3,450		1,975			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	43,369	3,000	0.3	2,525	0.3	2.8	4,050	0.5	3,125	0.4	3.6	3,500	0.4	2,050	0.3	2.8	Truck
Total PCE	234,169	8,600	1.0	7,725	1.0	**9**	8,500	0.9	7,250	0.9	**8**	11,100	1.2	8,050	1.0	**10**	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	195,687	6,050	0.6	8,725	0.9	7.4	4,850	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	35,678	2,700		1,800			3,600		2,175			3,200		1,500			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	50,632	4,250	0.4	2,325	0.2	3.3	6,225	0.6	3,075	0.3	4.7	3,900	0.4	1,825	0.2	2.9	Truck
Total PCE	296,951	10,300	1.0	11,050	1.1	**11**	11,075	1.1	10,100	1.0	**11**	13,225	1.3	10,750	1.1	**12**	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	13,752	1,350		300			1,900		300			1,825		175			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	27,482	2,500	0.3	1,050	0.1	1.8	3,675	0.4	1,475	0.2	2.6	2,350	0.3	700	0.1	1.5	Truck
Total PCE	287,116	9,625	1.1	11,025	1.2	**11**	9,800	1.1	10,275	1.1	**11**	12,275	1.4	11,600	1.3	**12**	Total

3. LG + No Build

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	3.9	3,225	0.5	2,850	0.5	3.0	5,250	0.9	5,375	0.9	5.3	GP
Port Trucks	51,406	3,225		3,575			4,200		4,100			3,700		2,700			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	54,882	3,725	0.6	3,625	0.6	3.7	4,950	0.8	4,200	0.7	4.6	3,850	0.6	2,725	0.5	3.3	Truck
Total PCE	224,452	7,825	1.3	7,250	1.2	8	8,175	1.4	7,050	1.2	8	9,100	1.5	8,100	1.4	9	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,600	0.8	6,000	0.8	6.8	GP
Port Trucks	51,446	3,500		3,050			4,625		3,700			4,125		2,550			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	53,380	3,625	0.4	3,200	0.4	3.4	4,825	0.5	3,975	0.5	4.4	4,175	0.5	2,625	0.3	3.4	Truck
Total PCE	254,191	9,225	1.0	8,400	1.1	9	9,275	1.0	8,100	1.0	9	11,775	1.3	8,625	1.1	11	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	195,687	6,050	0.6	8,725	0.9	7.4	4,850	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	46,162	3,350		2,550			4,375		3,075			3,875		2,100			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	61,116	4,900	0.5	3,075	0.3	4.0	7,000	0.7	3,975	0.4	5.9	4,575	0.5	2,425	0.2	3.5	Truck
Total PCE	317,919	10,950	1.1	11,800	1.2	12	11,850	1.2	11,000	1.1	12	13,900	1.4	11,350	1.1	13	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	24,004	1,800		1,225			2,450		1,400			2,275		925			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	37,734	2,950	0.3	1,975	0.2	2.5	4,225	0.5	2,575	0.3	3.4	2,800	0.3	1,450	0.2	2.1	Truck
Total PCE	307,620	10,075	1.1	11,950	1.3	12	10,350	1.2	11,375	1.3	11	12,725	1.4	12,350	1.4	13	Total

4. LG + Reg'l Trucks with No Build

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	3.9	3,225	0.5	2,850	0.5	3.0	5,250	0.9	5,375	0.9	5.3	GP
Port Trucks	59,199	3,725		4,025			4,675		4,700			4,375		3,125			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	62,675	4,225	0.7	4,075	0.7	4.2	5,625	0.9	4,800	0.8	5.2	4,525	0.8	3,150	0.5	3.0	Truck
Total PCE	240,038	8,325	1.4	7,700	1.3	**9**	8,850	1.5	7,650	1.3	**9**	9,775	1.6	8,525	1.4	**10**	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,600	0.8	6,000	0.8	6.8	GP
Port Trucks	59,027	3,950		3,575			5,200		4,325			4,700		2,975			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	60,961	4,075	0.5	3,725	0.5	3.9	5,400	0.6	4,600	0.6	5.0	4,750	0.5	3,050	0.4	3.9	Truck
Total PCE	269,353	9,675	1.1	8,925	1.1	**10**	9,850	1.1	8,725	1.1	**10**	12,350	1.4	9,050	1.1	**11**	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	195,687	6,000	0.6	8,725	0.9	7.4	4,650	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	57,139	3,975		3,325			5,225		4,000			4,700		2,750			
Regional Trucks	14,954	1,500		525			2,625		900			700		325			
Total Trucks	72,093	5,525	0.6	3,850	0.4	4.7	7,850	0.8	4,900	0.5	6.4	5,400	0.5	3,075	0.3	4.2	Truck
Total PCE	339,873	11,575	1.2	12,575	1.3	**13**	12,700	1.3	11,925	1.2	**13**	14,725	1.5	12,000	1.2	**14**	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	28,181	2,050		1,500			2,775		1,750			2,575		1,175			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	41,911	3,200	0.4	2,250	0.3	2.7	4,550	0.5	2,925	0.3	3.7	3,100	0.3	1,700	0.2	2.4	Truck
Total PCE	315,974	10,325	1.1	12,225	1.4	**12**	10,675	1.2	11,725	1.3	**12**	13,025	1.4	12,600	1.4	**13**	Total

5. HG with TSM/TDM

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	111,273	3,975	0.6	3,525	0.6	3.5	3,125	0.5	2,775	0.4	2.8	5,075	0.8	5,225	0.8	4.9	GP
Port Trucks	58,947	3,775		4,000			4,950		4,600			4,350		3,000			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	62,423	4,275	0.7	4,050	0.6	3.9	5,700	0.9	4,700	0.7	4.9	4,500	0.7	3,025	0.5	3.5	Truck
Total PCE	236,119	8,250	1.3	7,575	1.2	**8**	8,825	1.4	7,475	1.2	**8**	9,575	1.5	8,250	1.3	**9**	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	143,042	5,425	0.6	5,050	0.6	4.9	4,325	0.5	4,025	0.5	3.9	7,375	0.8	5,825	0.7	6.2	GP
Port Trucks	57,367	3,850		3,450			5,125		4,150			4,550		2,875			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	59,301	3,975	0.4	3,600	0.4	3.6	5,325	0.6	4,425	0.5	4.6	4,600	0.5	2,950	0.3	3.6	Truck
Total PCE	261,644	9,400	1.0	8,650	1.0	**9**	9,650	1.0	8,450	1.0	**9**	11,975	1.3	8,775	1.0	**10**	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	189,860	5,675	0.6	6,475	0.8	6.8	4,700	0.4	6,825	0.6	5.4	9,050	0.9	6,675	0.6	6.4	GP
Port Trucks	51,610	3,700		2,875			4,875		3,475			4,300		2,400			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	66,564	5,250	0.5	3,400	0.3	4.1	7,500	0.7	4,375	0.4	5.6	5,000	0.5	2,725	0.3	3.6	Truck
Total PCE	322,990	11,125	1.0	11,075	1.1	**11**	12,200	1.2	11,200	1.1	**12**	14,050	1.3	11,400	1.1	**13**	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	225,240	6,925	0.7	9,675	1.0	7.8	5,950	0.6	8,525	0.9	6.8	9,625	1.0	10,575	1.1	9.5	GP
Port Trucks	29,584	2,325		1,375			3,200		1,600			2,925		1,075			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	43,414	3,475	0.4	2,125	0.2	2.6	4,975	0.5	2,775	0.3	3.7	3,450	0.4	1,600	0.2	2.4	Truck
Total PCE	312,068	10,400	1.1	11,800	1.2	**11**	10,925	1.1	11,300	1.2	**11**	13,075	1.4	12,175	1.3	**12**	Total

6. HG+ND with TSM/TDM

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	111,273	3,975	0.6	3,525	0.6	3.5	3,125	0.5	2,775	0.4	2.8	5,075	0.8	5,225	0.8	4.9	GP
Port Trucks	40,330	3,100		3,275			4,100		3,725			3,600		2,425			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	51,806	3,600	0.6	3,325	0.5	3.3	4,850	0.8	3,825	0.6	4.1	3,750	0.6	2,450	0.4	2.9	Truck
Total PCE	214,005	7,575	1.2	6,850	1.1	7	7,975	1.3	6,600	1.0	7	8,825	1.4	7,675	1.2	8	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	143,042	5,425	0.6	5,050	0.6	4.9	4,325	0.5	4,025	0.5	3.9	7,375	0.8	5,825	0.7	6.2	GP
Port Trucks	41,435	2,075		2,375			3,050		2,650			3,450		1,975			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	43,369	3,000	0.3	2,525	0.3	2.6	4,050	0.4	3,125	0.4	3.4	3,500	0.4	2,050	0.2	2.6	Truck
Total PCE	229,780	8,425	0.9	7,575	0.9	8	8,375	0.9	7,150	0.8	8	10,875	1.1	7,875	0.9	9	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	169,860	5,675	0.6	6,475	0.6	6.8	4,700	0.4	6,625	0.6	5.4	9,050	0.9	8,675	0.8	8.4	GP
Port Trucks	35,678	2,700		1,800			3,600		2,175			3,200		1,500			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	50,632	4,250	0.4	2,325	0.2	3.1	6,225	0.6	3,075	0.3	4.4	3,900	0.4	1,825	0.2	2.7	Truck
Total PCE	291,124	10,125	1.0	10,800	1.0	10	10,925	1.0	9,900	0.9	10	12,950	1.2	10,500	1.0	12	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	225,240	6,925	0.7	9,675	1.0	7.0	5,950	0.6	8,525	0.9	6.0	9,625	1.0	10,575	1.1	9.5	GP
Port Trucks	13,752	1,350		300			1,900		300			1,825		175			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	27,482	2,500	0.3	1,050	0.1	1.7	3,675	0.4	1,475	0.2	2.4	2,350	0.2	700	0.1	1.4	Truck
Total PCE	280,204	9,425	1.0	10,725	1.1	10	9,625	1.0	10,000	1.0	10	11,975	1.3	11,275	1.2	11	Total

7. LG with TSM/TDM

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	111,273	3,975	0.6	3,525	0.6	5.5	3,125	0.5	2,775	0.4	2.8	5,075	0.8	5,225	0.8	4.9	GP
Port Trucks	51,406	3,225		3,575			4,200		4,100			3,700		2,700			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	54,882	3,725	0.6	3,625	0.6	3.5	4,950	0.8	4,200	0.7	4.3	3,850	0.6	2,725	0.4	3.1	Truck
Total PCE	221,037	7,700	1.2	7,150	1.1	8	8,075	1.3	6,975	1.1	8	9,925	1.4	7,950	1.3	8	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	143,042	5,425	0.6	5,050	0.6	4.9	4,325	0.5	4,025	0.5	3.9	7,375	0.8	5,825	0.7	5.2	GP
Port Trucks	51,446	3,500		3,050			4,625		3,700			4,125		2,550			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	53,380	3,625	0.4	3,200	0.4	3.2	4,825	0.6	3,975	0.5	4.2	4,175	0.4	2,625	0.3	3.2	Truck
Total PCE	249,802	9,050	0.9	8,250	1.0	9	9,150	1.0	8,000	0.9	9	11,550	1.2	8,450	1.0	10	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	189,860	5,875	0.6	6,475	0.8	6.8	4,700	0.4	6,825	0.6	5.4	9,050	0.9	8,675	0.8	8.4	GP
Port Trucks	46,167	3,350		2,550			4,375		3,075			3,975		2,100			
Regional Trucks	14,954	1,650		525			2,625		900			700		325			
Total Trucks	61,116	4,900	0.5	3,075	0.3	3.8	7,000	0.7	3,975	0.4	5.2	4,575	0.4	2,425	0.2	3.3	Truck
Total PCE	312,092	10,775	1.0	11,550	1.1	11	11,700	1.1	10,800	1.0	11	13,625	1.3	11,100	1.0	12	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	226,240	6,925	0.7	9,675	1.0	7.8	5,950	0.6	8,525	0.9	6.8	9,525	1.0	10,575	1.1	9.6	GP
Port Trucks	48,008	3,625		2,425			4,900		2,825			4,525		1,875			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	61,738	4,775	0.5	3,175	0.3	3.8	6,675	0.7	4,000	0.4	5.0	5,050	0.5	2,400	0.3	3.6	Truck
Total PCE	348,716	11,700	1.2	12,850	1.3	12	12,625	1.3	12,525	1.3	12	14,575	1.5	12,975	1.4	14	Total

8. LG with TSM/TDM+Exp PP

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	111,273	3,975	0.6	3,525	0.6	3.5	3,125	0.5	2,775	0.4	2.8	5,075	0.8	5,225	0.8	4.9	GP
Port Trucks	51,955	3,000		2,950			2,050		2,750			3,325		3,000			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	55,331	3,500	0.6	3,000	0.5	3.1	3,600	0.6	2,850	0.4	3.0	3,475	0.5	3,025	0.5	3.1	Truck
Total PCE	221,935	7,475	1.2	6,525	1.0	**7**	6,725	1.1	5,625	0.9	**6**	8,550	1.3	8,250	1.3	**8**	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	140,042	5,425	0.8	5,050	0.8	4.9	4,325	0.5	4,025	0.5	3.9	7,375	0.8	5,025	0.7	6.2	GP
Port Trucks	51,414	3,150		2,475			2,925		2,375			3,550		2,900			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	53,348	3,275	0.3	2,625	0.3	2.8	3,125	0.3	2,650	0.3	2.7	3,600	0.4	2,975	0.4	3.1	Truck
Total PCE	249,738	8,700	0.9	7,675	0.9	**8**	7,450	0.8	6,675	0.8	7	10,975	1.2	8,800	1.0	10	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	189,860	5,875	0.6	8,475	0.9	6.8	4,700	0.4	6,825	0.6	5.4	9,050	0.9	8,675	0.8	8.4	GP
Port Trucks	46,384	3,075		2,075			2,825		1,950			3,400		2,375			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	61,338	4,625	0.4	2,600	0.2	3.4	5,450	0.5	2,850	0.3	3.9	4,100	0.4	2,700	0.3	3.2	Truck
Total PCE	312,536	10,500	1.0	11,075	1.0	**11**	10,150	1.0	9,675	0.9	10	13,150	1.2	11,375	1.1	12	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	225,240	6,925	0.7	9,675	1.0	7.8	5,950	0.6	8,525	0.9	6.8	9,625	1.0	10,575	1.1	9.5	GP
Port Trucks	50,204	3,450		1,975			3,300		1,800			4,175		2,200			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	63,934	4,600	0.5	2,725	0.3	3.5	5,075	0.5	2,975	0.3	3.8	4,700	0.5	2,725	0.3	3.5	Truck
Total PCE	353,108	11,525	1.2	12,400	1.3	**12**	11,025	1.2	11,500	1.2	**11**	14,325	1.5	13,300	1.4	**14**	Total

9. HG with Alt Tech

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	3.9	3,225	0.5	2,850	0.5	3.0	5,250	0.9	5,375	0.9	5.3	GP
Port Trucks	40,943	2,950		2,775			3,475		3,125			3,075		2,900			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	44,319	3,150	0.5	2,825	0.5	3.0	4,225	0.7	3,225	0.5	3.7	3,225	0.5	2,925	0.3	2.6	Truck
Total PCE	203,326	7,250	1.2	6,450	1.1	7	7,450	1.2	6,075	1.0	7	8,475	1.4	7,100	1.2	8	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,600	0.8	6,000	0.8	6.8	GP
Port Trucks	41,435	2,875		2,375			3,350		2,850			3,450		1,975			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	43,369	3,000	0.3	2,525	0.3	2.8	4,050	0.5	3,125	0.4	3.6	3,500	0.4	2,050	0.3	2.8	Truck
Total PCE	234,169	8,600	1.0	7,725	1.0	9	8,500	0.9	7,250	0.9	8	11,100	1.2	8,050	1.0	10	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	195,687	6,050	0.6	8,725	0.9	7.4	4,850	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	35,578	2,700		1,800			3,600		2,175			3,200		1,500			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	50,532	4,250	0.4	2,325	0.2	3.3	6,225	0.6	3,075	0.3	4.7	3,900	0.4	1,825	0.2	2.9	Truck
Total PCE	296,951	10,300	1.0	11,050	1.1	11	11,075	1.1	10,100	1.0	11	13,225	1.3	10,750	1.1	12	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	13,732	1,350		300			1,900		300			1,825		175			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	27,482	2,500	0.3	1,050	0.1	1.8	3,675	0.4	1,475	0.2	2.6	2,350	0.3	700	0.1	1.5	Truck
Total PCE	287,116	9,625	1.1	11,025	1.2	11	9,800	1.1	10,275	1.1	11	12,275	1.4	11,600	1.3	12	Total

10. HG+ND with Alt Tech

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	3.9	3,225	0.5	2,850	0.5	3.0	5,250	0.9	5,375	0.9	5.3	GP
Port Trucks	40,043	2,650		2,775			3,475		3,125			3,075		2,000			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	44,319	3,150	0.5	2,825	0.5	3.0	4,225	0.7	3,225	0.5	3.7	3,225	0.5	2,025	0.3	2.6	Truck
Total PCE	203,326	7,250	1.2	6,450	1.1	7	7,450	1.2	6,075	1.0	7	8,475	1.4	7,400	1.2	8	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,600	0.8	6,900	0.8	6.8	GP
Port Trucks	41,435	2,875		2,375			3,850		2,850			3,450		1,975			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	43,369	3,000	0.3	2,525	0.3	2.8	4,050	0.5	3,125	0.4	3.6	3,500	0.4	2,050	0.3	2.8	Truck
Total PCE	234,169	8,600	1.0	7,725	1.0	9	9,500	0.9	7,250	0.9	8	11,100	1.2	9,050	1.0	10	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	195,587	6,050	0.6	8,725	0.9	7.4	4,850	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	35,678	2,700		1,800			3,600		2,175			3,200		1,500			
Regional Trucks	14,964	1,550		525			2,625		900			700		325			
Total Trucks	50,642	4,250	0.4	2,325	0.2	3.3	6,225	0.6	3,075	0.3	4.7	3,900	0.4	1,825	0.2	2.9	Truck
Total PCE	296,951	10,300	1.0	11,050	1.1	11	11,075	1.1	10,100	1.0	11	13,225	1.3	10,750	1.1	12	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown Intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	13,752	1,350		300			1,900		300			1,825		175			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	27,482	2,500	0.3	1,050	0.1	1.8	3,675	0.4	1,475	0.2	2.6	2,350	0.3	700	0.1	1.5	Truck
Total PCE	287,116	9,625	1.1	11,025	1.2	11	9,800	1.1	10,275	1.1	11	12,275	1.4	11,600	1.3	12	Total

11. LG with Alt Tech

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	5.9	3,225	0.5	2,850	0.5	5.0	5,250	0.9	5,375	0.9	5.3	GP
Port Trucks	25,730	1,650		1,850			2,125		2,000			1,925		1,250			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	29,206	2,150	0.4	1,900	0.3	2.0	2,875	0.5	2,100	0.4	2.5	2,075	0.3	1,275	0.2	1.7	Truck
Total PCE	173,100	6,250	1.0	5,525	0.9	6	6,100	1.0	4,950	0.8	6	7,325	1.2	6,650	1.1	7	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,500	0.9	5,000	0.9	5.8	GP
Port Trucks	27,942	2,050		1,475			2,725		1,775			2,500		1,225			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	29,876	2,175	0.2	1,625	0.2	1.9	2,925	0.3	2,050	0.3	2.5	2,550	0.3	1,300	0.2	1.9	Truck
Total PCE	207,183	7,775	0.9	6,825	0.9	8	7,375	0.8	6,175	0.8	7	10,150	1.1	7,300	0.9	9	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	195,687	6,050	0.6	8,725	0.9	7.4	4,850	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	22,658	1,900		975			2,475		1,150			2,250		775			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	37,612	3,450	0.3	1,500	0.2	2.5	5,100	0.5	2,050	0.2	3.6	2,950	0.3	1,100	0.1	2.0	Truck
Total PCE	270,911	9,500	1.0	10,225	1.0	10	9,950	1.0	9,075	0.9	10	12,275	1.2	10,025	1.0	12	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	5,511	350		150			550		325			550		275			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	19,241	1,500	0.2	900	0.1	1.2	2,325	0.3	1,500	0.2	1.9	1,175	0.1	800	0.1	1.0	Truck
Total PCE	270,635	8,625	1.0	10,875	1.2	10	8,450	0.9	10,300	1.1	10	11,100	1.2	11,700	1.3	12	Total

12. LG+Reg'l Trucks with Alt Tech+IE

Screenline 1 - North of Pacific Coast Highway (PCH)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	114,688	4,100	0.7	3,625	0.6	3.9	3,225	0.5	2,850	0.5	3.0	5,250	0.9	5,375	0.9	5.3	GP
Port Trucks	18,660	1,250		1,300			1,625		1,425			1,450		875			
Regional Trucks	3,476	500		50			750		100			150		25			
Total Trucks	22,336	1,750	0.3	1,350	0.2	1.6	2,375	0.4	1,525	0.3	2.0	1,600	0.3	900	0.2	1.3	Truck
Total PCE	159,360	5,850	1.0	4,975	0.9	**6**	5,600	0.9	4,375	0.7	**5**	6,050	1.1	6,275	1.0	**7**	Total

Screenline 2 - North of Del Amo Blvd (between I-405 and SR-91)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	147,431	5,600	0.6	5,200	0.7	5.4	4,450	0.5	4,125	0.5	4.3	7,600	0.8	6,000	0.8	6.8	GP
Port Trucks	20,660	1,600		1,000			2,125		1,225			1,950		950			
Regional Trucks	1,934	125		150			200		275			50		75			
Total Trucks	22,794	1,725	0.2	1,150	0.1	1.4	2,325	0.3	1,500	0.2	1.9	2,000	0.2	925	0.1	1.5	Truck
Total PCE	193,019	7,325	0.8	6,350	0.8	**7**	6,775	0.8	5,625	0.7	**7**	9,600	1.1	6,925	0.9	**9**	Total

Screenline 3 - South of Rosecrans Ave. (between SR-91 and I-105)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	195,667	6,050	0.6	8,725	0.9	7.4	4,850	0.5	7,025	0.7	5.9	9,325	0.9	8,925	0.9	9.1	GP
Port Trucks	18,972	1,650		750			2,150		900			1,950		600			
Regional Trucks	14,954	1,550		525			2,625		900			700		325			
Total Trucks	33,926	3,200	0.3	1,275	0.1	2.2	4,775	0.5	1,800	0.2	3.3	2,650	0.3	925	0.1	1.8	Truck
Total PCE	263,539	9,250	0.9	10,000	1.0	**10**	9,625	1.0	8,825	0.9	**10**	11,975	1.2	9,850	1.0	**11**	Total

Screenline 4 - North of the Atlantic Blvd/Bandini Blvd Intersection (close to the Downtown intermodal yards)

Vehicle Class	Daily Volume	AM Peak Hr (PCE)					Mid-Day Peak Hr (PCE)					PM Peak Hr (PCE)					Lane Type
		North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	North	v/c	South	v/c	Lanes	
Autos	232,152	7,125	0.8	9,975	1.1	8.6	6,125	0.7	8,800	1.0	7.5	9,925	1.1	10,900	1.2	10.4	GP
Port Trucks	5,613	350		225			550		325			650		275			
Regional Trucks	13,730	1,150		750			1,775		1,175			525		525			
Total Trucks	19,343	1,500	0.2	975	0.1	1.2	2,325	0.3	1,500	0.2	1.9	1,175	0.1	800	0.1	1.0	Truck
Total PCE	270,839	8,625	1.0	10,950	1.2	**10**	8,450	0.9	10,300	1.1	**10**	11,100	1.2	11,700	1.3	**12**	Total

APPENDIX D. IFA SUMMARY RESULTS FOR 2035 PEAK-HOUR V/CS AND LANE REQUIREMENTS (COMPARISONS ACROSS SCENARIOS AND ALTERNATIVES)

1. Screenline 1 Comparisons

	High Port Cargo Growth *with* Near-Dock Expansion			High Port Cargo Growth *without* Near-Dock Expansion			Low Port Cargo Growth			Low Port Cargo Growth with New Warehouse Locations/Expanded PierPASS (TSM/TDM)		
	AM	Mid-Day	PM	AM	Mid-Day	PM	AM	Mid-Day	PM	AM	Mid-Day	PM
2035 Baseline "No Build"												
Total Traffic (PCEs)	14,000	14,700	16,625	15,050	16,475	15,150	15,075	15,225	17,200	16,025	16,500	16,000
Volume/Capacity (North, South)	1.3 , 1.2	1.3 , 1.1	1.5 , 1.3	1.4 , 1.3	1.5 , 1.3	1.5 , 1.4	1.3 , 1.2	1.4 , 1.2	1.5 , 1.4	1.4 , 1.3	1.5 , 1.3	1.6 , 1.4
Number of Lanes Required												
Total General Purpose Lanes	**3.9**	**3.0**	**5.3**	**3.9**	**3.0**	**5.3**	**3.9**	**3.0**	**5.3**	**3.9**	**3.0**	**5.3**
Total Truck Lanes	**3.5**	**4.3**	**3.1**	**4.2**	**5.2**	**3.8**	**3.7**	**4.6**	**3.3**	**4.2**	**5.2**	**3.8**
TSM/TDM												
Total Traffic (PCEs)	14,425	14,575	16,500	15,625	16,300	17,625	14,850	15,050	16,875	14,000	12,350	16,500
Volume/Capacity (North, South)	1.2 , 1.1	1.3 , 1	1.4 , 1.2	1.3 , 1.2	1.4 , 1.2	1.5 , 1.3	1.2 , 1.1	1.3 , 1.1	1.4 , 1.3	1.2 , 1.0	1.1 , 0.9	1.3 , 1.3
Number of Lanes Required												
Total General Purpose Lanes	**3.5**	**2.8**	**4.9**	**3.5**	**2.8**	**4.9**	**3.5**	**2.8**	**4.9**	**3.5**	**2.8**	**4.9**
Total Truck Lanes	**3.3**	**4.1**	**2.9**	**3.9**	**4.9**	**3.5**	**3.5**	**4.3**	**3.1**	**3.1**	**3.0**	**3.1**
Alternative Technology												
Total Traffic (PCEs)	13,700	13,525	15,675	13,700	13,525	15,675	11,775	11,050	13,975	10,825	9,975	13,125
Volume/Capacity (North, South)	1.2 , 1.1	1.2 , 1	1.4 , 1.2	1.2 , 1.1	1.2 , 1	1.4 , 1.2	1.0 , 0.9	1.0 , 0.8	1.2 , 1.1	0.9 , 0.8	0.9 , 0.7	1.1 , 1.0
Number of Lanes Required												
Total General Purpose Lanes	**3.9**	**3.0**	**5.3**	**3.9**	**3.0**	**5.3**	**3.9**	**3.0**	**5.3**	**3.9**	**3.0**	**5.3**
Total Truck Lanes	**3.0**	**3.7**	**2.6**	**3.0**	**3.7**	**2.6**	**2.0**	**2.5**	**1.7**	**1.6**	**2.0**	**1.3**

2. Screenline 2 Comparisons

	High Port Cargo Growth *with* Near-Dock Expansion			High Port Cargo Growth *without* Near-Dock Expansion			Low Port Cargo Growth			Low Port Cargo Growth with New Warehouse Locations/Expanded PierPASS (TSM/TDM)		
	AM	Mid-Day	PM	AM	Mid-Day	PM	AM	Mid-Day	PM	AM	Mid-Day	PM
2035 Baseline "No Build"												
Total Traffic (PCEs)	16,325	15,750	19,150	16,375	16,325	21,150	17,525	17,375	20,400	16,600	16,575	21,400
Volume/Capacity (North, South)	1 , 1	0.9 , 0.9	1.2 , 1	1.1 , 1.1	1.1 , 1.1	1.4 , 1.1	1 , 1.1	1 , 1	1.3 , 1.1	1.1 , 1.1	1.1 , 1.1	1.4 , 1.1
Number of Lanes Required												
Total General Purpose Lanes	**5.4**	**4.3**	**6.8**	**5.4**	**4.3**	**6.8**	**5.4**	**4.3**	**6.8**	**5.4**	**4.3**	**6.8**
Total Truck Lanes	**2.8**	**3.6**	**2.8**	**3.8**	**4.9**	**3.8**	**3.4**	**4.4**	**3.4**	**3.9**	**5.0**	**3.9**
TSM/TDM												
Total Traffic (PCEs)	16,000	15,525	18,750	16,050	16,100	20,750	17,300	17,150	20,000	16,575	16,125	19,775
Volume/Capacity (North, South)	0.9 , 0.9	0.9 , 0.9	1.1 , 0.9	1 , 1	1 , 1	1.3 , 1	0.9 , 1	1 , 0.9	1.2 , 1	0.9 , 0.9	0.9 , 0.9	1.2 , 1.0
Number of Lanes Required												
Total General Purpose Lanes	**4.9**	**3.9**	**6.2**	**4.9**	**3.9**	**6.2**	**4.9**	**3.9**	**6.2**	**4.9**	**3.9**	**6.2**
Total Truck Lanes	**2.6**	**3.4**	**2.6**	**3.6**	**4.6**	**3.6**	**3.2**	**4.2**	**3.2**	**2.8**	**2.7**	**3.1**
Alternative Technology												
Total Traffic (PCEs)	16,325	15,750	19,150	16,325	15,750	19,150	14,300	13,300	17,400	13,975	12,400	16,525
Volume/Capacity (North, South)	1 , 1	0.9 , 0.9	1.2 , 1	1 , 1	0.9 , 0.9	1.2 , 1	0.9 , 0.9	0.8 , 0.8	1.1 , 0.9	0.8 , 0.8	0.8 , 0.7	1.1 , 0.9
Number of Lanes Required												
Total General Purpose Lanes	**5.4**	**4.3**	**6.8**	**5.4**	**4.3**	**6.8**	**5.4**	**4.3**	**6.8**	**5.4**	**4.3**	**6.8**
Total Truck Lanes	**2.8**	**3.6**	**2.8**	**2.8**	**3.6**	**2.8**	**1.9**	**2.5**	**1.9**	**1.4**	**1.9**	**1.5**

3. Screenline 3 Comparisons

	High Port Cargo Growth *with* Near-Dock Expansion			High Port Cargo Growth *without* Near-Dock Expansion			Low Port Cargo Growth			Low Port Cargo Growth with New Warehouse Locations/Expanded PierPASS (TSM/TDM)		
	AM	Mid Day	PM	AM	Mid Day	PM	AM	Mid Day	PM	AM	Mid Day	PM
2035 Baseline "No Build"												
Total Traffic (PCEs)	21,350	21,175	28,875	23,125	23,750	28,975	22,750	22,850	25,250	24,150	21,625	26,725
Volume/Capacity (North, South)	[illegible]	[illegible]	1.3 , 1.1	1.[illegible] , 1.2	1.2 , 1.1	1.4 , [illegible].2	1.1 , 1.2	1.2 , 1.[illegible]	1.4 , 1.1	1.[illegible] , 1.3	[illegible].3 , 1.2	1.5 , 1.2
Number of Lanes Required												
Total General Purpose Lanes	7.4	5.9	9.1	7.4	5.9	9.1	7.4	5.9	9.1	7.4	5.9	9.1
Total Truck Lanes	3.3	4.7	2.9	4.3	5.9	3.9	4.0	5.5	3.5	4.7	6.4	4.2
TSM/TDM												
Total Traffic (PCEs)	20,925	20,825	28,450	23,000	23,400	25,450	22,325	22,500	24,725	21,575	19,825	24,525
Volume/Capacity (North, South)	1 , 1	[illegible] , 0.9	1.2 , 1	1 , 1.1	1.2 , 1.1	1.3 , [illegible].1	1.[illegible] 1.1	1.1 1	[illegible].3 , [illegible]	1.0 1.0	[illegible].0 , 0.9	1.2 , 1.1
Number of Lanes Required												
Total General Purpose Lanes	6.8	5.4	8.4	6.8	5.4	8.4	6.8	5.4	8.4	6.8	5.4	8.4
Total Truck Lanes	3.1	4.4	2.7	4.1	5.6	3.6	3.8	5.2	3.3	3.4	3.9	3.2
Alternative Technology												
Total Traffic (PCEs)	21,350	21,175	28,875	21,350	21,175	28,875	19,725	19,025	22,300	19,250	19,450	21,625
Volume/Capacity (North, South)	[illegible] , [illegible]	[illegible] , 1.1	1.3 , 1.1	1 , 1.1	[illegible] , [illegible]	1.3 , [illegible].1	1 , 1	1 , 0.9	[illegible].2 , [illegible]	0.9 1.0	[illegible].1 , 0.9	1.2 , 1.0
Number of Lanes Required												
Total General Purpose Lanes	7.4	5.9	9.1	7.4	5.9	9.1	7.4	5.9	9.1	7.4	5.9	9.1
Total Truck Lanes	3.3	4.7	2.9	3.3	4.7	2.9	2.5	3.6	2.0	2.2	3.3	1.8

4. Screenline 4 Comparisons

	High Port Cargo Growth *with* Near-Dock Expansion			High Port Cargo Growth *without* Near-Dock Expansion			Low Port Cargo Growth			Low Port Cargo Growth with New Warehouse Locations/Expanded PierPASS (TSM/TDM)		
	AM	Mid-Day	PM	AM	Mid-Day	PM	AM	Mid-Day	PM	AM	Mid-Day	PM
2035 Baseline "No Build"												
Total Traffic (PCEs)	20,650	20,075	23,875	22,700	22,375	25,875	22,125	21,725	25,075	22,550	22,400	25,625
Volume/Capacity (North, South)	1.[illegible] , 1.2	1.1 , 1.1	1.4 , [illegible].3	[illegible].2 1.3	1.2 , 1.3	1.5 , 1.4	1.[illegible] , 1.3	1.2 , 1.3	1.4 , [illegible].4	[illegible].1 1.4	1.2 , 1.3	1.4 , 1.4
Number of Lanes Required												
Total General Purpose Lanes	8.6	7.5	10.4	8.6	7.5	10.4	8.6	7.5	10.4	8.6	7.5	10.4
Total Truck Lanes	1.8	2.6	1.5	2.0	3.0	2.5	2.5	3.4	2.1	2.7	3.7	2.4
TSM/TDM												
Total Traffic (PCEs)	20,150	19,625	23,250	22,200	22,225	25,250	21,525	21,275	24,450	21,225	19,975	24,425
Volume/Capacity (North, South)	1 , 1.1	1 , 1	1.3 , [illegible].2	[illegible].1 1.2	1.1 , 1.2	1.4 , 1.3	1 , [illegible].2	1.1 , 1.2	1.3 , [illegible].3	[illegible].0 1.2	1.0 , 1.1	1.3 , 1.3
Number of Lanes Required												
Total General Purpose Lanes	7.8	6.8	9.5	7.8	6.8	9.5	7.8	6.8	9.5	7.8	6.8	9.5
Total Truck Lanes	1.7	2.4	1.4	2.6	3.7	2.4	2.3	3.2	2.0	2.2	2.6	2.0
Alternative Technology												
Total Traffic (PCEs)	20,650	20,075	23,875	20,650	20,075	23,875	19,650	18,750	22,800	19,575	18,750	22,800
Volume/Capacity (North, South)	1.[illegible] , 1.2	1.1 , 1.1	1.4 , [illegible].3	[illegible].1 1.2	1.1 , 1.[illegible]	1.4 , 1.3	1 , [illegible].2	0.9 , 1.1	1.2 , [illegible].3	[illegible].0 1.2	0.9 , 1.1	1.2 , 1.3
Number of Lanes Required												
Total General Purpose Lanes	8.6	7.5	10.4	8.6	7.5	10.4	8.6	7.5	10.4	8.6	7.5	10.4
Total Truck Lanes	1.8	2.6	1.5	1.8	2.6	1.5	1.2	1.9	1.0	1.2	1.9	1.0