Technical Report
LAX Master Plan Supplement to the Draft EIS/EIR

S-2a. Supplemental On-Airport Surface Transportation Technical Report

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1. INTRODUCTION

JKH Mobility Services, a division of Kimley-Horn and Associates, Inc., is a member of a multi-discipline team assisting in the preparation of the Los Angeles International Airport Master Plan and Environmental Impact Statement/Environmental Impact Report (EIS/EIR) by conducting on-airport ground transportation analyses including roads, curbs, parking and automated people mover ridership. On-airport ground transportation conditions were analyzed for a future No Action/No Project Alternative and for four build alternatives. The methodologies and analysis techniques for the No Action/No Project Alternative and Alternatives A, B, and C are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR, January 2001. The latest analysis for Alternative D includes new remote landside facilities, including the Ground Transportation Center (GTC), a Consolidated Rental Car (RAC) Facility, and an Intermodal Transportation Center (ITC). Only the 2015 horizon year was analyzed for Alternative D, since the 2005 horizon year results in the same analysis as the No Action/No Project Alternative documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. In addition, a more detailed modeling analysis of the intermediate year 2008 was analyzed for Alternative D, which incorporated the peak construction traffic conditions.

This report documents the methodologies by which Alternative D was analyzed, the key inputs and assumptions, the unique operating characteristics of the alternative, the forecasted demands on the ground access network and on the automated people mover system, the mitigation measures and impacts, the resulting ground access plan for the alternative and the construction impacts.

The organization of this report is as follows:

- Analytical Procedures and Assumptions
- Characteristics of Alternative D
- Forecasts and Impacts
- Significant Impacts and Mitigation Measures
- Additional Improvements for On-Airport Ground Transportation
- Construction Impacts
- Attachments

The Attachments include the following: demand tables that include detailed level-of-service data for major segments of the ground access network for Alternative D; data for planned and mitigated on-airport traffic conditions as provided for the air quality analysis including figures depicting segment labels, travel classification and speed data by segment, and temporal distributions for terminals, parking and staging. Also provided is the complete Automated People Mover (APM) system ridership forecast including station-to-station trip tables for each landside population, produced by JKH Mobility Services. In addition, a curbfront analysis is provided in the Attachments. Finally, a construction question and answer document and the construction trip route volumes are included in the Attachments.

The resulting ground access plans developed for each alternative, including Alternative D, strive to accommodate the prescribed growth of air passenger traffic while adhering to transportation planning goals prescribed by Los Angeles World Airports (LAWA). The goals set by LAWA for planning ground access and circulation are summarized in Section 1, *Introduction*, of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR.

2. ANALYTICAL PROCEDURES AND ASSUMPTIONS

The analytical procedures and assumptions for the No Action/No Project Alternative and Alternatives A, B, and C are documented in Section 2, *Analytical Procedures and Assumptions,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The same analytical procedures and assumptions used in the other Master Plan alternatives were applied to Alternative D, unless otherwise specified in the following section.

2.1 Airport Area Definition

The on-airport ground transportation analysis area includes all current and future roadways that serve the terminal areas and the dedicated airport landside facilities remote from the terminals. Alternative D includes the Central Terminal Area (CTA) roadways, remote ground transportation facilities of the GTC and the ITC, as well as the proposed West Employee Parking Garage as part of the on-airport ground transportation analysis area. **Figure S1**, On-Airport Roadway Analysis Area, shows the on-airport roadway analysis area generalized for Alternative D.

2.2 Forecasting Procedures

The forecasting procedures for the No Action/No Project Alternative and Alternatives A, B, and C are documented in Section 2.2, *Forecasting Procedures,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. On-airport ground access demands for Alternative D were developed using the latest version of the Advanced Landside Performance Simulation™ (ALPS™) model, previously called the Airport Landside Planning System™ model in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. ALPS™ is an industry-accepted computer simulation model and encompasses the ground transportation planning process tailored to an airport environment. The "engine" of the ALPS™ model is the flight schedule for each alternative, which is processed to produce person trip generation data for essentially all airport populations. The portion of persons utilizing the ground transportation facilities is then quantified within the ALPS™ model based on the percent of passengers originating and terminating, their associated visitor ratios, and the percent of passengers connecting. The ground transportation population is then split into competing regional access/egress modes (i.e., private auto, taxi, shuttle, etc.), and further subdivided by trip purpose (i.e., drop-off at curbfront then exit airport, or go directly to parking and walk to terminal, etc.). Finally, the actual travel patterns are created for each trip mode and purpose, between each ground transportation origin/destination node.

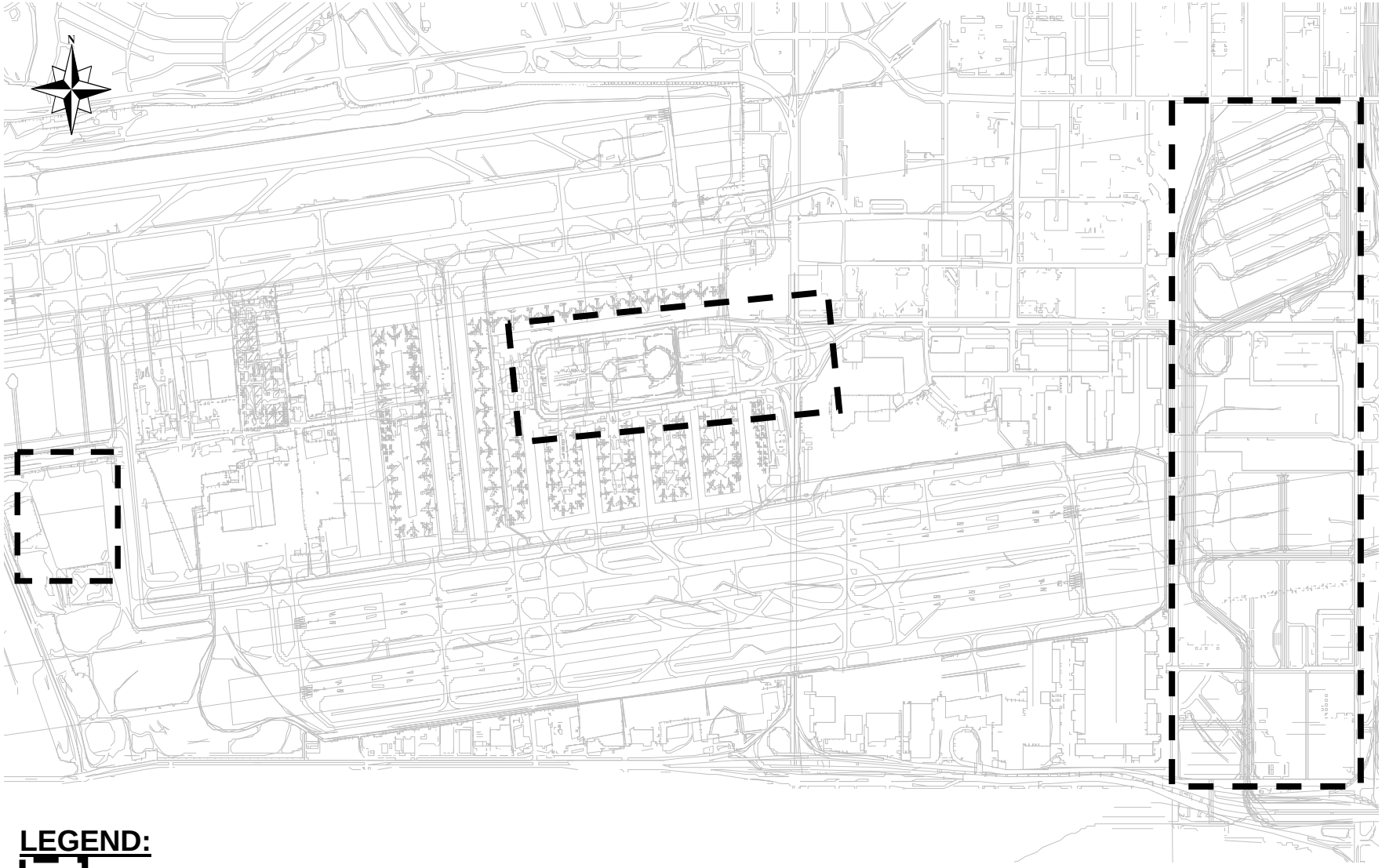
Subsequent to the processing of the ALPS™ model, a replay of the modeled network provides the analysis results of all ground access segments, color coded in both percent of capacity and level-of-service. Further explanation of each step of the ground transportation forecasts procedure is provided in the following sections.

2.2.1 Advanced Landside Performance Simulation™ (ALPS™) Model

The ALPS™ ground transportation simulation performs multi-modal trip assignments among pre-defined travel paths (routes) and accumulates corresponding vehicle and people flows on the various ground transportation segments for each hour of the day. The significance of having the capability of modeling the entire 24-hour period is the ability to study the effect of non-peak hours immediately before and after the peak hours. Due to lead and lag times associated with departing and arriving passengers, the ground transportation system can experience peak usage at different times from the peak arrival/departure rate of aircraft. The simulation depicts dynamic interactions among competing route assignments due to sensitivities of travel path times to demand loadings.

The ground transportation model is based upon the flight schedule and layout of an airport's ground access system. The model is created by first entering the airport site plan as a background. Then populations are defined, mode choice assessed, and segments and travel routes are established.

The ALPS™ model recognizes that different types of populations travel to different areas in the ground access system via distinct routes and varying modes of transportation. ALPS™ is programmed to allow a diversity of "populations" unique to the airport being modeled. Starting with the person trip database developed from the flight schedule, travel modes are assessed, and the person trips are converted to vehicle trips.



LAX Master Plan **Supplement to the Draft EIS/EIR**	**On-Airport Roadway Analysis Area**	**Figure** **S1**

Usually, by use of historic survey data, the travel mode choice for accessing or egressing the airport is determined, which "splits" the population into people using autos, buses, rail, etc. For each mode, specific ground transportation population types are defined, each having a distinct vehicle occupancy that equates person trips to vehicle trips. For this study, population types are the following:

- Air Passengers Dropped Off or Picked Up at the Curbfront (vehicle enters and leaves airport without entering parking)
- Air Passengers in Private Autos that Park Short-Term (accompanied by meeter/greeter or well wisher escorts)
- Air Passengers in Private Autos that Park Long-Term or Daily
- Air Passengers in Private Autos that Park Off-site
- Air Passengers and Escorts in Taxis
- Air Passengers in Rental Cars
- Air Passengers in Airport Shuttles
- Air Passengers in Charter Bus
- Air Passengers in Metro Bus
- Air Passengers in For-Hire Vans
- Air Passengers in Other Scheduled Transit
- Air Passengers in Courtesy Vehicles (Hotel, Motel)
- Escort Well-Wishers Parking Short-Term
- Escort Greeters Parking Short-Term
- Employees in Private Autos dropped or picked-up at the Employee Processing Area
- Employees in Scheduled Transit
- Employees in Private Autos Parked at Airport
- Background (pass-by) Trips and Delivery/Service Vehicles

On-airport roadway segments are defined as access roadways (e.g., Century Boulevard, Imperial Highway, La Cienega Boulevard and Sepulveda Boulevard), CTA terminal and GTC loop roads, circulation roadways (e.g., recirculation ramps in the GTC), curbfronts, toll/fare collection plazas, pedestrian walks or parking facilities. Ground transportation segments are defined in ALPS™ by unique sets of links and nodes. For each roadway segment, specific data, or attributes, are used to define the segment. Roadway segment attributes include roadway type, capacity, number of lanes and free flow speed. The roadway capacity is based on the roadway type, which corresponds to specific speed-flow curves used by ALPS™.

The roadway types available for use in ALPS™ are the following:

- Freeway
- Highway
- Ramp
- Toll Plaza
- Unsignalized Intersection Approach
- Signalized Intersection Approach
- Local Road
- Weaving Segments
- Traffic Circles
- Curbfront Through Lanes
- Curbfront Lanes

Transit segments and routes are treated separate from other segment types. Transit routes are composed of links made up of road and curb, or fixed guideway segments chained together to define a travel path between two nodes that are defined as stations (i.e., transit station or bus stop).

Accessing routes (travel paths) are created between origins (source nodes on the boundary of the airport) and destinations (terminal nodes), composed of segments (i.e., roads, curbs, toll plazas, parking areas, walks and transit links) combined in sequence so as to define a travel path, for a given population travel class, from its origin to its destination. Egressing routes are created in the same manner with the origin being the terminal node. The origin and destination, or "source" nodes in ALPS™ terminology must be defined before routes can be created.

While in the simulation, vehicles travel along the routes previously defined for their corresponding population type and trip purpose. The model moves vehicles through the airport ground transportation network in time increments (or steps), which is typically defined to be an hour (although any defined time step is possible). A variety of segment results including vehicle flows and percent capacity are computed for each segment and time step in the model. The results can be printed in tabular form or replayed on screen with the airport layout depicting the segments, which change color to represent various levels of the selected result throughout the day.

2.2.2 Network Development

The network development for the other Master Plan alternatives is documented in Section 2.2.2, *Network Development*, of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. Ground access network models for Alternative D were developed based on airport operations as described in the Draft LAX Master Plan Addendum. Each segment of the ground access network has been assigned unique attributes, representing specific direction of flow, number of lanes, facility type, capacity per lane, and speed characteristics. The Alternative D network includes the addition of the GTC, ITC and RAC and the associated roadway modifications to handle the new facilities. **Figure S2,** ALPS™ Structural Segment Model, Alternative D, Year 2015, depicts the ALPS™ "structural" segment models for the on-airport roadway network for Alternative D overlaid onto a background drawing file.

Also included in the Alternative D network is the proposed automated people mover (APM) system. The APM system was included in the network in order to forecast passenger demand for the system. Lea+Elliott used the forecast demands to assess the configuration of the APM system.

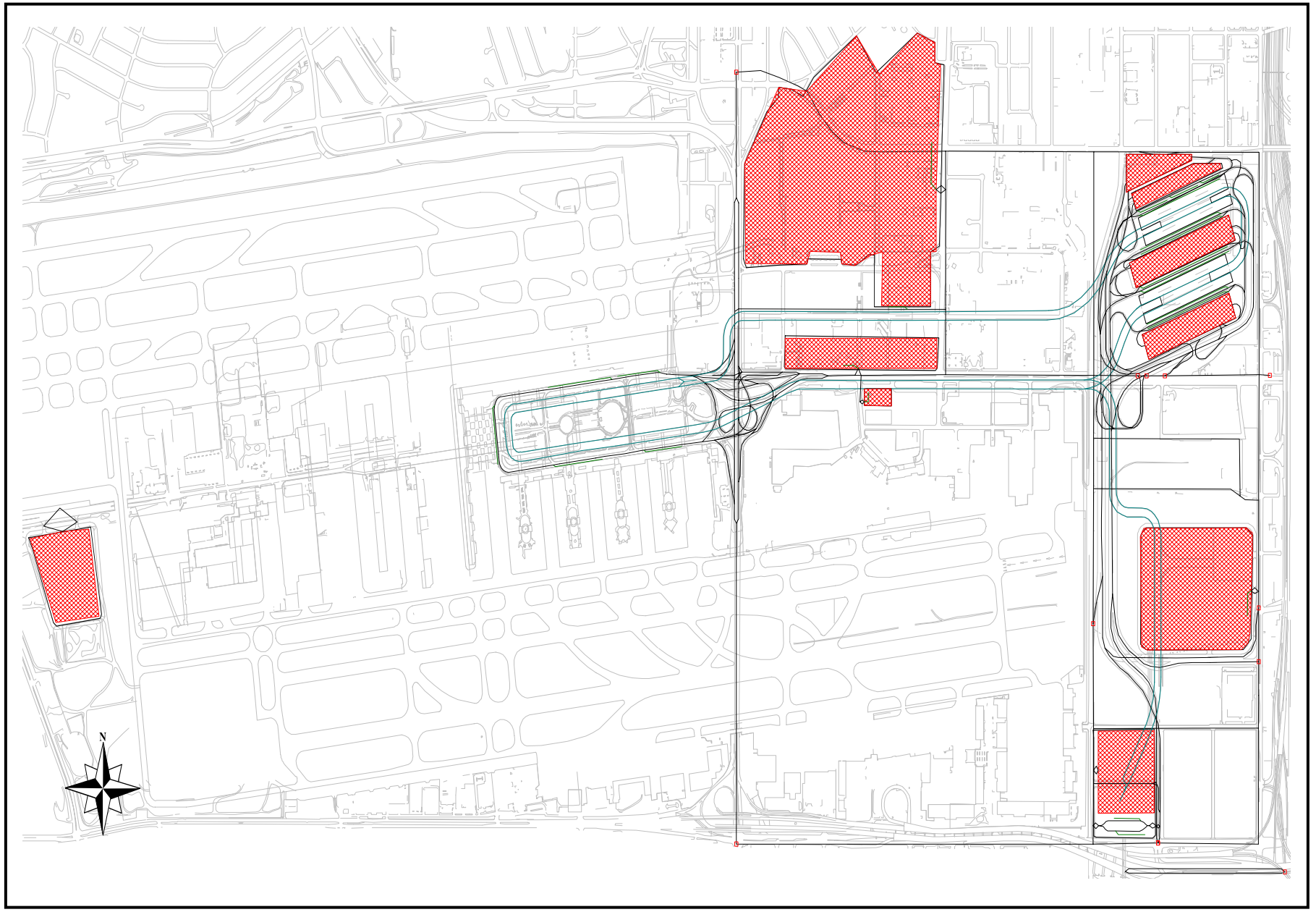
In developing attributes of the network segments, planned improvements to the roadway network and overall operations were incorporated. These improvements are referred to as "planned" because they are included in the LAWA capital improvements program. The planned improvements for the other Master Plan alternatives are documented in Section 2.2.2, *Network Development,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The planned improvements that impact the on-airport ground access network for Alternative D are listed below:

- Improve enforcement of curbside roadways.
- Modify upper and lower level curbside operations and signage.
- Update ground transportation rules and enforcement procedures.
- Enhance public parking services and modify rate schedules as appropriate.
- Encourage use of East Way and West Way.[1]
- Improve text, locations, and visibility of roadway signs into and approaching the CTA.[1]
- Enhance LAX Intelligent Transportation Systems.
- Upgrade on-airport traffic signal equipment and software.

2.2.3 Trip Generation

Person trip generation (flow) for Alternative D is based on the proposed flight schedule presented in the LAX Master Plan Addendum. The integration of the flight schedule information for Alternative D into the trip generation calculation followed the same procedure as described in Section 2.2.3, *Trip Generation*, of Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

[1] Applies to Alternative D Interim Year Construction Model, Year 2008.



LAX Master Plan **Supplement to the Draft EIS/EIR**	**ALPS™ Structural Segment Model, Alternative D, Year 2015**	**Figure** **S2**

2.2.4 Mode Split

As is the case for the Draft EIS/EIR analysis, the ground transportation population types are crafted to represent the various transportation modes that air passengers use to access and egress the airport (i.e., private auto, taxi, rental car, shuttle, etc.) from the surrounding region. Ground transportation population flows were "split" based on mode choice recommendations initially made by the consulting team.

The forecasts resulting from these initial values were compared to historical ground traffic growth. The regional access mode splits for the other Master Plan alternatives are documented in Section 2.2.4, *Mode Split,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The 2015 regional access mode splits were updated specifically for Alternative D in a LAWA Public Transportation Task Force meeting, which included representatives from MTA, Caltrans, and LADOT on November 1, 2001. The resulting regional access mode splits for Alternative D are discussed within the applicable sections of Section 3 below. The visitor mode splits for Alternative D are the same as the other Master Plan alternatives documented in Section 2.2.3, *Trip Generation,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR.

Within the airport simulation boundaries, the splits between alternative travel paths and internal airport transit systems are not treated as mode splits, thus there is only one regional access mode split defined for the model. Very specific, competing routes are defined for each mode traveling along on-airport roadways. For example, parking at the ITC garage and riding the APM to the terminal versus parking in the close-in GTC garage are route choices, and not mode choices, since both involve private autos parked for a long term (i.e., private auto regional access mode). These choices are modeled as route choices for those arriving by private auto.

2.2.5 Trip Purpose and Assignment

Aggregate ground access trip purpose, or "travel classification" data in ALPS™ terminology, for each mode (i.e., private auto drop-off at curbfront then exit airport, or go directly to private auto parking and walk to terminal, etc.) for the other Master Plan alternatives are documented in Section 2.2.5, *Trip Purpose and Travel Paths,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The Alternative D trip purpose data was modified slightly based on team discussions, and then adjusted (categorized) for accessing and egressing trips. The specific trip purpose data for Alterative D are presented in Chapter 3 below.

2.2.6 Curbfront Operations

For Alternative D, the curbfront demands by travel classification at the GTC were developed using ALPS™. These demands were then supplied to a separate model animating the curbfront operations, CURBAN. This animated simulation provides a more detailed, microscopic analysis of the curbfront operations. Because CURBAN is a microscopic model, the individual vehicles are simulated along the curbfront and the software incorporates the clustering effects of vehicles around doorways and thus evaluates the impact of the effective length of curb. Furthermore, dwell distributions are applied to the individual vehicle classifications so the impacts of a vehicle with a longer dwell blocking inside curb lane vehicles desiring to exit, can be observed and evaluated.

2.3 Key Definitions

Key definitions used in the discussion of on-airport traffic simulation are discussed in Section 2.3, *Key Definitions,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR, with the following clarification as related to Alternative D:

- **Mode** - Mode refers to the form of transportation used while accessing or egressing the airport. Regional access modes analyzed within this study included private auto parking, rental car (RAC), taxi, door-to-door van, courtesy vehicle, scheduled (FlyAway) bus, charter and tour bus, public transit bus, and rail public transit.

2.4 Key Input Assumptions

The key input assumptions for the No Action/No Project Alternative and Alternatives A, B, and C are documented in Section 2.4, *Key Input Assumptions,* of Technical Report 3a, *On-Airport Surface*

Transportation Technical Report, of the Draft EIS/EIR. The key input assumptions for Alternative D were based on the previous other Master Plan alternatives' assumptions but were supplemented with more recent team discussions. The assumptions listed below were the basis for the Alternative D modeling work, but were tested and modified during the model validation effort discussed in Section 2.5 below. The initial input assumptions are discussed below; however these initial inputs were subsequently modified for Alternative D as part of the model validation process. These refined input assumptions are provided in Section 3 below.

- **Curb Dwell Time** - Dwell times are one of the inputs for determining curb lane operational characteristics. Other data used to determine the level-of-service of the curbs include vehicle lengths and curb demand. The dwell times for the Alternative D analysis were reduced for private autos to reflect new security procedures. The resulting dwell times for Alternative D are provided with the curbfront forecasts in Section 4 below. Courtesy vehicles were grouped together, accounting for rental car shuttles, hotel/motel shuttles, and parking shuttles.
- **Curb Stops** - Alternative D curb use was analyzed for five travel classes: Private Auto (private auto, rental cars, limousine, employee); Taxi; Door-to-Door Vans; Courtesy Vehicles (hotel/motel, RAC, parking shuttles); and Buses (scheduled, charter, tour). For these classes, only the buses and long-term public parking shuttles from the south lot are served by curbfronts at the ITC, and all other classes are served by the curbfronts at the GTC. The estimated number of stops per vehicle trip for Alternative D are provided in **Table S1**, Estimated Number of Curb Stops per Vehicle Trip. Curbfront forecasts and impacts were evaluated based on the total available length of curb on the departure levels and on the arrival levels. The airport peak hour was used to analyze the curbfronts. Since curbfront policies governing curb allocation, vehicle staging, and dwell times impact the operating conditions of the curbfront, evaluation of curbfront operating conditions on an aggregate level was deemed to be the most useful method of evaluation. The required curb length is the product of the hourly demand times a surge factor of 1.25 (to account for surges within the peak hour) times the average dwell time times the average vehicle length. The available length is the actual and/or proposed curb length plus 50 percent of the double park lane (if available) and then reduced by 10 percent to account for unusable curbfront and emergency vehicle areas.

Table S1

Estimated Number of Curb Stops per Vehicle Trip

	Alternative D		
	CTA	**GTC**	**ITC**
Private Auto	0	1	0
Taxi	0	1	0
Door-to-Door Van	0	1	0
Courtesy Vehicle	0	2	1
Bus	0	0	1
Scheduled (FlyAway) Bus	5	0	0

Source: JKH Mobility Services, November 2001.

- **Employees** - For Alternative D, the percentage of employees assumed to be dropped at the curb or security screening location from a private auto was about 30 percent of the terminal employee population and 5 percent were assumed to use Public Transit, the remaining 65 percent park at a designated employee lot.
- **Visitors** - The Meeter/Greeter and Well-Wisher visitor ratios for Alternative D are 0.55 visitors per international originating/terminating passenger, and 0.38 visitors per domestic originating/terminating passenger.
- **Vehicle Occupancy** - The modeled vehicle occupancies used for Alternative D are summarized within Section 3 below.
- **Passenger Car Equivalents** - The passenger car equivalents for Alternative D were based on recommendations from the consulting team and historical data from other major airports. Heavy

vehicles in the traffic stream reduce the capacity of the roadway and the curbfronts. The Highway Capacity Manual methodology uses passenger car equivalents to reduce the actual capacity of a segment of roadway by equating the number of passenger cars that are displaced by the heavy vehicles. The specific passenger car equivalents used for Alternative D are summarized within Section 3 below.

- **Lead/Lag Times** - Lead/lag distributions by terminal population type were used to shift the timing of people's ground transportation trips with respect to the flight arrival or departure time. The same distributions were used in Alternative D as in the other Master Plan alternatives documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. Although recent terrorist events and associated security procedural changes have impacted the lead and lag times at airports, no changes to these time distribution curves were made in Alternative D in order to maintain consistency between alternatives. Any spreading of the distribution over a longer period of time could possibly reduce the peaking effects of demand on airport landside facilities, but such assessments were beyond the scope of this study.
- **Seasonal Factor** - Seasonal factors were applied to the a.m. and p.m. volumes of the Alternative D design day. The traditional airport specific activity peak occurs during the summer (August) when the noon volumes are the highest at the airport. Therefore, a summer design day was created to compile the worst-case scenario for each time period. This required the use of seasonal factors to adjust the a.m. and p.m. to reflect non-summer peak demand during these periods. The 8-9 a.m. and 5-6 p.m. air passenger volumes for Alternative D were adjusted by appropriate seasonal factors to account for non-summer air traffic, while the airport peak hour (11 a.m. to noon) was applied directly in the model without any adjustment factor.
- **Mode Splits** - The final mode choice patterns (e.g., after validation) for Alternative D are provided in Section 3 below.

2.5 Basis of Analyses

The basis for analyses for the No Action/No Project Alternative and Alternatives A, B, and C are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The same basis of analyses used in the other Master Plan alternatives was applied to Alternative D. The basis for analyzing the impact of forecast demands on the Alternative D ground access network is to compare the hourly vehicular volumes to capacities for each roadway segment. The volume to capacity (v/c) ratio is a measure of effectiveness for the roadway segment, and has been related in the Highway Capacity Manual to level of service (LOS). Levels of service designations provide a qualitative measure of the operating conditions of a segment of roadway. Roadway segment capacities and free flow speeds used as the basis of analyses for Alternative D are provided below. The capacities reflect the guidelines provided in the Highway Capacity Manual and in the FAA Advisory Circular No. 150/5360-13. These capacities are commensurate with the other Master Plan alternatives.

- Main access roads (Century Blvd, Sepulveda Blvd) - Capacity 1,500 to 1,700 vehicles per hour per lane (vphpl); free-flow speed 45 miles per hour (mph) or greater.
- Transitions from main access roads to curb approaches, including ramps - Capacity 1,000 to 1,500 vphpl; free-flow speed of 35 mph or greater.
- Approaches to curbs, loop ramps - Capacity 600 to 900 vphpl; free-flow speed of 30 mph or greater.
- Curbfront through lanes - Capacity 600 to 850 vphpl; free-flow speed of 25 mph.
- Curb lanes - Curb lane capacities are based on dwell times, vehicle fleet mix, the associated average vehicle length, and length of available curb. The length of available curb was increased by a factor of 50 percent to account for partial utilization of the double park lane to pick-up and drop-off passengers. Furthermore, the double park lane was assumed to have no contribution to the curb through lane capacity. Curb length requirements include a factor 1.25 applied to the calculated curb lengths to account for peaking within the peak hour. A 10 percent reduction was then applied to account for unusable curbfront and emergency vehicle areas.

Section 5 below discusses ways to mitigate deficiencies of the Alternative D on-airport ground transportation network. These mitigation measures either reduced demand, increased capacity or sought to achieve both.

The level of service criteria for the Alternative D on-airport ground access roadways is consistent with the other Master Plan alternatives documented in Section 2.5, *Basis of Analyses,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The overall goal level of service for on-airport roadway segments is LOS D, which is the Los Angeles Department of Transportation (LADOT) goal for the area roadways. This goal is obtainable on the proposed facilities linking the west terminal area. LOS D also served as the basis for the evaluation of Alternative D. However, facilities in the CTA are so capacity deficient in Year 2008 that a goal of LOS E was considered the most reasonable to expect without invoking drastic mitigation measures.

As with the other Master Plan alternatives documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR, Alternative D was analyzed and the resulting v/c ratios were compared to No Action/No Project Alternative v/c ratios to determine if changes were significant. An increase in v/c (i.e., worsening of conditions) was considered significant if the change in ratios was 0.08 for LOS C, 0.04 for LOS B, and 0.02 for LOS E. For a resulting LOS A or LOS B, a project related increase in v/c was not considered significant. Decreases in v/c between the Alternative D case and the No Action/No Project Alternative case were desirable, and considered not significant, because this indicated that LOS had improved.

2.6 Model Validation

As part of the previous Master Plan analysis, the ALPS™ models were validated. The documentation of the model validation is presented in Section 2.6, *Model Validation,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The process used to validate the 2005 No Action/No Project Alternative model was also applied to Alternative D.

2.6.1 Analysis Periods

The analysis periods for Alternative D are consistent with the analysis periods of the other Master Plan alternatives as documented in Section 2.6.1, *Analysis Periods,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. Ground transportation forecasts for Alternative D were developed for three peak periods, based on the airport "design day" peak hour. The airport design day has been designated by LAWA as a summer weekday. The airport peak hour of the airport design day has been designated as 11 a.m. to noon. The other two periods coincide with commuter peak periods, consisting of a non-summer morning weekday (8 a.m. to 9 a.m.) and a non-summer evening weekday (5 p.m. to 6 p.m.) peak.

The airport peak hour forecasts produce the greatest demand on the on-airport ground transportation network, thus driving the sizing of on-airport ground transportation infrastructure. The commuter peak period forecasts were used as inputs for the off-airport ground transportation analyses to determine off-airport ground transportation needs.

2.6.2 Validation Methodology

The approach to validating the Alternative D on-airport ground transportation ALPS™ model is the same process applied to the other Master Plan alternatives documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. The validation results for Alternative D are discussed in Section 2.6.4 below.

2.6.3 Input Data

The input data for the No Action/No Project Alternative and Alternatives A, B, and C are documented in Section 2.6.3, *Input Data,* of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. Much of the same input data used in the other Master Plan alternatives was applied to Alternative D, as specified in the following sections.

Input data was divided into two categories: input constants and input variables. Only input variables were adjusted to validate the model. The Alternative D design day flight schedule as provided by Landrum & Brown was considered a constant input. Other input data was considered adjustable for purpose of model validation. The resulting final input data for Alternative D used to obtain accurate ground transportation forecasts when compared to actual ground counts are provided in Section 3 below. A

discussion of each input variable is provided below, grouped primarily by the steps in the transportation planning process:

- Trip Generation
- Mode Split
- Vehicle Occupancy
- Trip Purpose and Assignment

2.6.3.1 Trip Generation

2.6.3.1.1 Airport Peak Hour/Season

Person trip generation for the Alternative D ground transportation forecasts is based on the following input data;

- The flight schedule, including percent of enplanements and deplanements that are originating, terminating and connecting,
- The number of visitors associated with each originating and terminating passenger, and
- The lead and lag times associated with flight activity.

Landrum & Brown provided the flight schedule for the Alternative D airport design day. Previous flight schedules were provided in ASCII format, but Alternative D was provided as an EXCEL workbook detailing hour-by-hour passenger boarding and alighting volumes from each gate. This information was treated an input constant. Therefore, no adjustment was made to the flight schedule.

The airport peak hour data is representative of the forecasted 2015 activity for the airport design day (a summer weekday). However, the peak days of the year will have higher activity levels.

The percent of passengers that originate, terminate, and connect were also provided in the Alternative D flight schedule, as shown in the LAX Master Plan Addendum. These data were also treated as input constants.

The number of visitors (meeter/greeters, well wishers) per originating and terminating passenger was based on the other Master Plan alternatives documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. This information was not time-of-day specific, rather fixed values for international passengers (0.55 visitors per passenger) and for domestic passengers (0.38 visitors per passenger). This information was treated as an input variable as no actual visitor surveys were performed for the analysis periods. The visitor trips are assumed to be by private autos which come to the airport, park in short term parking, then leave the airport an hour or so later. Each visitor trip includes both an accessing and an egressing vehicle trip for each one-way trip of the corresponding originating and terminating passenger. By definition, the visitor automobile is specifically identified by the vehicle parking in short-term parking with the visitor occupants leaving the vehicle and traveling to the terminal to accompany the air passenger.

Lead and lag times for the No Action/No Project Alternative and Alternatives A, B, and C were documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The same lead and lag times were applied to Alternative D. The lead curves and lag curves used in the Alternative D model for international and domestic concourses are depicted in **Figure S3**, Lead and Lag Curves. These curves are typical distributions from historic data gathered from various North American airports. All alternatives have been analyzed based on these same lead and lag times.

Although recent terrorist events and associated security procedural changes have impacted the lead and lag times at airports, no changes to these time distribution curves were made in Alternative D in order to maintain consistency between alternatives. Any spreading of the distribution over a longer period of time could possibly reduce the peaking effects of demand on airport landside facilities, but such assessments were beyond the scope of this study.

The visitor time distribution with respect to the flight time matches the air passenger's time distribution for the portion of the trip they accompany the passenger. The opposite portion of the trip has a much more compressed period in which the visitors enter or leave the airport.

2.6.3.1.2 Commuter Peak Hours/Season

None of the above data were available for the commuter peak season. As in the other Master Plan alternatives documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR, the Alternative D commuter peak periods consist of the non-summer morning weekday (8 a.m. to 9 a.m.) and non-summer evening weekday (5 p.m. to 6 p.m.) peaks. The airport design day data was used as initial input data for these time periods. Moreover, the total air passenger activity of the Alternative D summer Airport Design Day (as defined by the flight schedule) is factored down to 70 percent across the board in order to estimate the level of air passenger activity for a spring day. This reduction factor was determined from the previously published Master Plan studies by Leigh Fisher and Associates, and it has been consistently applied throughout the EIS/EIR process.

This seasonal adjustment is due to the fact that the environmental comparisons for the "commuter peak" for the Los Angeles area are based on a typical spring time day. This reduced air passenger activity scenario is then used to simulate the total airport activity. The vehicle-trips and the roadway demand data is extracted from the model results for the a.m. and p.m. Commuter Peak times for use in the other environmental and off-airport analyses. It is not a pure factoring of vehicle activity, since the commercial vehicles in particular remain close to the same activity level as during the summer periods, and only the private auto activity reduces proportionally.

2.6.3.1.3 Parking Forecasts

The parking forecasts for the other Master Plan alternatives are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR.

2.6.3.1.4 Delivery/Service Vehicle Traffic

In addition to factoring the flight schedule, a number of delivery and service vehicles traveling to the terminal and landside facilities were added to the Alternative D model during the a.m. and p.m. peak hours. Comprised in this vehicle population are operational vehicles such as LAWA operations and maintenance vehicles, police vehicles, airline vehicles, and delivery vehicles supplying goods to concessions and other central terminal area offices. Delivery vehicles would be primarily directed to a consolidated warehouse within the airport for security screening and internal distribution control. These vehicle trips are not flight related and typically occur during non-airport peak hours and were distributed between the CTA, GTC and ITC.

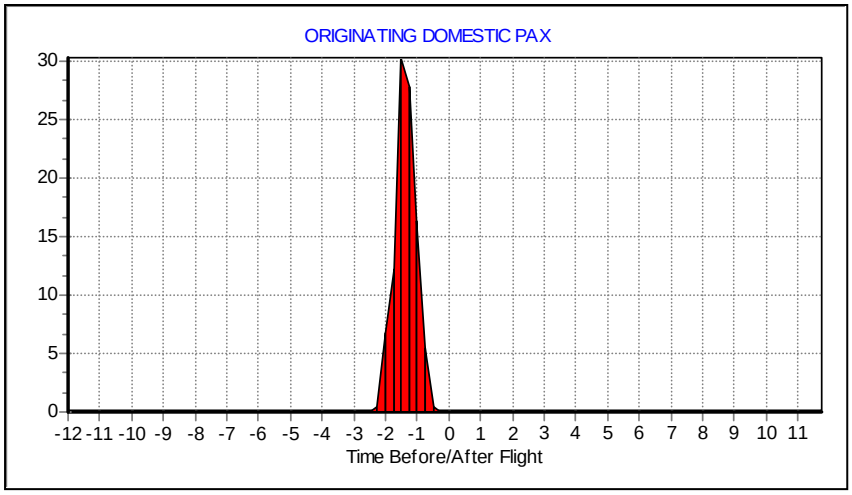
To generate the delivery/service vehicle trips in Alternatives A, B and C, a post processing factoring procedure was used as documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. For the Alternative D analysis, a pre-processing procedure was used where an additional 10 percent of the total hourly vehicle trips generated in the model were applied to the hours surrounding the commuter peak hours as bi-directional round trips, factored to represent historical data trends of background traffic in the CTA. The generation and distribution of the delivery service vehicles will be refined in further studies during advanced planning.

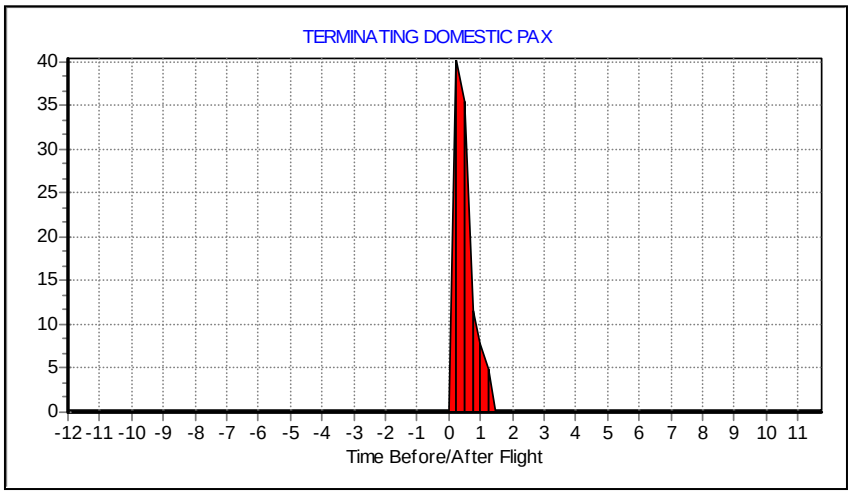
2.6.3.2 Mode Split

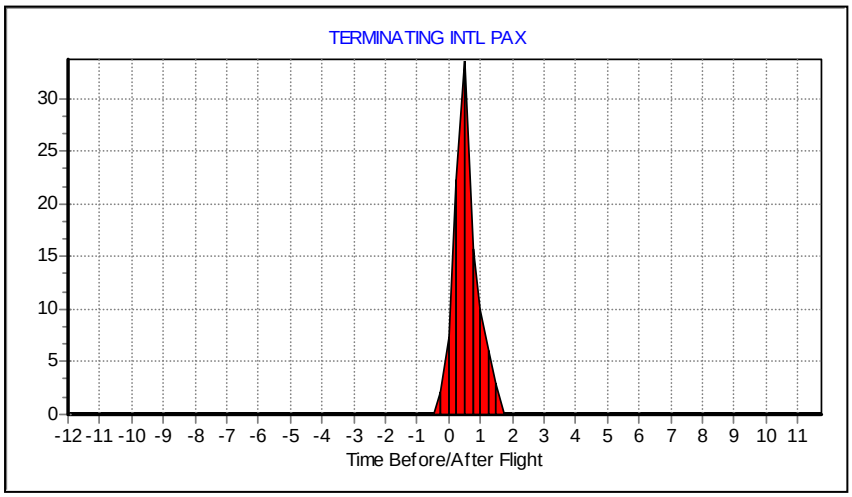
The process of converting person trips to vehicular trips begins by allocating person trips to individual ground transportation modes. The mode splits used in the No Action/No Project Alternative and Alternatives A, B, and C are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The 2015 mode splits for the other Master Plan alternatives were updated specifically for Alternative D in a LAWA Public Transportation Task Force meeting, which included representatives from MTA, Caltrans and LADOT on November 1, 2001. In reality, the mode split for an airport changes by time of day and day of year. Mode split values were treated as input variables allowing for adjustments. The final mode split values used to model the on-airport traffic conditions are detailed for Alternative D in Section 3 below.

2.6.3.3 Vehicle Occupancy

The vehicle occupancies for each ground transportation mode for the other Master Plan alternatives were estimated by the project team and are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. Vehicle occupancies were considered variable as







LAX Master Plan **Supplement to the Draft EIS/EIR**	**Lead and Lag Curves**	**Figure** **S3**

they do change hourly and daily. The final vehicle occupancy values used to model the on-airport traffic conditions are detailed for Alternative D in Section 3 below.

2.6.3.4 Trip Purpose and Assignment

Trip purpose (also termed sub-mode) influences how a passenger will use the airport facilities and describes in what order they will use them (i.e., private auto directly to curb then to close-in parking). Just as with mode split data, trip purpose changes during the day and during the year. Thus, trip purpose data were treated as variable. The final trip purpose data used to model on-airport traffic are detailed for Alternative D in Section 3 below.

Trip assignment (travel routes) data was not available; however, most travel routes were readily identified by field observations (i.e., the exact path Rental Car shuttles take to and from the CTA). As with mode split and trip purpose, travel routes change throughout the day and year. Trip assignment data were treated as input variables.

2.6.4 Validation Results

The validation results of the other Master Plan alternatives are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The same basis of analysis used in the other Master Plan alternatives was applied to Alternative D. The vehicle trips going to and from the CTA is different between Alternative D and Year 2015 No Action/No Project due to the air traffic growth between the two analysis years. However, vehicle trips entering and exiting the CTA per originating and terminating passenger (vph/O&D) can be used effectively as a basis of comparison by eliminating the growth in air passenger traffic from the equation.

The changed conditions between Alternative D and the 2015 No Action/No Project are the flight schedule and the anticipated change in the mode split towards more use of high occupancy vehicles. As discussed above, the flight schedule changes can be accommodated by validating the model to the lowest common denominator, vph/O&D.

The level of activity measured in terms of Million Annual Passengers (MAP), served by Alternative D is comparable to that of the No Action/No Project Alternative, however the makeup of that activity, in terms of organized destination flights versus connecting flights (i.e., the number of passengers that would drive to/from LAX versus the number of passengers that would remain within the terminal), is very different. The number of aircraft operations is less than the No Action/No Project Alternative due to the reduced gate frontage. However, the size of the domestic fleet is larger in Alternative D than with the No Action/No Project Alternative. There is more international activity in Alternative D than in the No Action/No Project Alternative but the enplanement/departure ratio is slightly lower than the No Action/No Project Alternative due to gate restrictions. The additional international activity, and the associated visitors accompanying the international passengers will increase the vehicle trips produced in the Alternative D scenario. There is also a decrease in the connection ratios, thus adding more originating and terminating passenger activity onto the roadways.

Table S2, Mode Split Changes Airport Peak Hour 2015 Alternative D, shows the impact of the mode split changes on vehicle trips per O&D passenger. The mode split and vehicle occupancy changes negate some of the effects due to the changes in flight activity. **Table S3**, Model Validation Results, shows the comparison of trips per O&D between 1996 and 2015 Alternative D.

Table S2

Mode Split Changes Airport Peak Hour 2015 Alternative D

Alternative D, 2015				Airport Peak (11am -12 pm)			
Domestic/Commuter Originating/Destinating Pax=				10687			
International Originating/Destinating Pax=				5376			
Total Originating/Destinating Pax=				16063			
	Domestic/Commuter			International			Total
Mode	Mode Split[1]	Vehicle Occ.[2]	One-Way Vehicle Trips	Mode Split[1]	Vehicle Occ.[2]	One-Way Vehicle Trips	One-Way Vehicle Trips
Private Auto	52.60%	1.55	3627	48.00%	1.55	1665	5292
Rental Car	18.10%	1.73	1118	16.70%	1.73	519	1637
Taxi	4.30%	1.45	317	4.40%	1.45	163	480
Door to Door Vans	6.50%	2.63	264	4.70%	2.63	96	360
Courtesy Vehicle (Hot/Mot)	3.50%	4.00	94	6.00%	4.00	81	174
Scheduled Bus (2)	6.40%	18.30	37	9.50%	18.30	28	65
Charter/Tour Bus (1)	4.30%	22.30	21	6.10%	22.30	15	35
Public Bus	1.00%	21.00	5	1.00%	21.00	3	8
Rail (Green Line)	3.30%	1000.00	0	3.60%	1000.00	0	1
Total Trips	**100.00%**		**5483**	**100.00%**		**2569**	**8052**
One Way Trips Per O/D			**0.513**			**0.478**	**0.501**

1 LAWA Public Transportation Task Force meeting with representatives from MTA, Caltrans and LADOT on November 1, 2001.

2 LAX Master Plan EIS/EIR – Phase III; Project Description – Final Draft, dated October 29, 1999.

Source: JKH Mobility Services, February 2003.

Table S3

Model Validation Results

Alternative	Peak	O/D[1] Pax	Trips[2] Inbound	Inbound Trips per O/D	Trips[3] Outbound	Outbound Trips per O/D	Total Trips	Total Trips per O/D	Percent change From 1996
1996 [1]	AM	7386	3604	0.49	3385	0.46	6989	0.95	N/A
1996 [1]	Noon	11345	6043	0.53	5396	0.48	11439	1.01	N/A
1996 [1]	PM	7291	3225	0.44	4530	0.62	7755	1.06	N/A
2015 Alternative D[4]	AM	6305	4011	0.64	2418	0.38	6429	1.02	8%
2015 Alternative D[4]	Noon	16063	7709	0.48	7792	0.49	15501	0.97	-4%
2015 Alternative D[4]	PM	6969	2933	0.42	4122	0.59	7055	1.01	-5%

Notes: Based on the Leigh Fisher report, update to 1996 Existing Conditions, dated June 1998.

1 Denotes originating and terminating passengers per hour, based on flight schedules provided in the LAX Master Plan Addendum. Time Distribution Curves were applied as well as a 30% reduction for the a.m. and p.m. Commuter Peaks.

2 Denotes vehicle trips entering the CTA and GTC.

3 Denotes vehicle trips exiting the CTA and GTC.

4 Total represents vehicle trips into and out of the GTC and CTA. Trips to and from the ITC were not added into the inbound/outbound trips since there was no correlation between these new trips and trips into the CTA in previous models.

Source: JKH Mobility Services, February 2003.

3. CHARACTERISTICS OF ALTERNATIVE D

The characteristics of the No Action/No Project Alternative and Alternatives A, B, and C are described in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. The general operating characteristics of Alternative D are described below. The associated remote facilities'

operating characteristics are also detailed in the following discussion. The operating characteristics presented in this section represent the Alternative D characteristics described in the Master Plan Addendum. Following the evaluation of the planned Alternative D forecasts and impacts, an updated roadway layout with corresponding operating characteristics was developed. The additional on-airport ground transportation improvements, classified for purposes of this study as "mitigation" measures, are presented in Section 6 below.

3.1 Alternative D

The characteristics of the 2005 analysis year for Alternative D are comparable to the 2005 No Action/No Project Alternative documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR; therefore no separate model run was performed for the 2005 intermediate year. In addition, a more detailed modeling analysis of the intermediate year 2008 was analyzed, which incorporated the year of peak construction traffic (discussed in Section 7 below). By the 2015 analysis year, Alternative D provides a new landside GTC, a consolidated RAC facility, and an ITC to the east of the existing CTA. Alternative D includes airfield modifications that improve the level of service at LAX while accommodating the Alternative D passenger level. Alternative D also includes space for additional gate facilities on the west side of the Tom Bradley International Terminal (TBIT) and for a new linear concourse to the west of TBIT, the West Satellite Concourse. Runway 24L will be moved to the south to allow a parallel taxiway to be constructed between the north runways in order to reduce the potential for runway incursions. This would require the demolition of the pier concourses associated with Terminals 1, 2, 3 and the TBIT north concourse. An east/west linear concourse would be constructed in their place.

Alternative D also includes new passenger processing facilities (terminals) within the CTA land envelope currently occupied by the existing parking garages. The existing parking garages in the CTA would be demolished to accommodate these new terminals. The new terminals would replace all existing ticketing, baggage claim, inbound/outbound bag sortation and distributions systems as well as the Federal Inspection Service (FIS) facilities within the CTA. These new terminals would be accessible directly from the GTC, ITC and consolidated RAC via the APM system and the CTA would have dedicated curbs for FlyAway buses only. Private auto traffic or non-FlyAway commercial vehicles would not be allowed in the CTA.

Within the CTA a total of four new terminals (Terminal 1 through 4) will be provided. The new terminals will be designed and built to provide the highest level of passenger security and convenience.

3.1.1 Ground Access

By Year 2015, essentially all ground transportation access to the airport is provided at remote ground transportation facilities. The primary remote ground transportation facility is the GTC located in the existing "Manchester Square" area bounded by Arbor Vitae Street to the north, La Cienega Boulevard to the east, Century Boulevard to the south and Aviation Boulevard to the west. Within the GTC, internal vehicle circulation is provided via two, one-way loop roads fully separated from the existing public road system. The only vehicles used by the general public that would be allowed access into the CTA roadways will be the FlyAway Buses, dedicated airport buses that run on a schedule from remote terminals throughout the region. In addition, there would be a small number of non-public vehicles allowed access to the CTA, such as for airport operators and police and fire protection. Service and delivery vehicles would be directed to a consolidated warehouse within the airport for security screening and internal distribution control.

The following major functions are anticipated at the GTC:

- Short-term and long-term parking
- Curbfront interface for private autos, taxis, limos etc.
- Skycap baggage check-in
- First level security screening
- APM Interface
- Baggage Claim (option for re-checked bags)

In addition to the GTC, the ITC provides a secondary remote landside facility. The ITC is located in the land envelope bounded by Aviation Boulevard to the west, Imperial Highway to the south and 111th Street to the north. Vehicle access from the surrounding region to the ITC is provided principally from Imperial Highway. The ITC is designed to serve the premium short-term and daily parking needs of the airport. In addition, the Green Line Light Rail Transit (LRT) system and the regional public transit bus system are served at the ITC. The Green Line currently has an end-of-line station across Imperial Highway and a pedestrian bridge will be provided with moving walkways for easy access.

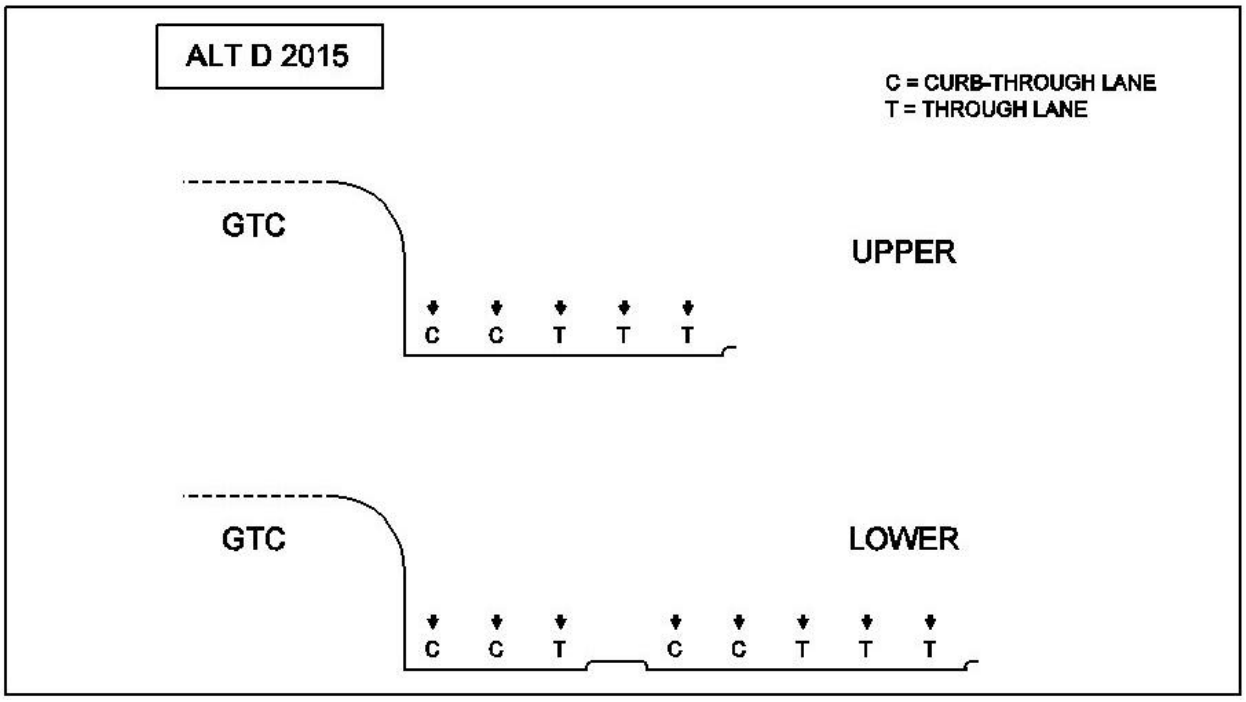
The following functions are anticipated at the ITC:

- APM and Green Line Access
- Short-term parking
- Potential direct freeway access

3.1.2 Curbs

All curbfronts within the GTC are dual level and approximately 1,400 feet long. All departures (upper) level curbfronts provide five lanes (two curbing and three through lanes). All arrivals (lower level) curbfronts provide two sets of curbfront lanes, separated by a sidewalk; the interior provides two curbing lanes with one through lane, and the exterior set provides five lanes (two curbing and three through lanes). The GTC is divided into two parallel terminal-like structures, called "piers", with adjacent parking facilities and a commercial vehicle holding area. These pier structures provide an orientation point for passengers to access a people mover system to the CTA. The eastbound curb vehicle flows at both the North and South Piers are accommodated on a clockwise loop road while all westbound curb vehicle flows are accommodated on a counter clockwise loop road. Recirculation connections are provided within each loop road and between the two loop roads. **Figure S4**, Ground Transportation Center Curbfronts - Alternative D, shows the curb lanes for 2015.

Figure S4 Ground Transportation Center Curbfronts - Alternative D



Each GTC Pier would be signed on the access roadways for specific air carriers and/or gates, although any curbfront and APM station could be used to reach any area in the CTA. The initial curbfront

designation described in the LAX Master Plan Addendum was modified based on team discussions to more evenly balance the curbfront activity between piers. Earlier studies assumed a correlation of CTA gates to GTC piers based purely on physical gate location. When these preliminary studies resulted in a substantial imbalance of curb activity, the match of CTA gates to GTC piers was adjusted to more evenly distribute air passengers between GTC piers. Specifically, the CTA gates were assigned to GTC piers based more on air passenger volumes and less on physical proximity of gates and APM stations in the CTA. Again since any curbfront and APM station can be used to reach any area in the CTA, the GTC piers can be signed to balance air passenger traffic in the GTC. The resulting assignment of gates to piers is shown in **Table S4**, GTC Curbfront Locations for Gates, Alternative D.

Table S4

GTC Curbfront Locations for Gates, Alternative D

Curbfront	APM Station in CTA	Gates Served
GTC North Pier, Curbfront A (Curb 1)	Terminal 1 and TBIT	Gates 1-10, TBIT Gates 90-99
GTC North Pier, Curbfront B (Curb 2)	Terminal 2 and Satellite	Gates 11-18, Satellite Gates 103-119
GTC South Pier, Curbfront A (Curb 3)	Terminal 3 and Satellite	Gates 40-59, Satellite Gates 100-102
GTC South Pier, Curbfront B (Curb 4)	Terminal 4 and Satellite	Gates 60-84, Satellite Gates 120-124

Source: JKH Mobility Services, February 2003.

Two initial ground transportation scenarios were modeled with regards to commercial vehicle curbfront access in the GTC. The first scenario modeled all commercial vehicles at one GTC curbfront (Curb 1) since it provided the closest proximity to the commercial vehicle holding area. The second scenario added commercial vehicles to a second additional curbfront in the south pier (Curb 3). Two iterations of each scenario were also performed, switching the commercial vehicle curbfront between the north and south curbfronts.

Based on the preliminary analyses and direction from LAWA and Landrum & Brown, the project was defined with commercial vehicle activity on the two north curbfronts. Specifically, commercial vehicles would use the arrivals and departures curbfronts on each pier's north side. Both private and commercial vehicles use the two curbs on the north side of each pier; whereas only private vehicles use the curbs on the two piers' south sides.

The curbfronts at the ITC are sized to accommodate large buses such as regional buses, charter buses and tour buses; however, the final number, type and location of curbfronts at the ITC will be determined in advanced planning. The curbfronts will eventually serve a mix of private autos (accessible only to those vehicles parking in the ITC parking garage), shuttles from the long term surface parking lot and high occupancy transit vehicles along their length.

3.1.3 Close-In Public Parking

By the 2015 analysis year, all existing close-in parking located at the CTA will be demolished. All close-in public parking for Alternative D will be provided in the GTC and ITC. Within the GTC complex, three parking structures are provided. The parking structures provide both short-term parking and long-term parking accommodations. The parking structures have a total of 6,373 short-term stalls and 3,262 long-term stalls.[2] Passengers are allowed to park in the parking structure and can move to or from any curbfront or APM station in the GTC. An additional premium short-term and daily public parking garage is provided in the ITC. Although physically farther from the CTA than the GTC, the ITC short-term parking lot would be easier to access than the GTC. With a direct people mover connection to the CTA, this parking lot would provide the most convenient parking for "daily" parkers (i.e., business travelers on short

[2] Figure 2.3-6, Alternative D Parking Plan. Draft LAX Master Plan Addendum. June 2003.

duration trips) and short-term parking, including parking by meeters/greeters and well wishers. This garage has a total of three floors providing 9,127[3] remote stalls.

3.1.4 Remote Parking

Alternative D remote parking (additional long-term parking) will be provided at a surface lot located west of La Cienega and north of 111th Street under the approach runways 25R and 25L. The capacity of the Long Term Parking Lot is 6,100[4] vehicles. The long term parking patrons access the CTA by first taking a shuttle bus to the ITC and then using the APM system to travel to the CTA.

3.1.5 Terminal Employee Parking

A characteristic of the airport operations, which has changed for Alternative D assessments, is the new security directive requiring all airport employees to first report to locations remote from the terminal for security screening. Only terminal employees were modeled in the on-airport model and were first assigned to the east employee lot until that lot reached capacity. The remaining terminal employees were then routed to the west employee lot. Specifically, the terminal employees are modeled in the Alternative D on-airport ground transportation model such that 46 percent utilize the West Employee Parking Garage (30 percent of total terminal employees) and 54 percent utilize the East Employee Parking Lot (35 percent of total terminal employees) in 2015.[5] The remaining 35 percent of terminal employees utilize public transit (5 percent of total terminal employees) or are dropped at the curb or security screening locations from a private auto (30 percent of total terminal employees). The West Employee Parking Garage under Alternative D has a total of 12,400 stalls and the East Employee Parking Lot has a total of 1,200 stalls.[6] The CTA terminal employees parking in the West Employee Parking Garage are brought to the CTA by a separate employee shuttle bus system operating on AOA roadways, which does not impact the facilities of Alternative D. The East Employee Parking Lot handles employees destined to the CTA, GTC, and ITC. CTA destined employees take an employee shuttle to the RAC curbfront and board the APM system to the CTA. Likewise the GTC-destined employees take the employee shuttle to the RAC curbfront and board the APM system to the GTC. Finally, the ITC-destined employees take the same employee shuttle to the ITC, which first stops at the RAC curbfront, then continues onto the ITC.

3.1.6 Rental Car Facilities

All passengers who rent vehicles from "on-airport" rental car companies pick-up and drop-off their vehicles in the RAC to the west of the GTC bordered by Carl E. Nielsen Youth Park on the north, Airport Boulevard to the east, 98th Street to the south and Sepulveda Boulevard to the west, in existing Lot C. The parking structure is planned to serve vehicles in a "quick turn-around" or QTA status. The primary elements of the consolidated RAC include:

- APM interface (Bi-Level)
- RAC Drop-off
- RAC Pick-up
- Ready Return and QTA Facilities
- Potential Claim for re-checked baggage
- RAC storage and support

All air passengers travel from the RAC to the CTA via the APM System. A proposed APM station is located at the RAC. It was assumed that no rental car companies operate courtesy vehicles to or from the GTC curbfronts. For purposes of this analysis, it was assumed that all rental car patrons (both on-airport and off-airport companies) board the APM system at the RAC. The off-airport rental car patrons (8 percent of all rental car patrons) are first shuttled to the RAC from their individual company lots. In

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3 Figure 2.3-6, Alternative D Parking Plan. Draft LAX Master Plan Addendum. June 2003.

4 Figure 2.3-6, Alternative D Parking Plan. Draft LAX Master Plan Addendum. June 2003.

5 Landrum & Brown and JKH Mobility Services. These percentages are based on discussions with Keith Wilschetz at L&B on July 16, 2002 and were further refined with model iterations to determine a percentage that would fill, but not exceed, the capacity of the East Employee Parking Lot.

6 Figure 2.3-6, Alternative D Parking Plan. Draft LAX Master Plan Addendum. June 2003.

addition, a passenger drop-off and pick-up curbfront will also be provided for rental car patrons within the RAC and therefore no rental car patrons have been modeled accessing the GTC curbfronts.

3.1.7 Staging

All commercial vehicle staging will be provided at a 230,000 square foot[7] lot to the north of the GTC. Staging use is dictated by policy, which may change in the future. For modeling ground access conditions for 2015, 80 percent of taxis, 75 percent of door-to-door vans and all charter/tour buses were assumed to use the staging facility. Within the GTC, commercial vehicles can access only the North Pier, Curbfront A (Curb 1) or the South Pier, Curbfront A (Curb 3). All commercial vehicle patrons travel to and from the GTC, since no commercial vehicles are allowed into the CTA.

3.1.8 Pedestrian Conveyance - APM System

Air passengers, as well as all visitors and employees traveling to/from the CTA via the GTC, ITC and RAC, will access the CTA using the landside APM system. As the on-airport analysis was completed, additional refinements to the APM alignment continued. The resulting APM system defined in the LAX Master Plan Addendum is slightly different from the system modeled in the on-airport surface transportation analysis. Although the physical alignment is now different than when modeled, the origin-destination trip patterns produced by the on-airport surface transportation analysis is not materially affected by the physical alignment refinements, and therefore remains the same. The new link volumes for the updated APM alignment will be accounted for by Lea+Elliott using the origin-destination trip patterns as part of the APM analysis documented in Technical Report S-2c, *Automated People Mover Technical Report*, of the Supplement to the Draft EIS/EIR. The refinements to the APM alignment will have no impact on the on-airport surface transportation analysis.

At each of the GTC stations for the modeled APM system, there are boardings and/or alightings for both the inner and outer loops traveling to the CTA. Additionally, there are four stations within the CTA for each of the three landside APM systems identified below:

- GTC Outer Loop: Counter-clockwise loop route from the CTA, GTC, RAC and back to the CTA. Riders will be signed between this route and the inner loop route based on the shortest travel path between their origin and destination.
- GTC Inner Loop: Clockwise inner loop route from CTA, RAC, GTC and back to CTA. This route works in conjunction with the Outer Loop route to provide each passenger the shortest travel path between the various locations within the CTA, RAC and GTC.
- ITC: Counter-clockwise pinched loop route from the ITC Parking structure that connects to the inner loop guideway to serve the four CTA stations (direct ITC Parking to CTA trips) then pinches back (reverses direction) to serve the four stations on the outer loop guideway and travel back to the ITC (direct CTA to ITC Parking service).

Key assumptions and inputs specific to Alternative D for the analysis year 2015 are shown in **Table S5**, Key Assumptions/Inputs 2015 Alternative D, Planned. More detailed trip purpose information for Alternative D is shown in **Table S6**, Sub-Modal Splits.

Table S5

Key Assumptions/Inputs 2015 Alternative D, Planned

	International	Domestic	Commuter
Enplanements/Deplanements (daily)	91,470	159,351	11,937
Connecting Passengers	**International**	**Domestic**	**Commuter**
(% of Enplanements/Departments)			
Originating/Terminating	65.0%	77.4%	46.6%
Connects in same Terminal (varies by Terminal)	16.9%-20.3%	9.9%-12.2%	25.3%-25.4%

[7] Figure 2.3-6, Alternative D Parking Plan. Draft LAX Master Plan Addendum. June 2003.

Table S5

Key Assumptions/Inputs 2015 Alternative D, Planned

Connects in another Terminal (varies by Terminal)	14.7%-18.2%	10.4%-12.7%	28.0%-28.1%

Vehicle Occupancy/Passenger Car Equivalents[1]	Veh. Occ.	PCE
Private Auto	1.55	1.00
Rental Car	1.73	1.00
Taxi	1.45	1.00
Door-to-Door Van	2.63	1.20
Courtesy Vehicle	4.00	1.50
Scheduled Bus	18.30	2.00
Charter and Tour Bus	22.30	2.00
Public Transit Bus	21.00	2.00

	International		Domestic		Commuter	
Mode Split[2]	Mode	Sub-Mode	Mode	Sub-Mode	Mode	Sub-Mode
(% of Originating and Terminating Passengers)						
Auto/Limo Curb Pick-Up & Drop-Off	30.4%		33.0%		33.0%	
Auto Short Term Parking (visitors)	9.1%		9.1%		9.1%	
Auto Long Term Parking	8.5%		10.5%		10.5%	
Direct to Close-in Park at GTC		6.0%		6.0%		6.0%
Curb stop then Close-in Park at GTC		16.0%		16.0%		16.0%
Close-in Park at ITC		40.0%		40.0%		40.0%
Direct to Remote Park		16.0%		16.0%		16.0%
Direct to Private Parking		22.0%		22.0%		22.0%
Auto Rental Car	16.7%		18.1%		18.1%	
Direct to RAC		92.0%		92.0%		92.0%
Off-Airport RAC		8.0%		8.0%		8.0%
Taxi	4.4%		4.3%		4.3%	
Direct to Curb		20.0%		20.0%		20.0%
Stage to Curb		80.0%		80.0%		80.0%
Door-to-Door Van	4.7%		6.5%		6.5%	
Courtesy Vehicle	6.0%		3.5%		3.5%	
Charter and Tour Bus	6.1%		4.3%		4.3%	
Public Transit	4.6%		4.3%		4.3%	
Metro Bus		50.0%		50.0%		50.0%
Rail		50.0%		50.0%		50.0%
Scheduled (FlyAway) Bus	9.5%		6.4%		6.4%	
TOTAL	**100.0%**		**100.0%**		**100.0%**	

		International		Domestic/Commuter	
Regional Access/Egress Directional Distributions[3]		Inbound	Outbound	Inbound	Outbound
(% of Originating and Terminating Passengers)					
Ground Transportation Center					
Eastbound Century Blvd. Loop Ramp	AM	34.8	31.8	34.8	31.8
	Noon	22.8	26.4	22.8	26.4
	PM	42.4	31.6	42.4	31.6
Westbound Century Blvd. Exit Ramp	AM	-	9.8	-	9.8
	Noon	-	7.9	-	7.9
	PM	-	8.8	-	8.8
Imperial at I-105, street level	AM	51.4	58.1	51.4	58.1
	Noon	46.6	54.4	46.6	54.4
	PM	49.1	56.3	49.1	56.3
Aviation Entrance Ramp	AM	6.5	-	6.5	-
	Noon	14.4	-	14.4	-
	PM	7.0	-	7.0	-
La Cienega	AM	7.3	0.3	7.3	0.3
	Noon	16.3	11.4	16.3	11.4
	PM	1.4	3.4	1.4	3.4

[1] Source: LAX Master Plan EIR/EIS – Phase III, Project Description – Final Draft, dated October 29, 1999.

Table S5

Key Assumptions/Inputs 2015 Alternative D, Planned

[2] Source: LAWA Public Transportation Task Force meeting with representatives from MTA, Caltrans and LADOT. November 1, 2001.

[3] Source: Parsons Transportation Group, July 15, 2002.

Source: JKH Mobility Services, February 2003.

Table S6

Sub-Modal Splits

Sub-Mode	Percent
Auto Curb Pick-up (Air Passenger meets vehicle at curb)	
Direct to GTC Curb then Exit	85 %
Direct to GTC Curb, Recirculate to Curb again, then Exit	15 %
Direct to Extended Dwell "curb" in GTC Parking structures, then Exit[1]	0 %
Auto Curb Drop-off (Air Passenger dropped at curb)	100 %
Auto Short Term Parking (visitors park the vehicle and travel to CTA)	
Accessing Well Wisher	
Direct to GTC Parking	27 %
Curb drop then recirculate to GTC Parking	13 %
Direct to ITC Parking	60 %
Accessing Meeter/Greeter	
Direct to GTC Parking	27 %
Curb then recirculate to GTC Parking	13 %
Direct to ITC Parking	60 %
Egressing Well Wisher	
GTC Parking exit then GTC exit	40 %
ITC Parking then exit	60 %
Egressing Meeter/Greeter	
GTC Parking exit then GTC exit	27 %
GTC Parking exit, then recirculate to curb for pick-up, then GTC exit	13 %
ITC Parking then exit	60 %
Auto Long Term Parking (Accessing and Egressing)	
Daily Park at ITC[2]	40 %
Direct to(from) GTC Parking	6 %
GTC curb stop and GTC Parking (recirculate)	16 %
Direct to(from) Remote Long Term Lot (shuttle to ITC, APM to CTA)	16 %
Direct to(from) Off-Airport Private Parking (Shuttle van to GTC curb)	22 %
Auto Rental Car (Accessing and Egressing)	
Direct to RAC[3]	92 %
Direct to(from) Off-Airport Rental Car (shuttle van to RAC Curb)	8 %
East Employee Parking and Curb Drop (Accessing and Egressing)	
Direct to (from) CTA (shuttle to RAC, APM to CTA)	50 %
Direct to (from) GTC (shuttle to RAC, APM to GTC)	40 %
Direct to (from) ITC (shuttle to ITC)	10 %
Taxi	
Accessing Air Passengers	
Direct to GTC then Exit (Deadheading out)	80 %
Curb and Recirculate to Commercial Vehicle Hold Lot	20 %

Table S6

Sub-Modal Splits

Sub-Mode	Percent
Egressing Air Passengers	
Commercial Vehicle Hold Lot to Curb, then Exit	20 %
Entrance to Commercial Vehicle Hold lot, then Curb (Deadheading in)	80 %

[1] The location and operation of the extended dwell curb was not defined in the LAX Master Plan Addendum; therefore no vehicles were routed to that curb in this model. If these routes are desired they will be addressed in the mitigation phase.

[2] Based on Parking Duration collected in August, 2001 by LAWA.

[3] In the case of the ITC and RAC parking structures with an Integrated APM station, it has been assumed that the curbfronts for air passenger recirculation to pick-up other passengers/visitors would be located internal to the parking facility.

Source: JKH Mobility Services, February 2003.

4. FORECASTS AND IMPACTS

On-airport ground transportation (vehicular and pedestrian) forecasts were developed for the analysis years with the forecasting procedures discussed in Section 2.2 above. The forecast vehicular and pedestrian volumes for the No Action/No Project Alternative and Alternatives A, B, and C are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR.

The forecast vehicular and pedestrian volumes for Alternative D are presented in the following sections for the design day airport peak hour, and the a.m. and p.m. commuter peak hours. Significant project impacts for Alternative D, those impacts that degrade the level of service (LOS) below the goal LOS standards, are also discussed in this section. The discussion is organized as follows:

- On-Airport Roadway Forecasts and Impacts
- Curbfront Forecasts and Impacts
- Parking Forecasts and Impacts
- Pedestrian Forecasts

The on-airport roadway forecasts are divided into “terminal area” (on-site) and “remote facilities” (off-site). On-site facilities can only be accessed through airport owned roadways. Off-site facilities are accessed from non-airport owned roadways. The “terminal area” forecasts include the CTA and the GTC. The shuttle buses (i.e., private parking, hotels, etc.) are also counted in the GTC area forecasts. The ITC is categorized as a “remote facility” since access can occur from both on-site and off-site roadways. The additional “remote facilities,” such as the consolidated RAC and off-site parking facilities, are included under the additional category of “indirect” areas. Forecasts for the remote and indirect facilities are synonymous to driveway counts and include private autos and shuttle buses.

Comparative data representing Year 2015 traffic volumes for Alternatives A, B and C are obtained from Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

4.1 Alternative D

The characteristics of the No Action/No Project Alternative and Alternatives A, B and C were described in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

The Alternative D ground transportation forecasts and impacts for Year 2015 are discussed in this section. The On-Airport Ground Transportation for Alternative D, Year 2005 will result in the same forecasts and impacts as the 2005 No Action/No Project Alternative.

A second Interim Year for Alternative D was established for Year 2013, the year that construction related air quality impacts will be the greatest. Because there are no notable differences between the flight schedule on-airport roadway model inputs between year 2013 and year 2015, there are no differences in

the on-airport traffic forecasts or associated roadway traffic impacts between these years. Finally, a detailed analysis was competed for the interim peak construction traffic year, Year 2008. The inputs, forecasts and impacts of the interim year construction analysis are presented in Section 7 below.

4.1.1 On-Airport Roadway Forecasts and Impacts

4.1.1.1 Forecasts

The detailed ground access vehicle-trip forecasts grouped by travel classification (mode) for year 2015 are provided in **Table S7**, On-Airport Travel Classification 2015 Alternative D. The location categories of CTA, GTC, ITC, and Indirect are defined above in the introduction of Section 4 above. The shuttle volumes are consistent with the other Master Plan alternatives. In some instances, as with the private long-term shuttles, the number of shuttles is higher than the number of private autos entering or exiting the private long-term parking lot during the same hour, but was kept constant for consistency between alternatives.

Table S7

On-Airport Travel Classification 2015 Alternative D

Location	AM Peak Hour		Airport Peak		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
CTA						
FlyAway Buses[1]	30	30	24	24	30	30
Delivery/Service Vehicles[2]	572	572	0	0	635	635
SUBTOTAL	**602**	**602**	**24**	**24**	**665**	**665**
GTC (Remote)						
Private Vehicles/Other[3]	1574	1546	3892	3978	1667	1751
GTC Parking Passenger Cars[4]	879	619	1700	1769	710	926
Private Parking Shuttles[5]	78	78	90	90	80	80
Hotel Shuttles[6]	112	112	135	135	119	119
Delivery/Service Vehicles[2]	132	132	0	0	148	148
SUBTOTAL	**2775**	**2487**	**5817**	**5972**	**2724**	**3024**
ITC (Remote)						
Charter Buses[7]	90	90	90	90	90	90
MTA Buses[8]	30	30	30	30	30	30
Long Term Public Parking Shuttles from South Lot[9]	25	25	25	25	25	25
Public Parking Short Term (private autos)[10]	1395	976	2714	2819	1119	1474
Employee Shuttles[11]	11	11	7	7	16	16
Delivery/Service Vehicles[2]	55	55	0	0	59	59
SUBTOTAL	**1606**	**1187**	**2866**	**2971**	**1339**	**1694**
INDIRECT (NON-GTC)						
Rental Cars (private autos)[12]	438	208	831	806	278	434
Off-Airport RAC Shuttles[13]	35	35	30	30	32	32
Private Long Term Parking (private autos)[14]	59	28	111	107	38	58
Private Parking Shuttles[5]	78	78	90	90	80	80
Public Parking Long Term (private autos)[15]	44	21	84	82	28	44
Long Term Public Parking Shuttles from South Lot[9]	25	25	25	25	25	25
West Employee Parking Garage, Terminal Employee (private autos)[16]	136	125	85	57	102	210
East Employee Parking Lot, Terminal Employee (private autos)[16]	422	409	243	210	433	560
Employee Shuttles[11]	11	11	7	7	16	16
SUBTOTAL	**1248**	**940**	**1506**	**1414**	**1032**	**1459**

1 The FlyAway buses and the service/delivery vehicles are the only modes of transport that access the CTA directly.

2 A number of vehicles were added to the trip production during the AM and PM commuter peak hours to account for service and delivery vehicles accessing the CTA, GTC, and ITC.

3 Other travel classifications include taxis, limos, and door-to-door vans. Does not include parking vehicles but does include curb drop for passengers.

4 These parking passenger vehicles represent vehicles parking at the GTC. Parking patrons travel between the GTC and CTA using the APM. Some of these vehicles travel to the curb before or after parking.

Table S7

On-Airport Travel Classification 2015 Alternative D

Location	AM Peak Hour		Airport Peak		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound

[5] Private parking shuttles are a component of the courtesy vehicles. Upon arriving at the GTC, private parking patrons use the APM to travel to/from the CTA.

[6] The hotel shuttles are a component of courtesy vehicles. Upon arriving at the GTC, Hotel patrons use the APM to travel to/from the CTA.

[7] Charter buses are assumed to pass through the commercial vehicle staging area at the north end of the GTC as they stage for the ITC curbfront.

[8] MTA Buses drop passengers at the ITC. Patrons travel to the CTA using the APM.

[9] Public parking shuttles travel between the Long Term Public Parking Lot and the ITC. These trips travel on 111th Street. Parking patrons travel between the ITC and the CTA using the APM.

[10] Public parking represents the daily and short term parking in the structure adjacent to the ITC. Parking patrons travel between the ITC and the CTA using the APM, and any associated curb drops occur at the curbfront internal to the ITC.

[11] A percentage of parking and curb-drop employees destined for the CTA, GTC, or ITC use the East Employee Parking Lot. Terminal employees destined to the CTA use a shuttle to the RAC and then board the APM to access the CTA. Employees destined to the GTC will use the same shuttle to the RAC curb-drop and board the outbound APM to the GTC. Employees destined to the ITC will remain on the Employee Shuttle after dropping at the RAC curbfront and will travel via shuttle to the ITC. Employees traveling by public transit will board the APM at the ITC and use the APM to access the CTA.

[12] This represents the rental cars utilizing on-airport and off-airport facilities. On-airport rental car patrons drive directly to/from the RAC and some also utilize the curbfront internal to the RAC facility. Off-airport rental car patrons, arrive at the rental car curbfronts via shuttle buses. All rental car patrons travel to and from the CTA using the APM.

[13] All rental car patrons (on-airport and off-airport) accessing the airport use the APM to travel between the CTA and the RAC. Off-airport rental car patrons travel to the RAC internal curbfront via shuttle buses. All rental car patrons travel to and from the CTA using the APM.

[14] This represents the private auto vehicles who travel to the off-airport lots to park, then take a shuttle to the GTC. Upon arriving at the GTC, private parking patrons use the APM to travel to/from the CTA.

[15] This represents the private autos utilizing the Remote Long Term Surface lot located south of the GTC.

[16] The employee parking lot roadway connections are not modeled in the Alternative D model, and only the lot entries/exits for terminal employees are modeled. The terminal employee private autos accessing and egressing the West Employee Parking Garage and East Employee Parking Lots are presented here. All employee curb-drops occur at the East Employee Parking Lot and terminal employees include people working in the CTA, GTC, and ITC. The employee shuttle buses to and from the West Employee Parking Garage are not modeled since they travel on AOA roadways only.

Source: JKH Mobility Services, February 2003.

The maximum traffic volume assignment for the 2015 Alternative D on-airport ground access forecasts to the roadway system is provided in **Figure S5**, On-Airport Ground Transportation Maximum Hourly Forecasts, Alternative D, Year 2015. The hourly forecasts in **Figure S5** represent the maximum hourly volume throughout the day. In most instances the maximum hourly volume occurs during the Airport Peak hour (11:00 a.m. to noon), however in some segments the maximum hourly volume begins in the preceding hour (10:00 a.m. to 11:00 a.m.). The resulting maximum volume to capacity ratios for the on-airport access forecasts can be seen in **Figure S6**, On-Airport Ground Transportation Maximum Volume to Capacity Ratios, Alternative D, Year 2015. As with the maximum hourly forecasts, the maximum volume to capacity ratios presented in **Figure S6** represent the maximum volume to capacity ratios throughout the day. Note that these figures are best viewed in color to observe the associated color-coding. Detailed demand and LOS information can be seen in Attachment A of this report.

4.1.1.2 Impacts

The ground access impacts on the CTA for Alternative D for year 2015 are less than 1996 conditions, because only the FlyAway Buses and a small number of delivery/service vehicles are allowed to access the CTA roadways. However, some capacity deficiencies in the GTC occur in the airport peak hour. The maximum traffic volumes occur at segments illustrated in **Figure S7**, GTC Maximum Hourly Forecasts, Alternative D, Year 2015. The hourly forecasts presented in **Figure S7** represent the maximum hourly volume throughout the day. In most instances the maximum hourly volume occurs during the Airport Peak Hour (11:00 a.m. to noon), however in some segments the maximum hourly volume begins in the preceding hour (10:00 a.m. to 11:00 a.m.). Note that this figure is best viewed in color. **Table S8**, Key Segment Link Volumes Alternative D Year 2015, shows the daily and Airport Peak Hour link volumes of the identified segments.

Table S8

Key Segment Link Volumes Alternative D Year 2015

Segment	Airport Peak Hour Link Volume (vehicles)	Airport Design Day, Daily Volume (vehicles)
A	4,101	43,764
B	3,988	43,361
C	3,038	35,663
D	3,427	41,254
E	4,358	56,830
F	3,979	52,656
G	3,511	42,199

Source: JKH Mobility Services, February 2003.

Segment A represents the southern entrance into the GTC, combining the entry volumes from the entry points south of Century Boulevard. Segment B represents the southern exit from the GTC for the exit points south of Century Boulevard. Segment C represents the west exit from the piers, prior to the recirculation ramp. Segment D represents the entry and recirculation movements into the westbound curbfronts. Segment E represents the south exit loop road, prior to the recirculation ramp and Century exit. Segment F represents the south exit loop road, prior to the parking exit and recirculation ramp. Finally, Segment G represents the east recirculation road, just after the parking exit. For more information on additional link volumes, Attachment B of this report has the volumes for all segments in the model as well as the average speed along those links during the Airport Peak Hour.

4.1.2 Curbfront Forecasts and Impacts

4.1.2.1 Forecasts

Table S9, GTC Curbfront Volumes, Alternative D, Year 2015, Airport Peak Hour, summarizes the Alternative D curbfront demands by vehicle type for Year 2015. In addition to these commercial vehicle volumes at the GTC, there are 30 MTA City Buses, 90 Charter Buses, 25 Remote Long Term Parking Shuttles and 7 Employee Shuttles using the commercial vehicle curbfront at the ITC during the airport peak hour. Curbfront demands are based on the airport peak hour (11:00 a.m. to noon) and the assumptions stated in Section 2.5 above. Curbfront length requirements are also based on the methodology and assumptions described in Section 2.5 above. A temporal distribution of curbfront approach volumes is included in Attachment B of this report.

Table S9

GTC Curbfront Volumes, Alternative D, Year 2015, Airport Peak Hour

	North Pier Curbfront A (Curb 1)				South Pier Curbfront A (Curb 3)			
	Arrivals		Departure		Arrivals		Departure	
Vehicle Classification	Curb	Thru Trips	Curb	Thru Trips	Curb	Thru Trips	Curb	Thru Trips
Curb Drop/Pickup	438	0	365	0	490	0	420	0
Long Term Park	17	1	17	0	21	0	21	0
Visitors, Departing Passengers	0	57	71	0	0	0	64	0
Visitors, Arriving Passengers	162	45	0	0	117	0	0	0
Taxis	118	0	121	0	118	0	122	0
Door to Door Vans	82	0	87	0	94	0	97	0
Private Long Term Park Courtesy Vehicles	90	0	90	0	90	0	90	0
Hotel Courtesy Vehicles	135	0	135	0	135	0	135	0

	North Pier Curbfront B (Curb 2)				South Pier Curbfront B (Curb 4)			
	Arrivals		Departure		Arrivals		Departure	
Vehicle Classification	Curb	Thru Trips	Curb	Thru Trips	Curb	Thru Trips	Curb	Thru Trips
Curb Drop/Pickup	478	0	462	0	466	0	442	0
Long Term Park	19	0	22	0	19	0	21	0
Visitors, Departing Passengers	0	0	78	0	0	0	71	0
Visitors, Arriving Passengers	106	0	0	0	117	0	0	0

Source: JKH Mobility Services, February 2003.

Note that a number of through trips travel along the arrivals level of the North Pier, Curbfront A (Curb 1) because of the location of the parking structure exit. Specifically, vehicles desiring to travel eastbound on Century must travel through the curbfront to access the correct exit. This routing pattern is shown below in **Figure S8**, Egressing Vehicles from North Pier Parking Structure, Alternative D. Specifically in this route the vehicle travels from the CTA on the APM, walks to the parking structure then drives to Century Boulevard.

4.1.2.2 Impacts

Curbfront operational impacts have been analyzed using two different techniques. The first is a factored analysis based on the technique used for Alternatives A, B, and C and documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. The second is an animated, car-by-car movement simulation analysis that dynamically accumulates dwell, travel speed and delay statistics.

Table S10, Curbfront Factored Analysis, Design Day Airport Peak Hour, 2015 Alternative D, summarizes the factored curbfront analysis for Year 2015, using the same methodology used in the analysis of the other Master Plan alternatives. To maintain consistency with the other Master Plan alternatives, a 4.7-minute dwell time was used for private autos on the arrivals curbfronts, a value obtained from curbfront surveys in 1996 conducted as part of the previous Master Plan work. This is longer than the 2.3-minute dwell time used for this vehicle classification in our "performance based" simulation study of Alternative D. First of all, the security related emphasis of Alternative D is expected to contribute to shorter dwells at the curbfront. Secondly, this use of the shorter dwell in the performance based analysis is justified by the fact that many cars are simulated to be trapped at the curb after their short car-loading dwell is completed due to traffic congestion and the presence of other cars dwelling in the adjacent lane, thereby blocking their exit. In other words, the actual time cars are stopped occupying curbfrontage space in the performance-based analysis is similar in time to the assumed factored analysis.

LAX Master Plan
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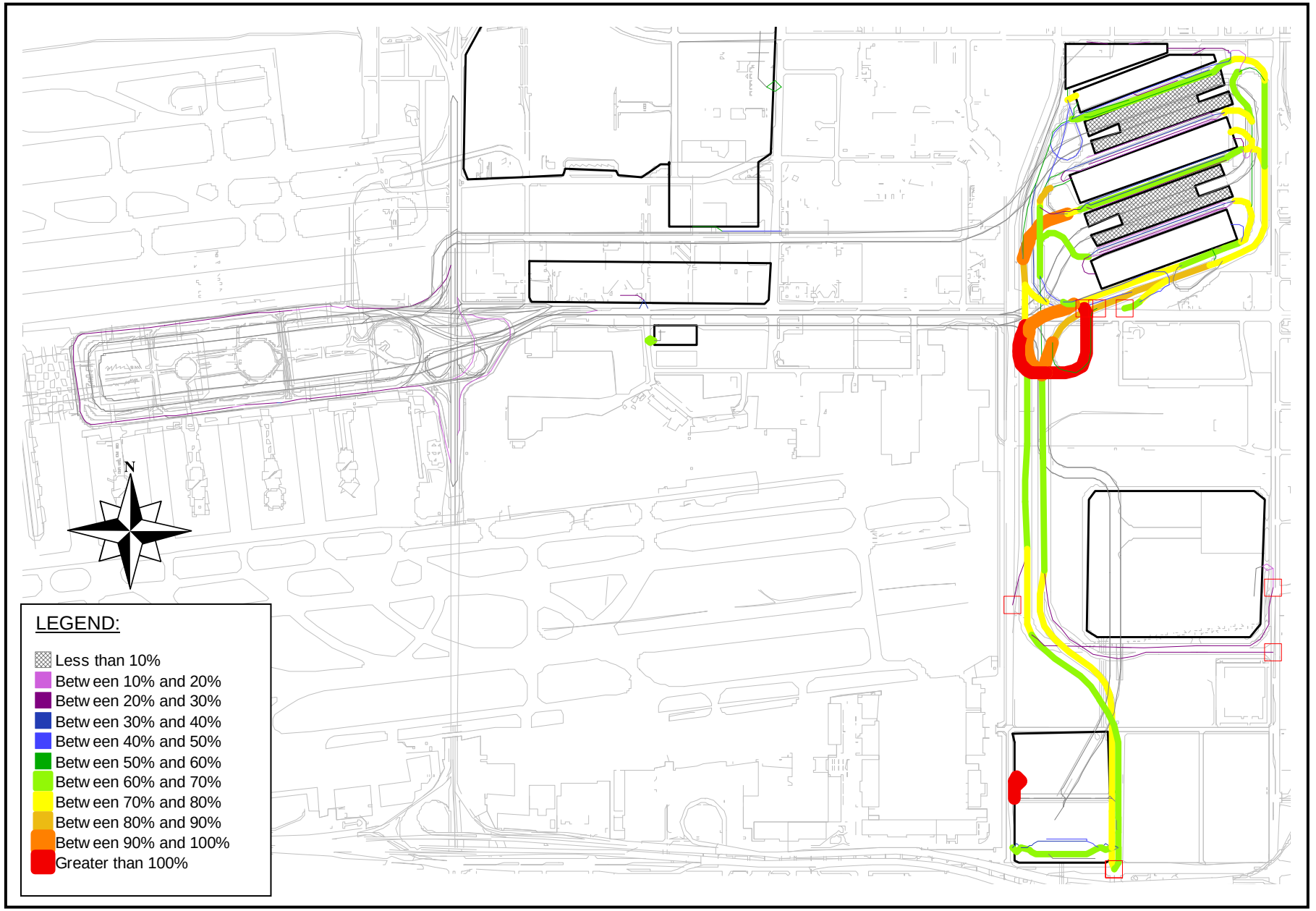
On-Airport Ground Transportation Maximum Hourly Forecasts, Alternative D, Year 2015

Figure S5



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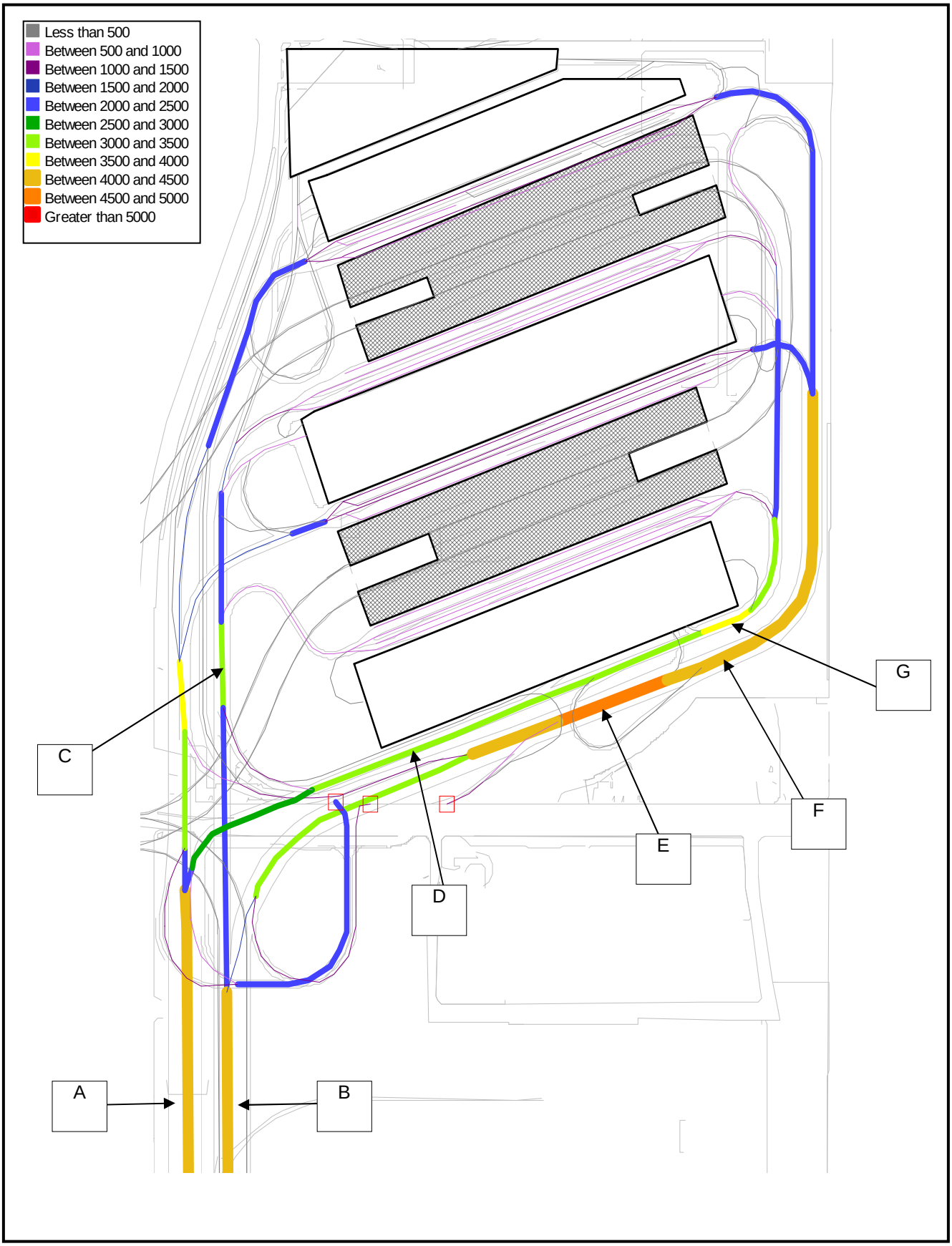
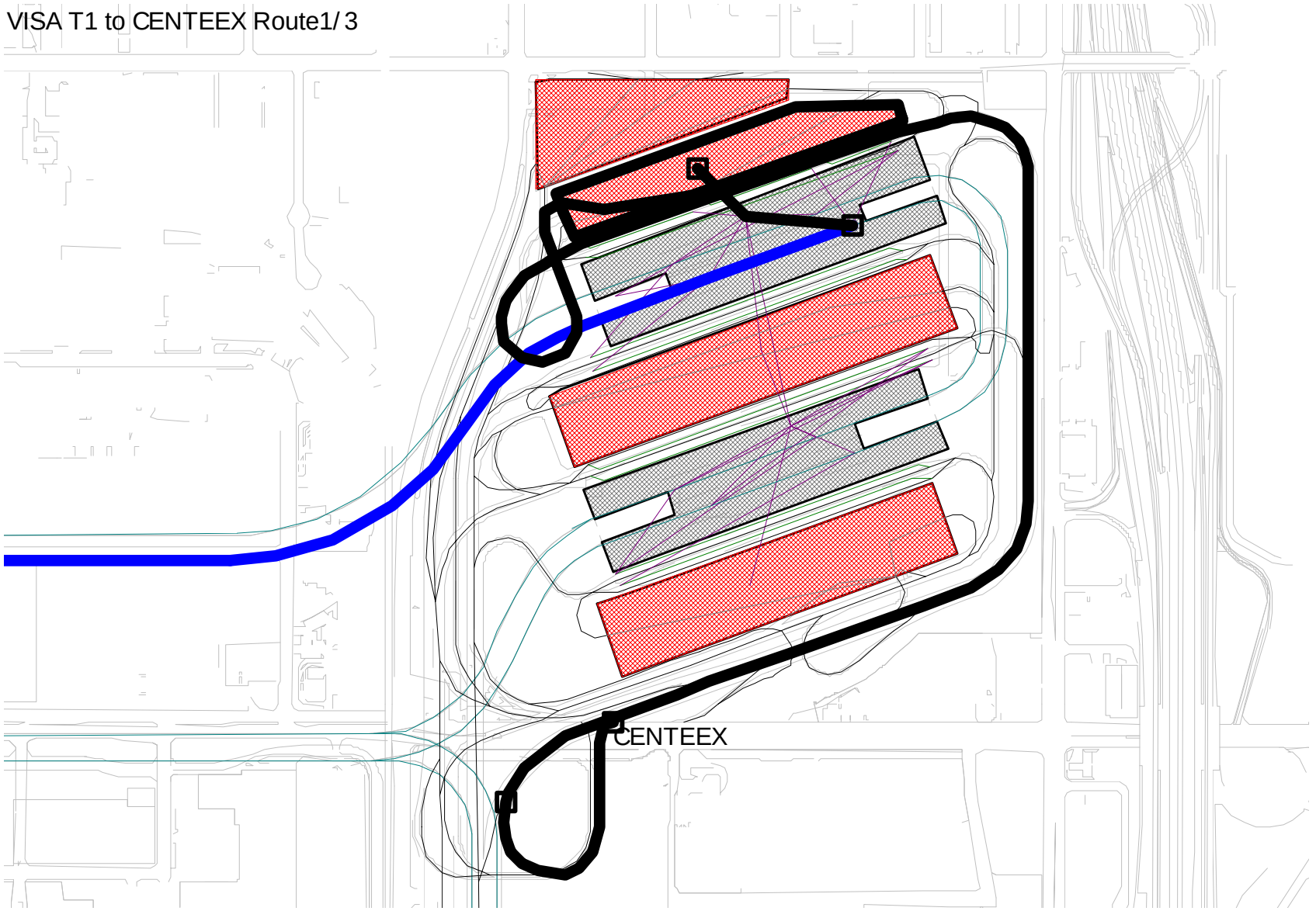
On-Airport Ground Transportation Maximum Volume to Capacity Ratio, Alternative D, Year 2015

Figure S6



LAX Master Plan **Supplement to the Draft EIS/EIR**	**GTC Maximum Hourly Forecasts,** **Alternative D, Year 2015**	**Figure** **S7**



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Egressing Vehicles from North Pier Parking Structure, Alternative D**	**Figure** **S8**

Table S10

Curbfront Factored Analysis, Design Day Airport Peak Hour, 2015 Alternative D

	Dwell (min.)	Avg. Vehicle Length (ft.)	Curb Demand (vph)	Req'd. Length (ft.)[1]	Available Length (ft.)[2]
Year 2015					
Curb 1					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	453	552	
Taxi	2.3	25	121	147	
Door-to-Door Vans	1.4	30	87	73	
Courtesy Vehicles	1.1	35	225	177	
				950	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	617	1510	1485
Taxi	4.7	25	118	288	608
Door-to-Door Vans	1.0	30	82	51	338
Courtesy Vehicles	1.2	35	225	192	540
				2041	2970
Curb 2					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	562	685	
				685	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	603	1476	
				1476	1485
Curb 3					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	505	615	
Taxi	2.3	25	122	149	
Door-to-Door Vans	1.4	30	97	82	
Courtesy Vehicles	1.1	35	225	177	
				1023	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	628	1537	1485
Taxi	4.7	25	118	288	608
Door-to-Door Vans	1.0	30	94	58	338
Courtesy Vehicles	1.2	35	225	192	540
				2075	2970
Curb 4					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	534	651	
				651	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	602	1474	
				1474	1485

[1] Applies a 1.25 peak internal surge factor.
[2] Actual or planned length of curb plus 50% of double park lanes, minus 10% for emergency vehicle use.

Source: JKH Mobility Services, February 2003.

The available length presented in **Table S10** was determined based on practical knowledge of the way physical curbfronts are built and allocated. The available length of the curbfront for the GTC in Alternative D was estimated at 1,100 feet, compared to the gross length of 1,400 feet mentioned in the LAX Master Plan Addendum. The available length was determined with consideration of the "dead space" not suitable for active curbfrontage use due to vehicle weaving/maneuvering space and associated curb cuts along the physical length. As noted in the table, the planned physical length of the curbfront that is available for use by vehicles is adjusted to account for the second lane use (an equivalent additional 50 percent of the length) minus a 10 percent decrement to provide for emergency vehicle space allocations.

As noted in the table below, the available curbfront length is adequate to serve the private auto demands on Curbs 2 and 4, although the curbfronts are close to capacity on the lower level. Using this methodology, the commercial curbs, Curbs 1 and 3, experienced capacity deficiencies on the lower level, private auto curbfronts.

To supplement the previous curbfront analysis, a more detailed curbfront analysis was completed for Alternative D using the CURBAN curbfront simulation software. Using this simulation, each of the curbfronts within the GTC were simulated to observe their operations during the airport peak hour. The data entered into the CURBAN simulations included the volumes presented in **Table S9**.

Additionally one APM station was assumed at each of the GTC Piers,[8] but directional signage and design of the APM stations and vertical circulation to the stations was assumed to facilitate the most efficient use of the entire curbfront.

Within the CURBAN simulation, three doorways were evenly distributed along each curbfront for both the arrivals and departures levels located at 350', 700' and 1050'. The maximum speed for the through lanes was modeled at 25 mph. Dwell time distributions were applied to result in the average dwell times presented in **Table S11**, Curbfront Simulation Analysis GTC Dwell Times and Vehicle Lengths Alternative D, Year 2015, and are consistent with the other alternatives' analyses.

Table S11

Curbfront Simulation Analysis GTC Dwell Times and Vehicle Lengths
Alternative D, Year 2015

Curbfront	Dwell (min.)[1]	Average Vehicle Curb Length (ft.)
GTC Departures		
Private Auto/Limo	2.3	25
Employee Private Auto	0.5	25
Taxi	2.3	25
Door-to-Door Vans	1.4	30
Courtesy Vehicles	1.1	35
Buses[2]	1.3	50
GTC Arrivals		
Private Auto/Limo[3]	2.3	25
Employee Private Auto	0.5	25
Taxi	4.7	25
Door-to-Door Vans	1.0	30
Courtesy Vehicles	1.2	35
Buses	2.0	50
CTA Departures		
Flyaway Buses	1.3	50
CTA Arrivals		
Flyaway Buses	2.0	50

1 LAX Master Plan: Existing Conditions Working Paper, dated April 19, 1996, with 10% reduction for planned curbfront improvements

2 Buses includes Charter, Tour and Public Transit Buses

3 Revised for security conditions premise for Alternative D, as well as "desired dwell time" aspect of simulation analysis methodology. (previously 4.7 min)

Source: JKH Mobility Services, February 2003.

The simulation-based analysis concluded that the curbfronts are at capacity and resulted in an average speed of 5.0 mph on the arrivals level and an average speed of 3.4 mph on the departures level as illustrated in **Table S12**, Curbfront Simulation Analysis, Average Vehicle Speeds at Curbfronts, Alternative D, Year 2015. These speeds are averaged over the entire curbfront distance and include the

8 URS via email to Pat Tomcheck (LAWA). July 17, 2002.

dwell time at the curb. Although the volumes on the North Pier, Curbfront A were higher than the volumes on the South Pier, Curbfront B, there were a number of through vehicles with higher average speeds which increased the average speed on the curbfront. **Figure S9**, Arrivals Curbfront, Alternative D, Year 2015, Airport Peak Hour, and **Figure S10**, Departures Curbfront, Alternative D, Year 2015, Airport Peak Hour, illustrate the severe congestion at the arrivals and departures curbfront, respectively. The departures level is severely congested as well as the inner, private auto curbfront of the arrivals level.

Table S12

Curbfront Simulation Analysis, Average Vehicle Speeds at Curbfronts, Alternative D, Year 2015

Curbfront	Arrivals Level	Departures Level
North Pier, Curbfront A (Curb 1)	4.8	3.3
North Pier, Curbfront B (Curb 2)	5.3	3.4
South Pier, Curbfront A (Curb 3)	4.6	3.6
South Pier, Curbfront B (Curb 4)	5.3	3.4
Average	**5.0**	**3.4**

Source: JKH Mobility Services, February 2003.

Additional iterations of the curbfront models were performed during mitigation in an attempt to improve the curbfront operations. The mitigated impacts are discussed in Section 6 below.

4.1.3 Parking Forecasts and Impacts

Table S13, Parking Facility Demands, Alternative D, Year 2015, shows detailed parking demands for each of the parking facilities. These volumes include not only the vehicles parking at the lots, but also the entering and exiting shuttles accessing the lots. Additional parking data is provided in Attachment B of this report. A parking capacity analysis for Alternative D was completed by Landrum & Brown and is discussed in Section 4.3.1, *On-Airport Surface Transportation,* of the Supplement to the Draft EIS/EIR.

4.1.4 Pedestrian Conveyance Forecasts

As the on-airport analysis was completed, additional studies of the APM alignment continued. The resulting APM system defined the LAX Master Plan Addendum is slightly different from the system modeled in the on-airport surface transportation analysis. Although the physical alignment is now different than when modeled, the origin-destination trip patterns produced by the on-airport surface transportation analysis is not materially affected by the physical alignment refinements, and therefore remains the same. The new link volumes for the updated APM alignment will be accounted for by Lea+Elliott using the origin-destination trip patterns as part of the APM analysis documented in Technical Report S-2c, *Supplemental Automated People Mover Technical Report*, of the Supplement to the Draft EIS/EIR. The refinements to the APM alignment will have no impact on the on-airport surface transportation analysis.

The ridership demands placed on the modeled operating routes of the APM system in Alternative D are the highest of all alternatives since all air passengers and their visitors, with the exception of the FlyAway Bus patrons, utilize the APM system to access the CTA. Additionally, terminal employees using public transit or those who use the East Employee Lot will also use the APM system to access the CTA or the GTC/ITC remote landside facilities. During the Airport Peak Hour, the peak link ridership on the Inner Loop route is 4,901 people traveling outbound between the stations at CTA Terminal 1 and the RAC. The link volumes during the Airport Peak Hour on the Outer Loop route show a peak link ridership of 5,068 people traveling inbound between the stations at the RAC and CTA Terminal 1. The daily peak link total flow is 64,248 inbound on the Outer Loop route between the RAC station and Terminal 1 station. Likewise, the daily peak link total flow is 63,926 outbound on the Inner Loop route between the same two stations.

Table S13

Parking Facility Demands, Alternative D, Year 2015

Parking Facility	Category of Parking	AM Commuter Peak Hour In (veh)	AM Commuter Peak Hour Out (veh)	Airport Peak Hour In (veh)	Airport Peak Hour Out (veh)	PM Commuter Peak Hour In (veh)	PM Commuter Peak Hour Out (veh)	Daily (Airport Design Day) In (veh)	Daily (Airport Design Day) Out (veh)
GTC, North of North Pier	Short Term (Visitor Vehicles) and Long Term (Passenger Vehicles)	274	170	501	488	179	288	6,551	6,508
GTC, Between North and South Pier	Short Term (Visitor Vehicles) and Long Term (Passenger Vehicles)	404	278	786	818	323	446	10,232	10,170
GTC, South of South Pier	Short Term (Visitor Vehicles) and Long Term (Passenger Vehicles)	201	169	413	463	208	191	5,107	5,120
Long Term Surface Lot[1]	Long Term (Passenger Vehicles)	69	46	109	107	53	69	1,396	1,402
ITC Premium Parking	Short Term (Visitor Vehicles) and Daily Park (Passenger Vehicles)	1,395	975	2,714	2,819	1,118	1,475	34,683	34,690
Private Long Term Parking Lot[1]	Long Term (Passenger Vehicles)	249	218	336	332	237	257	4,610	4,587
RAC QTA[1]	Rental Cars	473	243	861	836	310	466	10,286	10,115
West Employee Parking Garage[2]	Terminal Employee Private Vehicles	136	125	85	57	102	210	3,238	3,244
Commercial Vehicle Staging Lot	Commercial Vehicles	195	141	422	416	209	245	5,133	5,097
East Employee Parking Lot[2,3]	Terminal Employee Private Vehicles	433	420	249	216	450	577	10,642	10,649

[1] Includes shuttles entering parking lot, but not parking at the lot.

[2] The demands presented here include only terminal employees. Other employees, such as cargo employees, were included in the off-airport analysis of arterial streets.

[3] Includes curb drop terminal employees entering parking lot, but not parking at the lot.

Source: JKH Mobility Services, February 2003.

Figure S9

Arrivals Curbfront, Alternative D, Year 2015, Airport Peak Hour

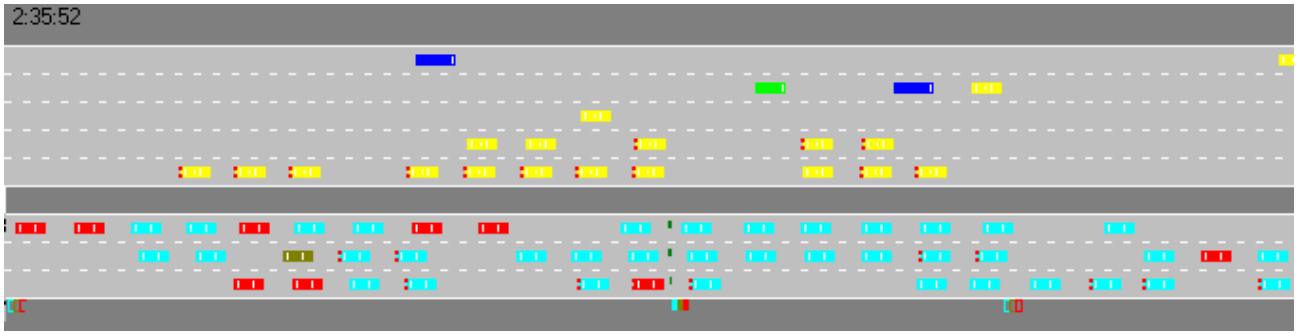


Figure S10

Departures Curbfront, Alternative D, Year 2015, Airport Peak Hour

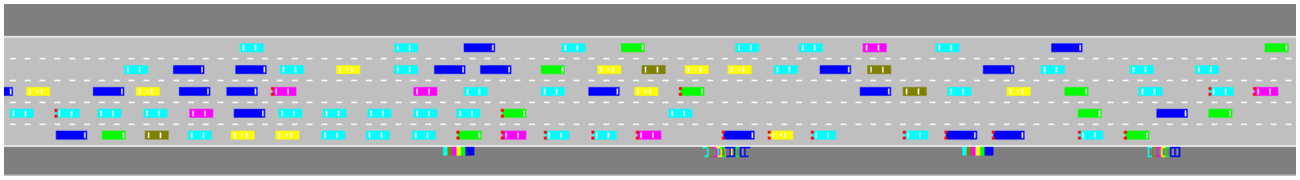


Figure S9

Arrivals Curbfront, Alternative D, Year 2015, Airport Peak Hour

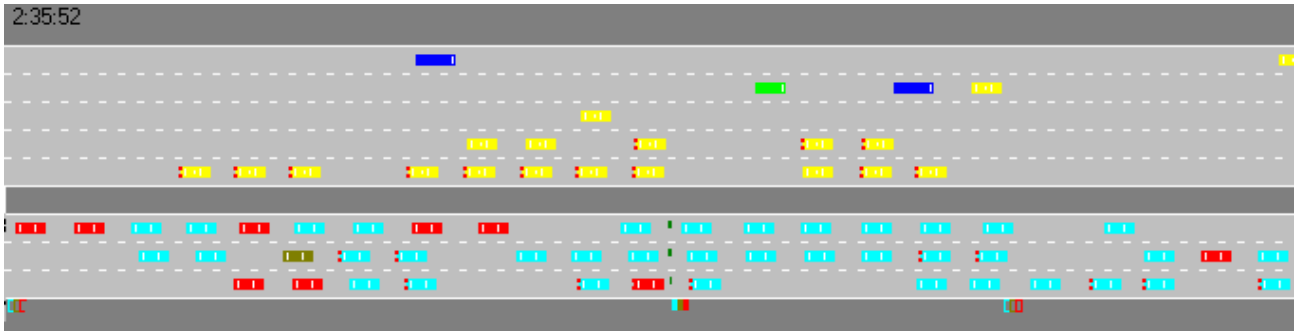
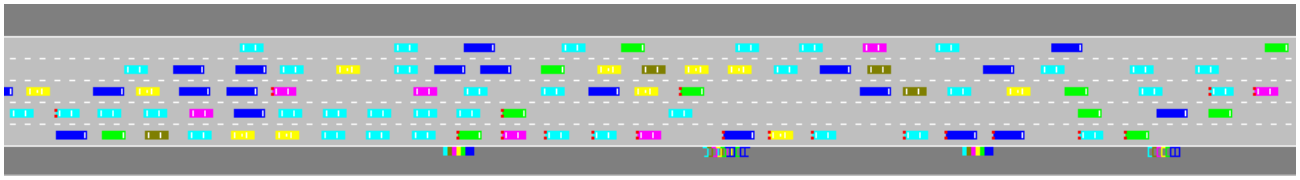


Figure S10

Departures Curbfront, Alternative D, Year 2015, Airport Peak Hour



The peak link ridership on the ITC Route is 5,683 outbound from the CTA Terminal 4 station to the ITC and 5,555 inbound to the CTA Terminal 4 station during the Airport Peak Hour. The corresponding daily total flows on these ITC route peak links are 69,796 outbound and 70,031 inbound to the CTA.

When the ITC link volumes are combined with the passengers traveling inbound on the Inner Loop route, the composite peak link volume is 8,963 passengers inbound to the CTA Terminal 4 station during the Airport Peak Hour. The corresponding composite flow outbound from the CTA on the ITC route and the Outer Loop route is 9,160 passengers during the Airport Peak Hour. The composite daily ridership between the CTA inbound link to the Terminal 4 station is 111,446 passengers and 110,214 passengers on the outbound link from the Terminal 4 station.

The daily boardings for all three routes total 367,352 for the airport design day. Detailed link volumes by time of day as well as detailed boarding and alighting volumes by link for each APM system can be seen in Attachment D of this report.

4.2 Comparison of Alternatives

For comparison between the other Master Plan alternatives and Alternative D, **Table S14**, Airport Peak Hour Volume to Capacity Comparisons Year 2015, was created identifying the v/c ratios and LOS for several key locations in the CTA. In Alternative D, the only traffic that is allowed into the CTA is that associated with the FlyAway Buses, emergency vehicles, and a small number of maintenance/ service/delivery vehicles. As such, Alternative D would result in substantially lower traffic volumes in the CTA, as compared to all other alternatives including the No Action/No Project Alternative. To offer some comparison between alternatives, **Table S14** compares similar functional segments in Alternative D, to the CTA segments in the other alternatives.

The measure of passenger cars per hour is often used in traffic analyses to measure roadway capacity based on passenger cars. By applying factors, or passenger car equivalents (PCE), to the individual vehicle types, roadway volumes can be standardized. For example, larger buses often have a PCE of 2.0; therefore, each bus on a roadway segment takes up the same space as two passenger cars.

The latest version of the on-airport model has the ability to compute the passenger cars per hour, in addition to the vehicles per hour. Because of this new capability, the v/c ratios for the new roadways in Alternative D were calculated in passenger cars per hour to better define the impact of heavy vehicles on level of service. To provide consistency with the other Master Plan alternatives, all existing roadways define the v/c ratios in vehicles per hour.

Table S14

Airport Peak Hour Volume to Capacity Comparisons Year 2015

Location	NA/NP[1]		Alt. A		Alt. B		Alt. C		Alt. D	
	V/C Ratio[2]	LOS[3]	V/C Ratio[2]	LOS[3]	V/C Ratio[2]	LOS[3]	V/C Ratio[2]	LOS[3]	V/C Ratio[2]	LOS[3]
Inbound Upper										
Century	0.50	A	0.36	A	0.27	A	0.40	A	N/A[5]	N/A
N. Sepulveda	N/A	N/A	0.39	A	0.56	A	0.52	A	N/A[5]	N/A
S. Sepulveda	0.84	D	0.55	A	0.64	B	0.76	C	N/A[5]	N/A
Skyway	0.94	E	-	-	-	-	-	-	N/A[5]	N/A
Inbound Lower										
Century	0.51	A	0.16	A	0.11	A	0.15	A	N/A[5]	N/A
N. Sepulveda	N/A	N/A	0.58	A	0.60	A	0.74	C	N/A[5]	N/A
S. Sepulveda	1.60	F	0.38	A	0.40	A	0.51	A	N/A[5]	N/A
Skyway	1.00	E	-	-	-	-	-	-	N/A[5]	N/A
Outbound Upper										
Century	0.33	A	0.24	A	0.22	A	0.33	A	N/A[5]	N/A
N. Sepulveda	N/A	N/A	0.23	A	0.30	A	0.36	A	N/A[5]	N/A
S. Sepulveda	0.20	A	0.14	A	0.20	A	0.28	A	N/A[5]	N/A
Skyway	0.19	A	-	-	-	-	-	-	N/A[5]	N/A
Outbound Lower										
Century	0.45	A	0.23	A	0.21	A	0.19	A	N/A[5]	N/A
N. Sepulveda	1.44	F	0.86	D	0.79	C	1.00	E	N/A[5]	N/A
S. Sepulveda	0.87	D	0.55	A	0.55	A	0.58	A	N/A[5]	N/A
Skyway	0.28	A	-	-	-	-	-	-	N/A[5]	N/A
World Way Upper										
Terminal 1	1.52	F	0.67	B	0.69	B	0.84	D	N/A[5]	N/A
TBIT	0.82	D	0.40	A	0.34	A	0.65	B	N/A[5]	N/A
Terminal 8	1.09	F	0.63	B	0.65	B	0.87	D	N/A[5]	N/A
World Way Lower										
Terminal 1	1.39	F	0.64	B	0.59	A	0.74	C	N/A[5]	N/A
TBIT	1.60	F	0.60	A	0.68	B	0.85	D	N/A[5]	N/A
Terminal 8	1.46	F	0.80	C	0.71	C	0.94	E	N/A[5]	N/A
Inbound GTC										
Century	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.88	D
Imperial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.67	B
Aviation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.28	A
La Cienega	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.28	A
Outbound GTC										
Century, EB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.57	A
Century, WB	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.60	B
Imperial	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.77	C
La Cienega	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.25	A

Source: JKH Mobility Services, February 2003.

1 NA/NP = No Action/No Project Alternative

2 V/C = Volume to Capacity Ratio

3 LOS = Level of Service. Range A (good) - F (breakdown)

4 N/A = Not Applicable

5 A new facility replaces the corresponding No Action/No Project facility.

5. SIGNIFICANT IMPACTS AND MITIGATION MEASURES

According to CEQA methodology, which also takes into account applicable federal statutory and regulatory requirements, only impacts deemed significant when compared to the 1996 environmental baseline must be mitigated. The significant impacts and mitigation measures for Alternatives A, B, and C, as well as comparison of impacts between the No Action/No Project Alternative and those three build alternatives, are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. Under Alternative D, there are a number of segments within the GTC that would experience high roadway volumes as illustrated in Section 4.1.1.2 above, but queuing and delays exist only where those volumes exceed capacity. As in the other alternatives' analyses, the ratios of volume to capacity for Alternative D were compared to the 1996 Environmental Baseline (e.g., Leigh Fisher's June 1998 Update to Existing Conditions Report) to determine significant impacts. As stated in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR, an increase in v/c (i.e., worsening of conditions) was considered significant if the change in ratios was 0.08 for LOS C, 0.04 for LOS D, and 0.02 for LOS E. For a resulting LOS A or LOS B, a project related increase was not considered significant. Decreases in v/c ratios between Alternative D and the 1996 Environmental Baseline were desirable, and considered not significant because this indicated that LOS had improved.

5.1 Alternative D

Because the Ground Transportation Center (GTC) Roadways are new facilities, there can be no direct comparison to the 1996 Environmental Baseline to determine mitigation. The volumes within the CTA are very low, since only FlyAway Buses, emergency vehicles, and a small number of maintenance/delivery/ service vehicles are allowed to access the CTA directly; thus there are no significant impacts on the CTA Roadways as defined by CEQA.

5.1.1 Roadway Impacts

Although no direct comparison between Alternative D and the 1996 Environmental Baseline can be completed, the demand loadings and v/c ratios of the GTC roadways were evaluated and design refinement were defined for GTC roadways with a LOS D or worse. There are a number of segments within the GTC that experience high roadway volumes, as illustrated in Section 4.1.1.2 above, but queuing and delays exist only when then those volumes exceed capacity.

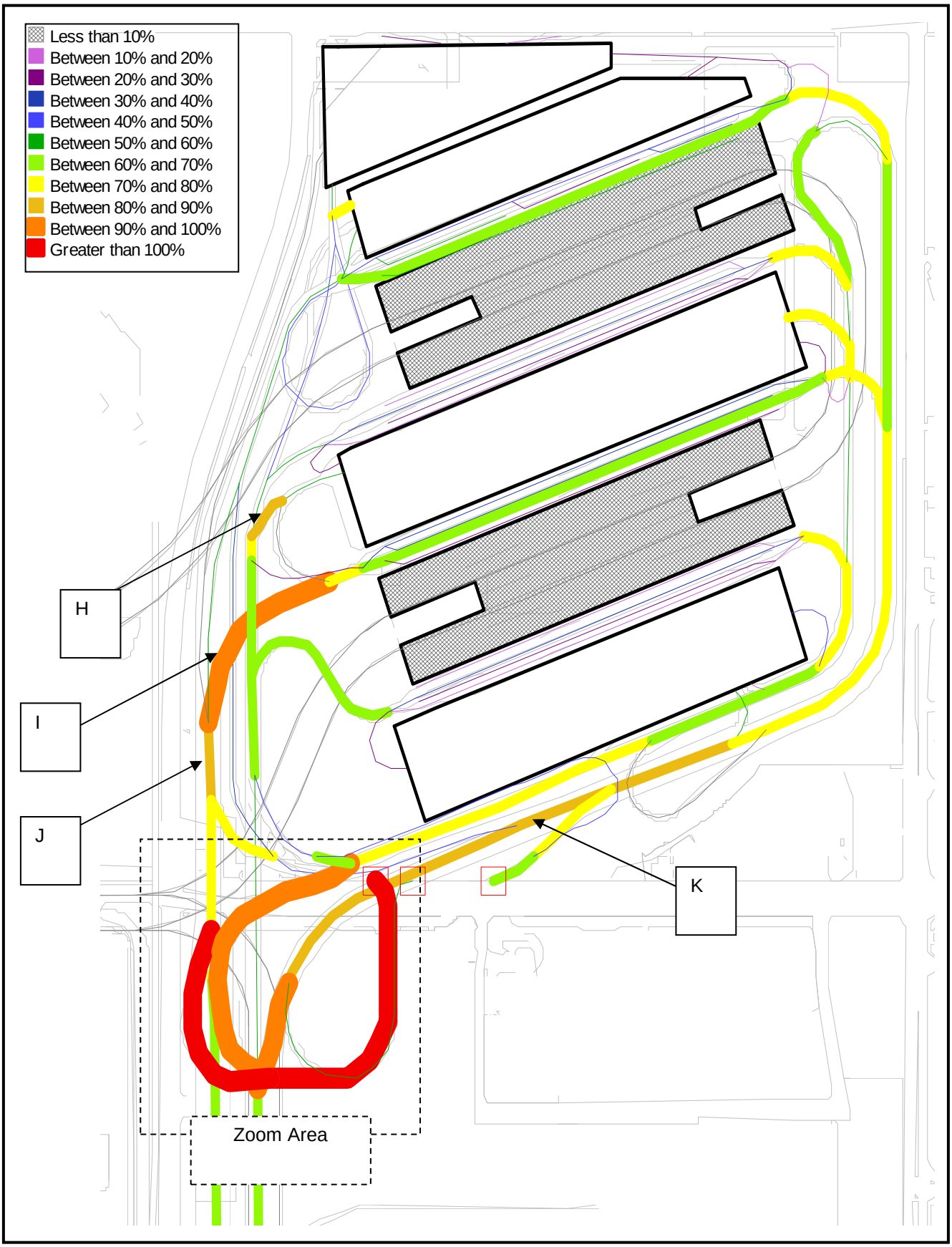
Segments A - G in the previously discussed **Figure S7** represent the highest vehicular demands on the GTC roadway system, however there are several segments that could experience LOS problems based on initial estimates of capacity. **Figures S11**, Roadway Demand Compared to Capacity, Alternative D, Year 2015, and **S12**, Additional Roadway Demand Compared to Capacity, Alternative D, Year 2015, illustrate the maximum volume to capacity ratios throughout the entire day and highlight some of the areas where design refinements can be applied to ensure sufficient capacity is provided. Note that these figures are best viewed in color. The peak hourly volumes for Segments H - P are shown below in **Table S15**, Maximum Peak Hour Volumes. The hourly volumes represent the maximum hourly volume throughout the entire day. The specific hour referenced is also shown in the table. In most instances the peak hour is the same as the Airport Peak Hour (11:00 a.m. to noon), however in some segments the maximum hour begins in the preceding hour (10:00 a.m. to 11:00 a.m.).

Table S15

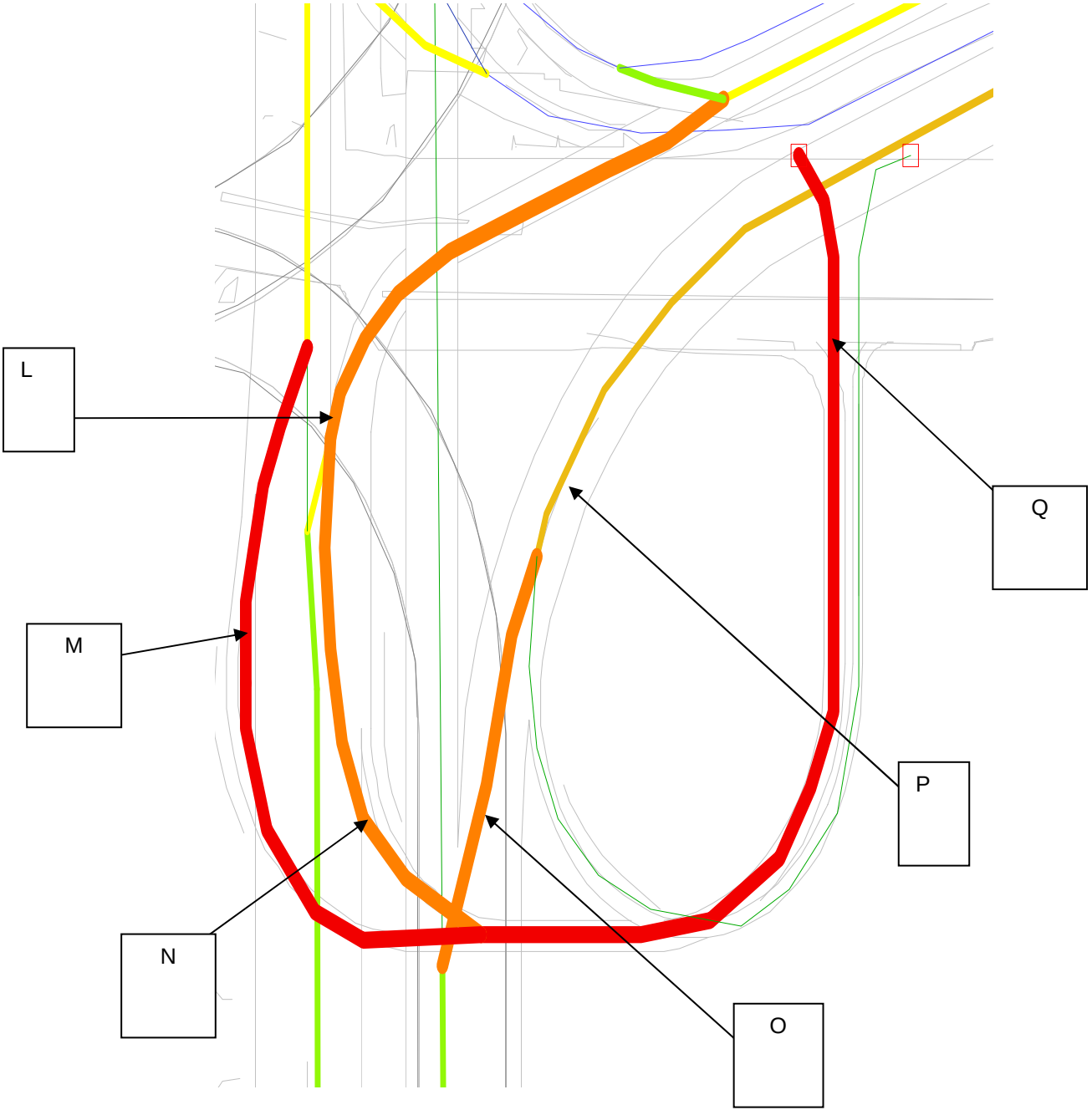
Maximum Peak Hour Volumes

Segment	Vehicles	At Time (Hour Beginning)	Passenger Car Equivalents (PCE)	At Time (Hour Beginning)
H	733	11:00 AM	733	11:00 AM
I	1,740	11:00 AM	1,988	11:00 AM
J	3,535	11:00 AM	3,917	11:00 AM
K	3,757	11:00 AM	4,134	11:00 AM
L	2,792	11:00 AM	2,792	11:00 AM
M	1,115	8:00 PM	1,218	10:00 AM
N	905	10:00 AM	905	10:00 AM
O	1,954	11:00 AM	1,984	11:00 AM
P	2,968	11:00 AM	3,007	11:00 AM
Q	2,015	10:00 AM	2,124	10:00 AM

Source: JKH Mobility Services, February 2003.



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Capacity Deficiencies, Alternative D, Year 2015**	**Figure** **S11**



LAX Master Plan Supplement to the Draft EIS/EIR	Additional Capacity Deficiencies, Alternative D, Year 2015	Figure S12

Segment H represents the exit roadway from the Parking Structure, P2. Segment I represents the entrance roadway into the South Pier, Curbfront A. Segment J represents the west entry roadways to the GTC, prior to the South Pier entrance. Segment K represents the South GTC Exit before the slip ramp that splits off recirculating traffic. Segment L represents the south GTC Entrance after the slip ramp combining entering traffic from Century and additional entry traffic destined to the North Pier, Curbfront B (Curb 2) and South Pier, Curbfront B (Curb 3). Segment M represents the GTC entrance for Century traffic destined to the North Pier, Curbfront A (Curb 1) and the South Pier, Curbfront A (Curb 3). Segment N represents the GTC entrance for Century traffic destined to the North Pier, Curbfront B (Curb 2) and the South Pier, Curbfront B (Curb 4). Segment O represents exiting traffic destined to the exit points south of Century Blvd. Segment P represents the south exit to the GTC. Segment Q represents the GTC entrance from eastbound Century Blvd.

Although Segment H has a relatively low volume compared to some of the other segment highlighted, because of the proximity to merges and the curvature of the roadway there could be insufficient capacity. For example, if a one-lane roadway were provided with only a 900 passenger cars per hour per lane (pcphpl) capacity, then resulting level-of-service for this roadway segment would be LOS D.

Note that for Segment M the peak hour demand occurs at 8:00 p.m. and the peak hour PCE occurs during 10:00 a.m. Those two hours have similar vehicular volumes, 1,110 vehicles at 10:00 a.m. and 1,115 vehicles at 8:00 p.m. However, because of variations in heavy vehicles throughout the day the PCE changes from 1,218 pcph at 10:00 a.m. to 1,196 pcph at 8:00 p.m., despite the slightly higher volume.

To improve the capacity deficiencies on GTC roadways, additional lanes can be added to the problem segments. To further reduce and/or shift demands around the GTC, additional access/egress ramps can be added. Additional entry/exit ramps have the potential to shift the attraction points to different entries along the GTC. For example a direct access off the I-105 will make that route more attractive to GTC users and could potentially decrease the demand from the overloaded Century ramps.

The access and egress of the ITC is generalized in the LAX Master Plan Addendum. The ITC must be designed to handle 2,866 trips entering and 2,971 trips exiting during the peak hour. More detailed design of the ITC with the addition of direct access ramps can improve the operations of the ITC.

5.1.2 Curbfront Impacts

Based on the CURBAN simulations, the curbfronts, in particular the commercial vehicle curbfronts, experienced delays and unserved vehicles. To improve the curbfront operations and increase the average speeds there are a number of design refinements that can be implemented.

- Alternate curb allocations so that private autos use the outside lanes of the Arrivals Level and the commercial vehicles use the inside lanes
- Lane shifts to allow more curb lanes
- Changes to the median break lengths and break locations
- Shift doorways/attraction points
- Balance GTC traffic through signage to attract more private auto use of Curbs 2 and 4

To further improve the curbfront operations, dwell times enforcement can occur at the curbfront and proper design should provide a high number of attraction points along the curbfront, so that the entire curbfront is utilized.

An additional design refinement could be to reduce the number of courtesy vehicles. The courtesy vehicle forecasts were kept at the same levels as in the other alternatives to maintain consistency between alternatives. In some instances the number of courtesy vehicles exceeds the vehicles in and out of the lots. To further reduce GTC traffic, courtesy vehicles could be assigned to use a designated curbfront at the RAC. Since many of the hotels and private long-term parking lots are located along Century Boulevard, the use of a designated curbfront the RAC could decrease trip time and trip length.

6. ADDITIONAL IMPROVEMENTS FOR ON-AIRPORT GROUND TRANSPORTATION

Additional improvements for on-airport ground transportation under the No Action/No Project Alternative and Alternatives A, B, and C are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. The following sections discuss the additional improvements for on-airport ground transportation under Alternative D.

Section 5 above presented concepts for improving on-airport operations. Since all the GTC roadways are new, there can be no comparison to the 1996 environmental baseline and thus no deficiencies deemed significant according to CEQA standards. Section 6 below presents specific measures and additional means to improve mobility within the on-airport ground transportation system in Alternative D. These recommendations were made in an attempt to improve LOS to the goal levels set by LAWA for on-airport operations. These additional mobility improvement concepts are not required by CEQA, inasmuch as no significant impact has been identified; however, the concepts can be effective at improving mobility for the Alternative D on-airport roadway network.

Table S16, On-Airport Concepts, summarizes the potential improvements related to airport landside access and their associated impacts. Some concepts improved segment capacities while other reduced actual demand on the network. The mobility improvement concepts include on-airport improvements as well as regional improvements that affect the on-airport ground access network. Concepts proposed as part of the regional mitigation plan are numbered B10, B06 and B13 in **Table S16**.

6.1 Refined On-Airport Roadway Network

Based on the preliminary analysis of the defined Alternative D, a refined roadway layout was created that addressed some of the capacity concerns. The most notable changes were the additional ramps at 111th Street and the direct ramps from I-105. The addition of these new ramps also impacted the directional distributions and shifted traffic around the GTC. A more detailed description of the Refined Alternative D on-airport roadway network is presented in the following sections.

6.1.1 Refined Ground Access

The refined roadway network was initially defined by Landrum and Brown (L&B) on November 1, 2002. Design refinements to the Alternative D roadway network include:

- Direct access and egress ramps from I-105 with elevated access road to GTC (proposed Mitigation Measure MM-ST-12 in the off-airport surface transportation analysis)
- Access/Egress from 111th Street
- Direct entry/exit ramps to ITC off elevated access roads
- Ramps to/from ITC from La Cienega access points

Figure S13, ALPS™ Structural Segment Model, Refined Network, Year 2015, depicts the ALPS™ "structural" segment model for the on-airport roadway network for the Alternative D refined roadway network, overlaid onto a background drawing file.

There were no changes to the proposed flight schedule presented in the LAX Master Plan Addendum during refinement of the system. Additionally no changes were made to mode splits, vehicle occupancies, passenger car equivalents or trip timing. However, because of the additional entry/exit points, new regional distributions were developed to reallocate the directional access/egress trips. Specifically, Parsons Transportation Group (PTG) ran the mitigated off-airport model to quantify the impacts of the new entry/exit points on the regional distribution of airport traffic. These new directional distributions were then used as input into the mitigated on-airport model. The key assumptions and inputs specific to the Refined On-Airport Roadway System - Alternative D, Year 2015 analysis are shown in **Table S17**, Key Assumptions/Inputs 2015 Alternative D, Refined System.

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ALPS™ Structural Segment Model, Mitigated Alternative D, Year 2015

Figure
S13

Table S16

On-Airport Concepts

	Location of Deficiency	Improvement	Net Effect/Action Plan	Applicable To: NA/NP 2005	NA/NP 2015	Alt A 2005	Alt A 2015	Alt B 2005	Alt B 2015	Alt C 2005	Alt C 2015	Alt D 2005*	Alt D 2015
1	NB Sepulveda off-ramp	Prohibit access from NB Sepulveda to EB Century	Alternative route required. Need LADOT approval. Airport traffic along exceeds capacity	■	■	■	■	■	■	■	■	■	
2	NB Sepulveda slip ramp to lower level	Widen slip ramp to 2 lanes.	Localized doubling of capacity	■	■							■	
3	NB Sepulveda slip ramp to upper level	Widen slip ramp to 2 lanes.	Localized doubling of capacity	■	■							■	
4	Lower level loop ramp to NB Sepulveda	1. Remove CVEH return ramp or;	1. CVEH would use Century to return. Would help but not mitigate (An alternative to 4.2)	■	■	■	■	■	■	■	■	■	
	Lower level on-ramp to SB Sepulveda	2. Connect lower exit to new upper level flyover exit. Expand flyover to 2 lanes or;	2. Move 20% of private autos from lower level to upper flyover ramp. Allow CVEH to continue along lower to loop ramp that should provide access only to Ramp F or Century EB.			■	■	■	■	■	■		
	Recirculation from upper level to lower level	3. Widen loop ramp to 2 lanes, one for the CVEH return, one for NB Sepulveda.	3. Merge onto NB Sepulveda will be difficult. Doubles ramp capacity.			■	■	■	■	■	■		
5	Lower Level on-ramp to SB Sepulveda	Divert outbound traffic to Century.	Improve SB Sepulveda ramp access reducing the number of vehicles that must turn right at the 5 leg intersection	■	■	■	■	■	■	■	■	■	
6	Recirculation from upper level to lower level	Eliminate lower exit to Skyway. Encourage use of upper exit on Century, instead of using upper/lower loop ramp to lower Century exit.	Improves lower Skyway intersection capacity.	■	■							■	
7	Lower level Terminal 1-Through lanes	1. Consolidate RAC facilities. (NA/NP Only)	1. Reduce curb demand up to 5%	■	■							■	
		2. Provide ped tunnels/bridges and eliminate ped signals.	2. Increase CTA through-lane capacity by 10% 2005, additional 10% 2015 LOWER for NA/NP Only	■	■	■	■	■	■	■	■	■	
		3. Modify garages to allow exits to upper level and improve connectivity within garages.	3. Will increase approach capacity by 10%	■	■	■	■	■	■	■	■	■	
8	Lower level Terminal 2 - Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
9	Lower level TBIT Terminal - Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
10	Lower level Terminal 4 - Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
11	Lower level Terminal 5 - Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
12	Lower level Terminal 7/8 - Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
13	Upper level Terminal 1-Through Lanes	1. Consolidate RAC facilities. (NA/NP Only)	1. Reduce curb demand up to 5%.	■	■							■	

Table S16

On-Airport Concepts

	Location of Deficiency	Improvement	Net Effect/Action Plan	Applicable To: NA/NP 2005	NA/NP 2015	Alt A 2005	Alt A 2015	Alt B 2005	Alt B 2015	Alt C 2005	Alt C 2015	Alt D 2005*	Alt D 2015
		2. Provide ped tunnels/bridges and eliminate ped signals.	2. Increase CTA through-lane capacity by 1% 2005, additional 1% 2015 UPPER for NA/NP Only	■	■	■	■	■	■	■	■	■	
		3. Modify garages to allow exits to upper level and improve connectivity within garages.	3. Shift 5-10% private auto during peak periods from lower to upper	■	■	■	■	■	■	■	■	■	
14	Upper level Terminal 2-Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
15	Upper level Terminal TBIT-Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
16	Upper level Terminal 4-Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
17	Upper level Terminal 5-Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
18	Upper level Terminal 7/8-Through Lanes	ditto	ditto	■	■	■	■	■	■	■	■	■	
19	East Upper Curb	Consolidate RAC facilities	Reduce demand up to 5%. May mitigate problem along with planned improvements.	■	■							■	
20	East Lower Curb	Consolidate RAC facilities	ditto	■	■							■	
21	EB Centerway approach to lower World Way signal	Add 2 EBRT turn lanes to World Way. Add 1 EBRT to Center Way.	10% increase in intersection capacity	■	■	■	■	■	■	■	■	■	
B10	Regional Mitigation Plan	Remote check in	2.5% reduction CTA private auto in 2005, additional 2.5% reduction in 2015.	■	■	■	■	■	■	■	■	■	
B06	Regional Mitigation Plan	Expanded TMC		■	■	■	■	■	■	■	■	■	
B13	Regional Mitigation Plan	Rate Adjustments		■	■	■	■	■	■	■	■	■	
22	Century Access Ramps to GTC	Additional access/egress ramps	Redistribution of traffic around the GTC										■
23	ITC Roadways	Detailed Roadway layout with additional access	Additional Capacity										■
24	Recirculation Roadway Congestion	Lane additions	Increased Capacity										■
25	Curbfront Congestion	Reallocation of curbfront lanes and effective length.	Increased Capacity										■

NA/NP = No Action/No Project Alternative
* - identical to 2005 NA/NP Alternative

Source: JKH Mobility Services, February 2003.

Table S17

Key Assumptions/Inputs 2015 Alternative D, Refined System

	International	Domestic	Commuter
Enplanements/Deplanements(daily)	91,470	159,351	11,937

Connecting Passengers	**International**	**Domestic**	**Commuter**
(% of Enplanements/Departments)			
Originating/Terminating	65.0%	77.4%	46.6%
Connects in same Terminal (varies by Terminal)	16.9%-20.3%	9.9%-12.2%	25.3%-25.4%
Connects in another Terminal (varies by Terminal)	14.7%-18.2%	10.4%-12.7%	28.0%-28.1%

Vehicle Occupancy/Passenger Car Equivalents[1]	**Veh. Occ.**	**PCE**
Private Auto	1.55	1.00
Rental Car	1.73	1.00
Taxi	1.45	1.00
Door-to-Door Van	2.63	1.20
Courtesy Vehicle	4.00	1.50
Scheduled Bus	18.30	2.00
Charter and Tour Bus	22.30	2.00
Public Transit Bus	21.00	2.00

	International		**Domestic**		**Commuter**	
Mode Split[2]	**Mode**	**Sub-Mode**	**Mode**	**Sub-Mode**	**Mode**	**Sub-Mode**
(% of Originating and Terminating Passengers)						
Auto/Limo Curb Pick-Up & Drop-Off	30.4%		33.0%		33.0%	
Auto Short Term Parking (visitors)	9.1%		9.1%		9.1%	
Auto Long Term Parking	8.5%		10.5%		10.5%	
Direct to Close-in Park at GTC		6.0%		6.0%		6.0%
Curb stop then Close-in Park at GTC		16.0%		16.0%		16.0%
Close-in Park at ITC		40.0%		40.0%		40.0%
Direct to Remote Park		16.0%		16.0%		16.0%
Direct to Private Parking		22.0%		22.0%		22.0%
Auto Rental Car	16.7%		18.1%		18.1%	
Direct to RAC		92.0%		92.0%		92.0%
Off-Airport RAC		8.0%		8.0%		8.0%
Taxi	4.4%		4.3%		4.3%	
Direct to Curb		20.0%		20.0%		20.0%
Stage to Curb		80.0%		80.0%		80.0%
Door-to-Door Van	4.7%		6.5%		6.5%	
Courtesy Vehicle	6.0%		3.5%		3.5%	
Charter and Tour Bus	6.1%		4.3%		4.3%	
Public Transit	4.6%		4.3%		4.3%	
Metro Bus		50.0%		50.0%		50.0%
Rail		50.0%		50.0%		50.0%
Scheduled (FlyAway) Bus	9.5%		6.4%		6.4%	
TOTAL	**100.0%**		**100.0%**		**100.0%**	

Table S17

Key Assumptions/Inputs 2015 Alternative D, Refined System

Regional Access/Egress Directional Distributions[3]		International		Domestic/Commuter	
		Inbound	Outbound	Inbound	Outbound
(% of Originating and Terminating Passengers)					
Ground Transportation Center					
Eastbound Century Blvd. Loop Ramp	AM	29.9	38.0	29.9	38.0
	Noon	18.4	27.2	18.4	27.2
	PM	39.0	32.5	39.0	32.5
Westbound Century Blvd. Exit Ramp	AM	-	9.9	-	9.9
	Noon	-	8.2	-	8.2
	PM	-	8.9	-	8.9
Imperial at I-105, street level	AM	20.8	15.7	20.8	15.7
	Noon	24.9	27.0	24.9	27.0
	PM	23.0	22.7	23.0	22.7
Imperial at I-105, access ramps	AM	16.7	25.8	16.7	25.8
	Noon	10.8	14.5	10.8	14.5
	PM	18.2	21.1	18.2	21.1
Aviation Entrance Ramp	AM	3.1	-	3.1	-
	Noon	7.3	-	7.3	-
	PM	2.3	-	2.3	-
La Cienega	AM	27.7	9.7	27.7	9.7
	Noon	27.9	19.6	27.9	19.6
	PM	14.9	12.3	14.9	12.3
111th Street	AM	1.8	0.9	1.8	0.9
	Noon	10.7	3.5	10.7	3.5
	PM	2.6	2.5	2.6	2.5

[1] Source: LAX Master Plan EIR/EIS – Phase III, Project Description – Final Draft, dated October 29, 1999.
[2] Source: LAWA Public Transportation Task Force meeting with representatives from MTA, Caltrans and LADOT, November 1, 2001.
[3] Source: Parsons Transportation Group. October 29, 2002.

Source: JKH Mobility Services, February 2003.

6.1.2 Refined Curbfront Design and Operation

The curbfronts for the mitigated model remained dual level and approximately 1,400 feet long. In the LAX Master Plan Addendum all arrivals (lower level) curbfronts were defined with two sets of curbfront lanes, separated by a sidewalk; the interior lanes providing three lanes and the exterior providing five lanes. Several iterations of the curbfront models were analyzed in mitigation to evaluate the impact of shifting lanes on the arrivals level curbfront.

All departures (upper) level curbfronts were defined to have five lanes in the LAX Master Plan Addendum. Analyses were performed to evaluate the impacts of allowing two and three curbing lanes. All curbfront analyses were performed using CURBAN.

The curbfronts at the ITC are sized to accommodate large buses such as regional buses, charter buses and tour buses. However, as part of the overall mitigation plan the Metropolitan Transportation Authority (MTA) regional buses were moved to a curbfront at the Green Line end-of-line station across Imperial Highway. The regional bus patrons will access the ITC via the pedestrian bridge with moving walkways.

A final curbfront analysis with the refinements described above, was completed to evaluate the impacts of moving the charter buses to the GTC curbfronts, instead of using the curbfronts at the ITC.

6.2 Refined Forecasts and Impacts

The Alternative D ground transportation forecasts and impacts for year 2015 as revised in light of the on-airport refinements described above and off-airport mitigation measures described below, are discussed in this section. The on-airport ground transportation for Alternative D, Year 2005 will result in the same

forecasts and impacts as the 2005 No Action/No Project Alternative documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

Within the following sections the "planned" model refers to the roadway layouts and input assumptions as defined in the LAX Master Plan Addendum and summarized in the above Section 3 of this report. Also, the analysis accounts for the effects of two key off-airport surface transportation system mitigation measures. Those measures are described in detail in Technical Report S-2b, *Supplemental Off-Airport Surface Transportation Technical Report,* of the Supplement to the Draft EIS/EIR and, in summary include: (1) new ramps that provide a direct connection between the I-105 Freeway and the proposed on-airport roadways; and (2) a new interchange at Lennox Boulevard and I-405.

6.2.1 On-Airport Roadway Forecasts and Impacts

6.2.1.1 Forecasts

The detailed ground access forecasts grouped by travel classification (mode) for Year 2015 are provided in **Table S18**, On-Airport Travel Classification 2015 Alternative D, Mitigated. The categories (i.e., CTA, GTC, ITC, Indirect) are defined in Section 4 above. The assignment of the Mitigated 2015 Alternative D on-airport ground access forecasts to the roadway system are provided in **Figure S14**, On-Airport Ground Transportation Maximum Hourly Forecasts, Mitigated Alternative D, Year 2015. The hourly forecasts in **Figure S14** represent the maximum hourly volumes throughout the day. In most instances the maximum hourly volume occurs during the Airport Peak Hour (11:00 a.m. to noon), however in some segments the maximum hourly volume begins in the preceding hour (10:00 a.m. to 11:00 a.m.). Note that this figure is best viewed in color.

Table S18

On-Airport Travel Classification 2015 Alternative D, Mitigated

Location	AM Peak Hour		Airport Peak		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
GTC						
Private Vehicles/Other[1]	1574	1545	3891	3979	1665	1751
GTC Parking Passenger Cars[2]	878	626	1695	1785	711	932
Private Parking Shuttles[3]	78	78	90	90	80	80
Hotel Shuttles[4]	112	112	135	135	119	119
Delivery/Service Vehicles[5]	132	132	0	0	148	148
SUBTOTAL	**2774**	**2493**	**5811**	**5989**	**2723**	**3030**
ITC						
MTA Buses[6]	30	30	30	30	30	30
Charter Buses[7]	90	90	90	90	90	90
Long Term Public Parking Shuttles from South Lot[8]	25	25	25	25	25	25
Public Parking Short Term (private autos)[9]	1395	968	2717	2802	1119	1466
Employee Shuttles[10]	11	11	7	7	16	16
Delivery/Service Vehicles[5]	55	55	0	0	59	59
SUBTOTAL	**1606**	**1179**	**2869**	**2954**	**1339**	**1686**
"Indirect" (non GTC)						
Rental Cars (private autos)[11]	438	208	831	806	278	434
Off-Airport RAC Shuttles[12]	35	35	30	30	32	32
Private Long Term Parking (private autos)[13]	59	28	111	108	38	59
Private Parking Shuttles[3]	78	78	90	90	80	80
Public Parking Long Term (private autos)[14]	44	21	84	82	28	44
Long Term Public Parking Shuttles from South Lot[8]	25	25	25	25	25	25
West Employee Parking Garage Terminal Employees (private autos)[15]	139	128	87	58	104	215
East Employee Parking Lot, Terminal Employees (private autos)[15]	419	406	241	208	432	556
Employee Shuttles at East Employee Parking Lot[10]	11	11	7	7	16	16
SUBTOTAL	**1248**	**940**	**1506**	**1414**	**1033**	**1461**

Table S18

On-Airport Travel Classification 2015 Alternative D, Mitigated

Location	AM Peak Hour		Airport Peak		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
CTA						
FlyAway Buses[16]	30	30	24	24	30	30
Delivery/Service Vehicles[5]	572	572	0	0	635	635
SUBTOTAL	**602**	**602**	**24**	**24**	**665**	**665**

1 Other travel classifications include taxis, limos, and door-to-door vans. Does not include Parking Vehicles but does include curb drop for passenger.

2 These Parking Passenger Vehicles represent vehicles parking at the GTC. Parking patrons travel between the GTC and CTA using the APM. Some of these vehicles travel to the curb before or after parking.

3 The Private Parking Shuttles are a component of the Courtesy Vehicles. Upon arriving at the GTC, Private parking patrons use the APM to travel to/from the CTA.

4 The Hotel Shuttles are a component of the Courtesy Vehicles. Upon arriving at the GTC, Hotel patrons use the APM to travel to/from the CTA.

5 A number of vehicles were added to the trip production during the a.m. and p.m. commuter peak hours to account for service and delivery vehicles accessing the CTA, GTC, and ITC.

6 MTA Buses drop passengers at a location close to the Green Line. MTA Bus patrons travel to the ITC via a moving walk, and travel to the CTA using the APM.

7 Charter Buses are assumed to pass through the commercial vehicle staging area at the north end of the GTC as they stage for the ITC Curbfront.

8 Public Parking Shuttles travel between the Long Term Public Parking Lot and the ITC. These trips travel on 111th Street and the ITC street level access road. Parking patrons travel between the ITC and CTA using the APM.

9 Public Parking represents the Daily and Short Term parking in the structure adjacent to the ITC. Parking patrons travel between the ITC and CTA using the APM, and any associated curb drops occur at the curbfront internal to the ITC.

10 A percentage of parking and curb-drop employees destined for the CTA, GTC, or ITC use the East Employee Parking Lot. Terminal employees destined to the CTA use a shuttle to the RAC and then board the APM to access the CTA. Employees destined to the GTC will use the same shuttle to the RAC curb-drop and board the outbound APM to the GTC. Employees destined to the ITC will remain on the Employee Shuttle after dropping at the RAC curbfront and will travel via shuttle to the ITC. Employees traveling by public transit will board the APM at the ITC and use the APM to access the CTA.

11 This represents the rental cars utilizing on-airport and off-airport facilities. On-airport rental car patrons drive directly to/from the RAC and some also utilize the curbfront internal to the RAC facility. Off-airport rental car patrons, arrive at the RAC internal curbfront via shuttle buses. All rental car patrons travel to and from the CTA using the APM.

12 All Rental Car Patrons (on-airport and off-airport) accessing the airport use the APM to travel between the CTA and the RAC. Off-airport rental car patrons travel to the RAC using shuttle buses.

13 This represents the private auto vehicles who travel to the off-airport lots to park, then take a shuttle to the GTC. Upon arriving at the GTC, Private Parking patrons use the APM to travel to/from the CTA.

14 This represents the private autos utilizing the Remote Long Term Surface lot located south of the GTC.

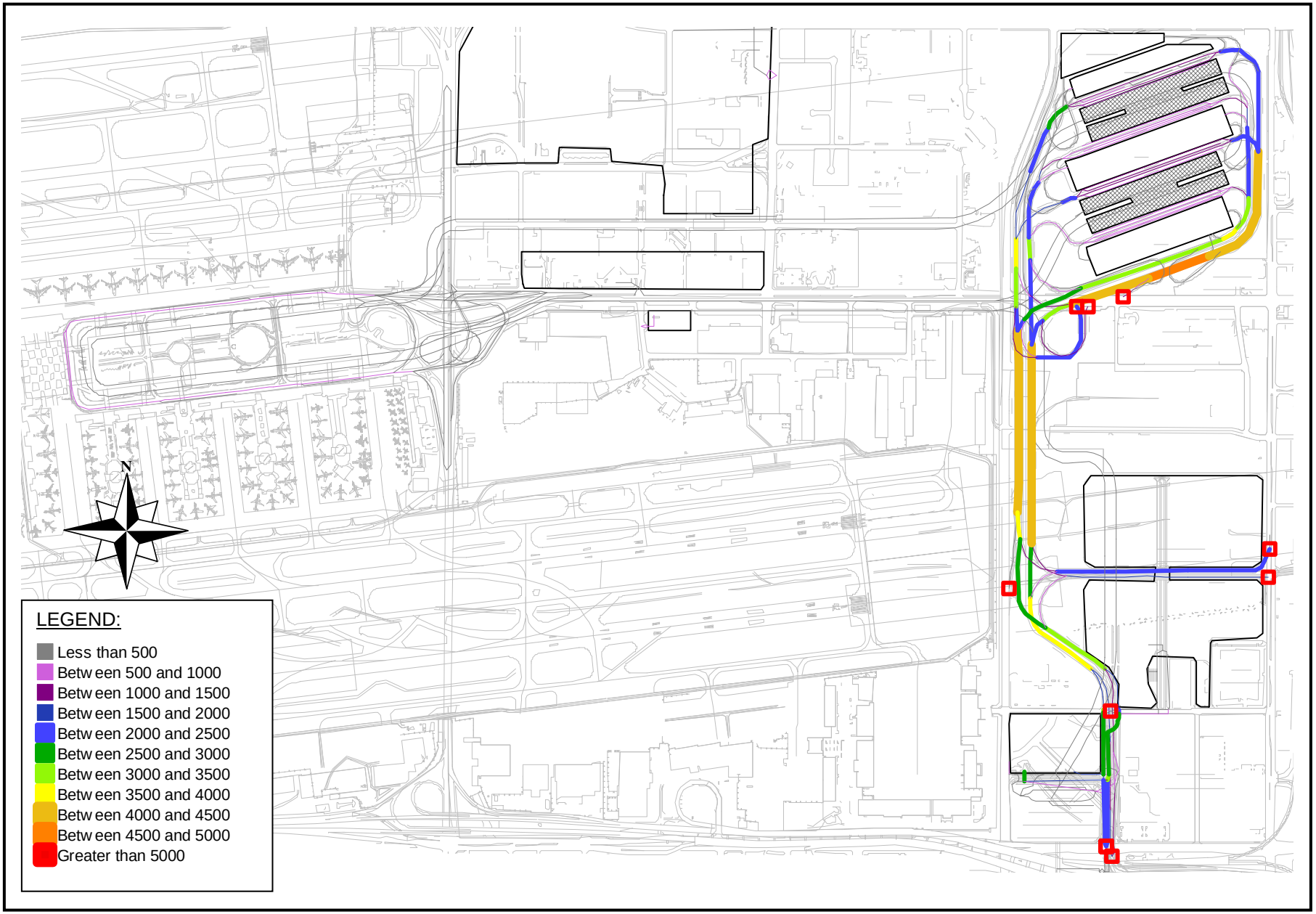
15 The employee parking lot roadway connections are not modeled in the Alternative D model, and only the lot entries/exits for terminal employees are modeled. The terminal employee private autos accessing and egressing the West Employee Parking Garage and East Employee Parking Lot are presented here. All employee curb-drops occur at the East Employee Parking Lot and terminal employees include people working in the CTA, GTC and ITC. The employee shuttle buses to and from the West Employee Parking Garage are not modeled since they travel on AOA roadways only.

16 The Flyaway buses and the service/delivery vehicles are the only modes of transport that access the CTA directly.

Source: JKH Mobility Services, February 2003.

6.2.1.2 Impacts

There are no changes to the ground access impacts on the CTA roadways, but there are changes in the GTC roadways due to the shifts in directional distribution. Segment labels identifying key roadway segments in the mitigation analysis are presented in **Figure S15,** Key Segments and Maximum Volume to Capacity Ratios, Refined Alternative D, Year 2015. As with the maximum hourly forecasts, the maximum v/c ratios presented in **Figure S15** represent the maximum volume to capacity ratio throughout the day. Note that this figure is best viewed in color. **Table S19**, Key Segment Results Refined Alternative D, Year 2015, shows the daily and peak hour link volumes of the identified segments with the mitigation improvements applied.



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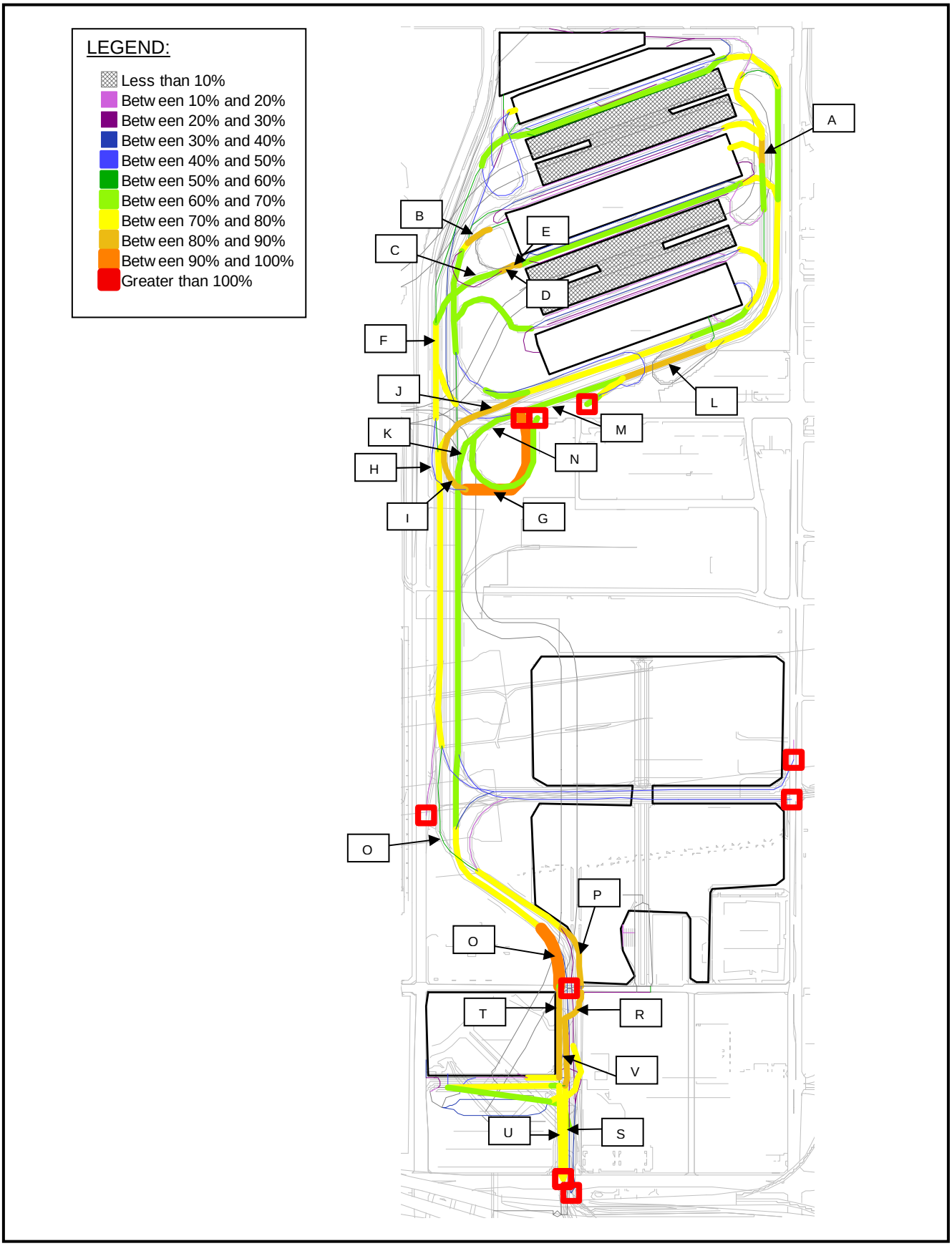
On-Airport Ground Transportation Maximum Hourly Forecasts, Mitigated Alternative D, Year 2015

Figure S14



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Key Segments and Maximum Volume to Capacity Ratios, Refined Alternative D, Year 2015**	**Figure** **S15**

Table S19

Key Segment Results Refined Alternative D, Year 2015

Segment	Lanes	Maximum Hourly Volume (vehicles)	Maximum Hourly Volume (pcph)	Capacity (pcph)	Maximum V/C Ratio	LOS	Speed (mph)
Segment A	2	1713	1728	2000	0.864	D	20
Segment B	1	739	739	900	0.821	D	21
Segment C	3	1739	1988	3000	0.663	B	23
Segment D	3	1929	2192	2700	0.812	D	21
Segment E	3	2015	2278	2700	0.844	D	21
Segment F	5	3534	3917	5500	0.712	C	23
Segment G	2	1920	2027	2100	0.965	E	18
Segment H	2	1076	1176	2400	0.490	A	33
Segment I	1	851	851	1000	0.851	D	20
Segment J	3	2791	2791	3300	0.846	D	20
Segment K	3	1980	2009	3000	0.670	B	23
Segment L	5	4386	4880	6000	0.813	D	28
Segment M	5	3822	4199	6000	0.700	B	30
Segment N	4	3034	3073	4800	0.640	B	31
Segment O	3	2551	2572	4500	0.572	A	32
Segment P	2	1884	1900	2200	0.864	D	20
Segment Q	2	1981	1995	2200	0.907	E	19
Segment R	3	2536	2560	3000	0.853	D	20
Segment S	3	2156	2197	3000	0.732	C	22
Segment T	3	2603	2694	3000	0.898	D	19
Segment U	3	2304	2315	3000	0.772	C	22
Segment V	2	762	762	1800	0.423	A	25

Source: JKH Mobility Services, February 2003.

There remain some segments within the GTC that experience high v/c ratios. **Figure S15** illustrates the v/c ratios for GTC roadways with high v/c ratios, and thus poor level of service (LOS). The final volumes, capacity, number of lanes, link speed and LOS after the mitigation changes for the key segments are presented in **Table S19**. The hourly volumes in **Table S19** represent the maximum hourly volume throughout the entire day. In most instances the peak hour is the same as the Airport Peak hour (11:00 a.m. to noon), however in some segments the maximum hour begins in the preceding hour (10:00 a.m. to 11:00 a.m.). The complete set of operating speeds and link volumes for the Alternative D analysis can be seen in Attachment C of this report.

The new roadway layout with the corresponding lane additions and updated directional distributions improve the LOS for GTC roadways. The key roadway segments and the incorporated mitigation measures for the Mitigated Alternative D model include the following segments:

East GTC Access Road, Northbound (Segment A) - No Change

This roadway segment was originally assigned three lanes in the Planned Roadway Layout, but has been decreased to two lanes in the Mitigated Alternative D Layout. The segment has a volume of 1,713 vehicles (1,728 pcph) resulting in a LOS D and a link speed of 20 mph. Because the link speed remained relatively high, no change was made to the number of lanes in the Mitigated Roadway Layout for the On-Airport Refined Model Run.

Pier 2 Parking Egress to GTC Roadways (Segment B) - No Change

The volume of 739 vehicles (739 pcph) results in a LOS D for this segment, the same LOS as in the Final Iteration. The resulting link speed remains relatively high at 21 mph; therefore, no change to the number of lanes was made.

Curb 3 Access Roadways (Segments C, D and E) - Additional Lane

In the Planned Alternative D Analysis, the access road to Curbfront 3 experienced a LOS E. In the Refined Model, the access roadway (Segment C) maintained a LOS E with a volume of 1,739 vehicles (1,988 pcph) and a speed of 17 mph. By adding an additional lane, the LOS improves to LOS B.

The weave segment following Segment C (Segment D) in the Refined Roadway Layout is arranged slightly different than in the Planned Alternative D Layout and experienced a LOS F since only two lanes are assigned. By increasing the number of lanes to three lanes, the LOS improves to LOS D. Particular attention and a more detailed weaving analysis should be conducted of this weaving segment during the advanced planning stages of the project.

The final approach segment into the curbfront (Segment E) remained at LOS D but maintained a link speed of 21 mph, so no additional lanes were added.

West GTC Access Roadway, Northbound (Segment F) - Additional Lane

The West GTC Access Roadway resulted in a LOS D in the Mitigated Model, experiencing the same operating conditions as in the Planned Alternative D Model. To improve this LOS, as well as to facilitate a better lane balance for the additional Curb 3 lane, an additional lane is recommended for the West GTC Access Roadway. This additional lane can be a continuation of the auxiliary lane from the westbound recirculation ramp. The additional lane will improve the LOS to LOS C.

Century Boulevard Access Ramps (Segments G, H, I and J) - Additional Lane to One Ramp

As discussed in the Planned Alternative D analysis, the constraining factor of the Century Access Roadways is along Century, (i.e., only a maximum of two on-ramp lanes can be facilitated). Because of the new directional distributions shifting more traffic to the La Cienega, Imperial, 111th Street and I-105 access points, the LOS for the Century Access Ramp (Segment G) improved from a LOS F in the Planned analysis to a LOS E in the Refined Alternative D model. No change was made to the number of lanes for this ramp.

The Century on-ramp then diverges into two separate ramps. The ramp to the left (Segment H) continues onto the West GTC Roadways traveling northbound. This ramp experienced a LOS E when only one lane is allowed. Increasing this ramp to two lanes will improve the LOS dramatically. The ramp to the right (Segment I) traveling to the Southern GTC Roadways experiences a LOS D, however due to lane balancing no additional lanes were added. Following Segment I onto the South GTC Roadways traveling eastbound (Segment J) also experiences a LOS D. Segment J experiences a LOS E in the Planned Alternative D but the volumes went down in mitigation because the directional distributions shifted traffic from Century to I-105, La Cienega and 111th Street. Although the LOS is D, the link speed is 20 mph so no additional lanes were added.

South GTC Egress to South Boundaries (Segment K) - Additional Lane

The South GTC Egressing Ramp that travels to the South Boundaries degraded from a LOS E in the Planned Alternative D layout to a LOS F in the Mitigated On-Airport Model because of the new regional egress directional distributions, assigning more traffic to the South. To improve the LOS an additional lane is recommended which will increase the operations to LOS B.

Egressing South GTC Roadways, Westbound (Segments L, M and N) - Additional Lane

To balance the recommended lane along Segment K, additional lanes should be added to the two upstream roadway segments (Segment M and N). In addition this will improve the LOS D which exists along the South GTC Egress Roads. The most upstream South GTC Egressing Roadway (Segment L) is also operating at a LOS D. No additional lane is recommended for this segment since the link speed is 28 mph, but there could be an effective use of auxiliary lanes for the Century off-ramp and/or the Parking Egress ramp to increase the capacity along this roadway segment. The auxiliary lane issues should be addressed in advanced planning.

Accessing GTC Roadways, Northbound (Segment O) - Additional Lane

The shifted directional distributions increased the traffic accessing and egressing the GTC from I-105 and Imperial Highway and also added traffic accessing and egressing the GTC from 111th Street. Additionally, the Planned Roadway Access from the South (Segment O) initially had a three-lane roadway, but was reduced to two lanes to accommodate the La Cienega ramps. It is recommended that due to the increase in traffic, Segment O be increased to three lanes, thus improving the LOS dramatically.

GTC On-Ramp north of 111th Street (Segment P) - Additional Lane

The latest directional distributions from the off-airport roadway analysis include an additional access to the GTC at 111th Street. The resulting directional distribution for this boundary node is 10.7 percent during the airport peak hour. Add to this the 24.9 percent of the traffic accessing the GTC from the Imperial Street Level during the Airport Peak hour and that results in 35.9 percent of GTC traffic entering the GTC from this ramp. At least one additional lane is essential but more than two lanes may be difficult to handle at 111th Street intersection. Increasing the ramp to two lanes results in a LOS D. An additional design refinement may be to sign traffic to use the Aviation On-Ramp or La Cienega On-Ramps to access the GTC.

GTC Off-Ramp north of 111th Street (Segment Q) - Additional Lane

The latest roadway layout allows for GTC traffic to egress onto 111th Street. All traffic destined to 111th Street (3.5 percent of egressing traffic) or the Imperial Street Level (26.9 percent or egressing traffic) must travel along this ramp, resulting in a total of 30.4 percent of the GTC Traffic. As with the 111th Street On-Ramp, at least one additional lane is essential, but any more than two lanes may be difficult to merge with the surrounding roadways. With two lanes the ramp operates at a LOS E.

ITC Surface Street Roadways (Segments R, S, T and U) - Additional Lane

The Northbound ITC Surface Streets handle all traffic destined to the ITC with the exception of the vehicles using the direct ramps to access the parking structure. Additionally a large percentage of traffic leaving the ITC exits along the surface street level. Add to the ITC Traffic the 24.9 percent accessing and 26.9 percent egressing GTC through traffic from the street level Imperial boundary, and the volumes well exceed the capacity. An additional lane to the segments north of the ITC Intersection improves the LOS of Segments R and T from LOS F to LOS E. The additional lane on Segments S and U improves the LOS to LOS C. A more detailed study of the operations of the ITC intersection should be conducted during advanced planning to ensure that the intersection has sufficient capacity and proper signal timings to handle these volumes of traffic.

Southbound ITC Access Ramp (Segment V) - Additional Lane

The Southbound ITC Access Ramp into the Parking Structure, Segment V, has a volume of 762 vehicles. With a one-lane ramp capacity of 900 pcph, the ramp operates at a LOS E. Increasing this ramp to 2 lanes will ensure a much more efficient flow into the parking structure and will dramatically improve the LOS. Additionally, during advanced planning particular attention should be paid to the processing rate at which vehicles can enter the garage. If sufficient capacity is not provided at the ticket machines, queues can develop and impact traffic on the ramps and ITC Roadways.

6.2.2 Curbfront Forecasts and Impacts

6.2.2.1 Forecasts

Table S20, GTC Curbfront Volumes Refined Alternative D, Year 2015, summarizes the Refined Alternative D curbfront demands by vehicle type for Year 2015. The initial CURBAN simulation was analyzed allowing Charter Buses at the GTC curbfront to simulate a worst-case scenario. Curbfront demands are based on the airport peak hour (11:00 a.m. to noon) and the assumptions stated in Section 2.5 above. Curbfront length requirements are also based on the methodology and assumptions described in Section 2.5 above.

Table S20

GTC Curbfront Volumes Refined Alternative D, Year 2015

	Curb 1		Curb 2		Curb 3		Curb 4	
Vehicle Classification	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**	**Volume**	**%**
Arrivals								
CURB	437	41.0%	478	79.1%	490	44.7%	466	77.2%
LTPK	16	1.5%	19	3.1%	21	1.9%	20	3.3%
VISD	0	0.0%	0	0.0%	0	0.0%	0	0.0%
VISA	158	14.8%	107	17.7%	119	10.8%	118	19.5%
TAXI	118	11.1%		0.0%	118	10.8%		0.0%
DVAN	82	7.7%		0.0%	94	8.6%		0.0%
LTPK CVEH	90	8.4%		0.0%	90	8.2%		0.0%
HOTEL CVEH	135	12.7%		0.0%	135	12.3%		0.0%
CBUS	30	2.8%			30	2.7%		
TOTAL	1,066		604		1,097		604	
Departures								
CURB	365	39.8%	462	82.2%	420	42.9%	442	82.8%
LTPK	17	1.9%	22	3.9%	21	2.1%	21	3.9%
VISD	71	7.8%	78	13.9%	64	6.5%	71	13.3%
VISA	0	0.0%	0	0.0%	0	0.0%	0	0.0%
TAXI	121	13.2%		0.0%	122	12.5%		0.0%
DVAN	87	9.5%		0.0%	97	9.9%		0.0%
LTPK CVEH	90	9.8%		0.0%	90	9.2%		0.0%
HOTEL CVEH	135	14.7%		0.0%	135	13.8%		0.0%
CBUS	30	3.3%			30	3.1%		
TOTAL	916		562		979		534	

Source: JKH Mobility Services, February 2003.

6.2.2.2 Impacts

Curbfront operational impacts have been analyzed using two different techniques. The first is a factored analysis based on the technique used for Alternatives A, B, and C. The second technique, often described as a performance based analysis, is an animated, car-by-car movement simulation analysis that dynamically accumulates dwell, travel speed and delay statistics. Refer to Attachment F for details of the CURBAN performance simulations.

Table S21, Curbfront Analysis Design Day Airport Peak Hour 2015 Alternative D, Refined GTC Curbs with Charter Buses, summarizes the factored curbfront analysis for the mitigated curbfront in year 2015, using the same type methodology used in the analysis of the other Master Plan alternatives as documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. To maintain consistency with the other Master Plan alternatives, a 4.7-minute dwell time was used for private autos on the arrivals level curbfronts, a value obtained from curbfront surveys in 1996 conducted as part of the previous Master Plan work. This is longer than the 2.3-minute dwell time used for the private auto classification in our "performance based" simulation study of Alternative D. This use of the shorter dwell in the performance based analysis is justified by the fact that while the actual loading time for passengers and baggage averages 2.3 minutes, many cars are simulated to be trapped at the curb after their short car-loading dwell is completed due to traffic congestion and the presence of other cars dwelling in the adjacent lane, thereby blocking their exit. In other words, the actual time cars are stopped and occupying curbfrontage space in the performance-based analysis is similar in time to the 4.7 minutes assumed in the simple factored analysis.

Table S21

Curbfront Analysis Design Day Airport Peak Hour 2015 Alternative D, Refined GTC Curbs with Charter Buses

Year 2015	Dwell (min.)	Avg. Vehicle Length (ft.)	Curb Demand (vph)	Req'd. Length (ft.)[1]	Available Length (ft.)[2]
Curb 1					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	453	552	
Taxi	2.3	25	121	147	
Door-to-Door Vans	1.4	30	87	73	
Courtesy Vehicles	1.1	35	225	177	
Charter Bus	1.2	50	30	38	
				988	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	616	1508	1485
Taxi	4.7	25	118	288	608
Door-to-Door Vans	1.0	30	82	51	338
Courtesy Vehicles	1.2	35	225	192	338
Charter Bus	1.8	50	30	56	203
				2038	2972
Curb 2					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	562	685	
				685	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	603	1476	
				1476	1485
Curb 3					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	505	615	
Taxi	2.3	25	122	149	
Door-to-Door Vans	1.4	30	97	82	
Courtesy Vehicles	1.1	35	225	177	
Charter Bus	1.2	50	30	38	
				1023	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	629	1540	1485
Taxi	4.7	25	118	288	608
Door-to-Door Vans	1.0	30	94	58	338
Courtesy Vehicles	1.2	35	225	192	338
Charter Bus	1.8	50	30	56	203
				2077	2972
Curb 4					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	534	651	
				651	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	602	1474	
				1474	1485

[1] Applies a 1.25 peak internal surge factor
[2] Actual or planned length of curb plus 50% of double park lanes, minus 10% for emergency vehicle use.

Source: JKH Mobility Services, February 2003.

The available length of the curbfront that was used in the factored analysis is presented in **Table S21.** This length was determined based on practical knowledge of the way physical curbfronts are built and allocated. The available length of the curbfront for the GTC in Alternative D was estimated at 1,100 feet, compared to the gross length of 1,400 feet mentioned in the LAX Master Plan Addendum. The available length was determined with consideration of the "dead space" not suitable for active curbfrontage use due to vehicle weaving/maneuvering space and associated curb cuts along the physical length. As noted in the table, the planned physical length of the curbfront that is available for use by vehicles is adjusted to account for the second lane use (an equivalent additional 50 percent of the length) minus a 10 percent decrement to provide for vehicle space allocations.

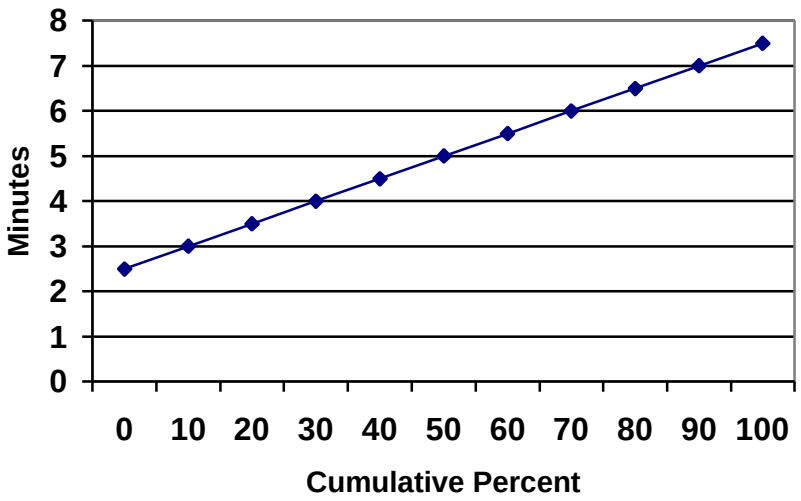
As noted in the table below which represents the mitigated results with Charter Buses included at the GTC commercial curbfronts, the available curbfront length is adequate to service the private auto demands on Curbs 2 and 4, although the curbfronts are close to capacity on the lower level. Using this factored methodology, there is insufficient capacity for private autos at Curbs 1 and 3.

To supplement the factored curbfront analysis described above, a more detailed performance based analysis was completed using the CURBAN curbfront simulation software. Using this simulation, each of the curbfronts were modeled to observe their operations during the airport peak hour. The vehicle flow volumes entered into the model were identical to those used in the factored analysis, as presented in **Table S20**. The additional inputs into CURBAN are similar to the previous runs and were presented previously in Section 4.1.2.2 above.

The CURBAN simulation evaluated the impacts of allowing the Charter Buses to use the GTC Curbfronts. Thirty charter buses were added to both commercial vehicle curbfronts in the GTC and the impact on curbfront operation was evaluated.

The buses were added, using an average dwell time of 5 minutes. This dwell is consistent with other charter bus operations observed at other airports. Specifically, the dwell times varied linearly between 2.5 minutes and 7.5 minutes as illustrated in **Figure S16**, Charter Bus Dwell Time Distribution. The Charter Bus travel class was given a nominal vehicle length of 40'. A curb length of 150' was initially provided for the Charter Buses using space previously allocated to courtesy vehicles.

Figure S16 Charter Bus Dwell Time Distribution



More detailed information regarding the individual CURBAN model runs is provided in Attachment F of this report.

The performance based simulation analysis concluded that the curbfronts would operate at capacity and therefore Charter Buses cannot be recommended at the GTC. The very poor performance of the South Pier, Commercial Vehicle Departures Level Curbfront, combined with the adequate performance of the North Pier, Commercial Vehicle Departures Level Curbfront, indicates that the commercial departure curbs are near saturation. After witnessing the very high levels of performance on the private vehicle only curbs in both the North and South Piers, it was concluded that the existing commercial vehicle curbfront layout directing Charter Buses to the GTC cannot be recommended and charter buses will therefore be routed to the ITC.

Since the conclusion of the analysis was that Charter Buses were not recommended at the GTC, the factoring analysis was updated in **Table S22**, Curbfront Analysis Design Day Airport Peak Hour 2015 Alternative D, Refined GTC Curbs without Charter Buses, to represent conditions with no Charter Buses at the GTC. This analysis indicates that on the arrivals (lower) level, the commercial curbfronts have

sufficient capacity, but private auto curbfronts operate at capacity or slightly over on 3 of the 4 curbfronts. During advanced planning, techniques to more evenly distribute traffic loadings on the curbfronts will be studied.

Table S22

Curbfront Analysis Design Day Airport Peak Hour 2015 Alternative D, Refined GTC Curbs without Charter Buses

Year 2015	Dwell (min.)	Avg. Vehicle Length (ft.)	Curb Demand (vph)	Req'd. Length (ft.)[1]	Available Length (ft.)[2]
Curb 1					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	453	552	
Taxi	2.3	25	121	147	
Door-to-Door Vans	1.4	30	87	73	
Courtesy Vehicles	1.1	35	225	177	
				950	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	616	1508	1485
Taxi	4.7	25	118	288	608
Door-to-Door Vans	1.0	30	82	51	338
Courtesy Vehicles	1.2	35	225	192	541
				2038	2972
Curb 2					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	562	685	
				685	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	603	1476	
				1476	1485
Curb 3					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	505	615	
Taxi	2.3	25	122	149	
Door-to-Door Vans	1.4	30	97	82	
Courtesy Vehicles	1.1	35	225	177	
				1023	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	629	1540	1485
Taxi	4.7	25	118	288	608
Door-to-Door Vans	1.0	30	94	58	338
Courtesy Vehicles	1.2	35	225	192	541
				2077	2972
Curb 4					
Upper Level (Departures)					
Private Auto/Limo	2.3	25	534	651	
				651	1485
Lower Level (Arrivals)					
Private Auto/Limo	4.7	25	602	1474	
				1474	1485

[1] Applies a 1.25 peak internal surge factor.

[2] Actual or planned length of curb plus 50% of double park lanes, minus 10% for emergency vehicle use.

Source: JKH Mobility Services, February 2003.

6.2.3 Parking Forecasts and Impacts

Parking forecasts were based on the methodology detailed in Section 2.6 above. None of the design and operations refinement measures impacted the parking forecasts. Therefore, there was only slight changes to the parking forecasts presented in Section 4 above. The resulting impacts are similar to the impacts presented Section 4.1.3 above. **Table S23**, Parking Facility Demands Refined Alternative D, Year 2015, illustrates the refined parking forecasts.

6.2.4 Pedestrian Conveyance Forecasts

The refinement measures only impacted the directional distributions along the airport roadways. These changes will not impact the demands placed on the APM system. The forecasts for the refined model are similar to those presented in Section 4.1.4 above with only slight differences in values. The resulting APM ridership numbers for the Refined Alternative D model are presented in Attachment E of this report.

7. CONSTRUCTION IMPACTS

The construction impacts for the other Master Plan alternatives are documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. The following sections discuss the construction impacts of Alternative D.

7.1 Introduction

As part of the LAX Master Plan, traffic flow conditions on the on-airport ground transportation system during construction were simulated and the impacts analyzed. Construction impacts were identified and recommendations are made to minimize impacts to motorists at or near the airport for Alternative D. The construction activity forecast is described in the July 11, 2002 Compilation of Draft Environmental Impact Statement (DEIS) Construction Impacts Input Data Description Notebook, prepared by MARRS Services, Inc. for URS Corporation. Note that the landside construction activity forecast in this July report remained unchanged in the subsequent updates to the report which were released on August 2, 2002, February 28, 2003, and May 21, 2003. More detailed assumptions with regards to the on-airport roadway model are based on a set of questions developed by JKH/Kimley-Horn (KHA) and forwarded to URS Corporation on July 30, 2002 and the various documented sets of answers to these and subsequent questions and conversations between JKH/KHA and the LAWA/URS/CDM/PTG/L&B study team during the month of August, 2002. The document summarizing the questions and answers is included in Attachment G of this report.

In addition to the construction traffic, ground transportation forecasts are affected by the number of originating and terminating passengers. The airport traffic volumes used in this analysis represent peak summer airport operations. The peak construction period traffic demands, Year 2008, were applied to the airport peak period traffic demands. The resulting traffic volumes and impacts represented in this report depict the highest construction traffic scenario.

Evaluating construction impacts required two primary tasks: addition of the construction traffic to the airport related ground access demands, and reviewing the routes of the construction traffic model and determining where construction projects would adversely impact the on-airport ground access operations (e.g., detours, road closures, etc.). The construction scenario was analyzed in particular for capacity deficiencies that are expected to occur during this period of construction. Recommendations are made for minimizing construction impacts.

The following sections detail the methodology, the impact analyses results testing the demand loading of construction traffic movement in conjunction with the CTA passenger traffic forecast by Landrum & Brown. Finally, the resulting recommendations and policies for Alternative D, Year 2008, conclude the section.

7.2 Methodology

7.2.1 Construction Schedule

Under Alternative D, construction activities will peak between the years 2005 and 2008. The majority of the airport passenger facilities construction will peak in Year 2008, the year selected for the interim year construction analysis. The construction locations, schedule, types, and craft labor activity were obtained from histograms prepared by MARRS Services, Inc.[9]

The MARRS report provides an order of magnitude estimation of the construction resources data and a conceptual construction schedule. As engineering and construction plans are developed for the preferred build alternative, the estimate of construction resources will be refined and the resulting impacts clarified, revised and expanded in subsequent analyses.

The construction of Alternative D is divided into three major phases as described below.

Phase I projects include those projects that will be completed or still underway in 2008, namely:

- Reconstruction of Runway 7R/25L
- Center Taxiway project in the south airfield
- ITC parking facilities
- CTA Landside
- APM (under construction)
- Consolidated RAC (under construction)
- GTC (under construction)
- Off-site Utilities and Roadway Improvements
- Baggage Tunnel (under construction)

Phase II involves the construction of the West Satellite Concourse area, including:

- West Satellite Concourse and related passenger and baggage handling facilities
- Support infrastructure projects such as Aircraft Rescue and Firefighting, Compressed Natural Gas (CNG) and cargo facilities

Phase III includes reconfiguration of the existing fuel farm, and modifications to the existing Tom Bradley International Terminal (TBIT), CTA, and Runway 6R/24L in the north airfield.[10]

More detail on the trip generation and distribution of the construction traffic specific to the on-airport model is provided in the following sections.

7.2.2 Assumptions

To conduct the capacity analyses for the construction phases of this project, assumptions were made with respect to the transportation network, trip generation, and trip distribution. The following sections explain these assumptions in more detail. A summary of key assumptions and inputs specific to Alternative D for the analysis Year 2008 is shown in **Table S24**, Key Assumptions/Inputs 2008 Alternative D. These mode and sub-mode split assumptions were determined through a series of meetings and emails between November 2001 and October 2002. The regional access/egress directional distributions were provided from the off-airport roadway studies for the construction scenario.

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9 MARRS Services, Inc. LAX Master Plan Alternative D, Compilation of Draft Environmental Impact Statement (DEIS) Construction Impacts Input Data. May 21, 2003.

10 MARRS Services, Inc. LAX Master Plan Alternative D, Compilation of Draft Environmental Impact Statement (DEIS) Construction Impacts Input Data. May 21, 2003.

Table S23

Parking Facility Demands Refined Alternative D, Year 2015

Parking Facility	Category of Parking	AM Commuter Peak Hour In (veh)	AM Commuter Peak Hour Out (veh)	Airport Peak Hour In (veh)	Airport Peak Hour Out (veh)	PM Commuter Peak Hour In (veh)	PM Commuter Peak Hour Out (veh)	Daily (Airport Design Day) In (veh)	Daily (Airport Design Day) Out (veh)
GTC, North of North Pier	Short Term (Visitor Vehicles) and Long Term (Passenger Vehicles)	274	172	500	493	179	291	6,548	6,574
GTC, Between North & South Pier	Short Term (Visitor Vehicles) and Long Term (Passenger Vehicles)	404	280	784	825	323	449	10,221	10,261
GTC, South of South Pier	Short Term (Visitor Vehicles) and Long Term (Passenger Vehicles)	201	171	413	467	208	193	5,103	5,169
Long Term Surface Lot[1]	Long Term (Passenger Vehicles)	69	46	109	107	53	69	1,405	1,403
ITC Premium Parking	Short Term (Visitor Vehicles) and Daily Park (Passenger Vehicles)	1,395	968	2,717	2,802	1,118	1,466	34,692	34,473
Private Long Term Parking Lot[1]	Long Term (Passenger Vehicles)	249	218	336	333	237	258	4,612	4,595
RAC QTA[1]	Rental Cars	473	243	861	836	310	466	10,286	10,115
West Employee Parking Garage[2]	Terminal Employee Private Vehicles	139	128	87	58	104	215	3,309	3,314
Commercial Vehicle Staging Lot	Commercial Vehicles	195	141	423	416	209	245	5,136	5,099
East Employee Parking Lot[3]	Terminal Employee Private Vehicles	430	417	247	215	448	572	10,569	10,576

1 Includes shuttles entering parking lot, but not parking at the lot.
2 The demands presented here include only terminal employees. Other employees, such as cargo employees, were included in the off-airport analysis of arterial streets.
3 Includes curb drop terminal employees entering parking lot, but not parking at the lot.

Source: JKH Mobility Services, February 2003.

Table S24

Key Assumptions/Inputs 2008 Alternative D

	International	Domestic	Commuter
Enplanements/Deplanements(daily)	76,056	159,259	9,822

Connecting Passengers	**International**	**Domestic**	**Commuter**
(% of Enplanements/Departments)			
Originating/Terminating	34.7%	20.8%	54.8%
Connects in same Terminal (varies by Terminal)	13.3% - 34.7%	4.4% - 11.2%	25.9% - 27.0%
Connects in another Terminal (varies by Terminal)	0.0% - 21.4%	9.6% - 16.5%	27.8% - 28.9%

Vehicle Occupancy/Passenger Car Equivalents[1]	**Veh. Occ.**	**PCE**
Private Auto	1.55	1.00
Rental Car	1.73	1.00
Taxi	1.45	1.00
Door-to-Door Van	2.63	1.20
Courtesy Vehicle	4.00	1.50
Scheduled Bus	18.30	2.00
Charter and Tour Bus	22.30	2.00
Public Transit Bus	21.00	2.00

Table S24

Key Assumptions/Inputs 2008 Alternative D

Mode Split[2] (% of Originating and Terminating Passengers)	International Mode	International Sub-Mode	Domestic Mode	Domestic Sub-Mode	Commuter Mode	Commuter Sub-Mode
Auto/Limo Curb Pick-Up & Drop-Off	33.4%		40.0%		40.0%	
Auto Short Term Parking (visitors)	6.8%		4.5%		4.5%	
Auto Long Term Parking	9.9%		9.9%		9.9%	
Direct to Close-in Park at ITC		31.0%		31.0%		31.0%
Curb stop then Close-in Park at ITC		16.5%		16.5%		16.5%
Direct to Remote Park		6.5%		6.5%		6.5%
Curb stop then Remote Park		8.0%		8.0%		8.0%
Direct to Private Parking		38.0%		38.0%		38.0%
Auto Rental Car	17.2%		18.6%		18.6%	
Direct to RAC		80.0%		80.0%		80.0%
Off-Airport RAC		20.0%		20.0%		20.0%
Taxi	5.4%		5.0%		5.0%	
Direct to Curb		20.0%		20.0%		20.0%
Stage to Curb		80.0%		80.0%		80.0%
Door-to-Door Van	3.6%		5.6%		5.6%	
Courtesy Vehicle	6.1%		4.0%		4.0%	
Charter and Tour Bus	6.2%		4.0%		4.0%	
Public Transit	2.0%		1.5%		1.5%	
Metro Bus		50.0%		50.0%		50.0%
Rail		50.0%		50.0%		50.0%
Scheduled (FlyAway) Bus	9.4%		6.9%		6.9%	
TOTAL	100.0%		100.0%		100.0%	

Regional Access/Egress Directional Distributions[3] (% of Originating and Terminating Passengers)		International Inbound	International Outbound	Domestic/Commuter Inbound	Domestic/Commuter Outbound
North	AM	37.0	33.3	37.0	33.3
	Noon	25.0	30.6	25.0	30.6
	PM	28.2	35.6	28.2	35.6
South	AM	26.3	36.7	26.3	36.7
	Noon	38.7	38.4	38.7	38.4
	PM	39.3	37.4	39.3	37.4
East	AM	36.7	30.0	36.7	30.0
	Noon	36.3	31.0	36.3	31.0
	PM	32.5	27.0	32.5	27.0

1 LAX Master Plan EIS/EIR – Phase III, Project Description – Final Draft, dated October 29, 1999.

2 Based on 2005 No Action/No Project assumptions presented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of Draft EIS/EIR, supplemented with LAWA Transportation Working Group Conference Call, September 2002.

3 Table 3.1-1 of Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR.

Source: JKH Mobility Services, February 2003.

7.2.2.1 Transportation Network Assumptions

The project team assumed that the 2008 on-airport ground transportation network was similar to the 2005 No Action/No Project Alternative network documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR with a few key changes, the most notable change being that all close-in parking within the CTA would be demolished by Year 2008. Other than the change to close-in parking, the construction scenario utilizes the existing ground transportation network. Associated remote facilities such as private long-term parking and private parking, were assumed to operate similar to current conditions. Increases in remote facility usage are in proportion to the increase

in trips generated from the Alternative D, Year 2008 flight schedule provided by Landrum & Brown on September 4, 2002. Key assumptions and inputs specific to the Alternative D construction model are discussed in the following sections.

Figure S17, ALPS™ Structural Segment Model, Alternative D, Year 2008, shows the ALPS™ network overlaid on a background drawing file with the construction staging areas labeled.

7.2.2.1.1 Ground Access

In 2008, which is the peak year for ground traffic effects and construction vehicle activity, the existing central terminal area access roads would remain unchanged. The GTC is not operational by Year 2008, but the major access and egress roads to the GTC site are built and handle construction traffic.

7.2.2.1.2 Curbs

All curbing activity in Year 2008 would continue to take place in the CTA, as in the existing configuration and the existing curbfront system in the CTA would remain unchanged in the 2008 scenario.

The CTA curbfronts will stay the same as existing conditions for this interim construction period. The upper level will have mixed vehicle curbs for departure. The lower level will continue to be divided, the closest curbs to the terminal will be used by private vehicles and taxis; the outer curb will be used by commercial vehicles. The curbs are assigned to particular vehicles. Both levels provide through curb lanes. The assumed dwell times for the CTA traffic is presented in **Table S25**, CTA Dwell Times and Vehicle Lengths Alternative D, Year 2008.

Table S25

CTA Dwell Times and Vehicle Lengths Alternative D, Year 2008

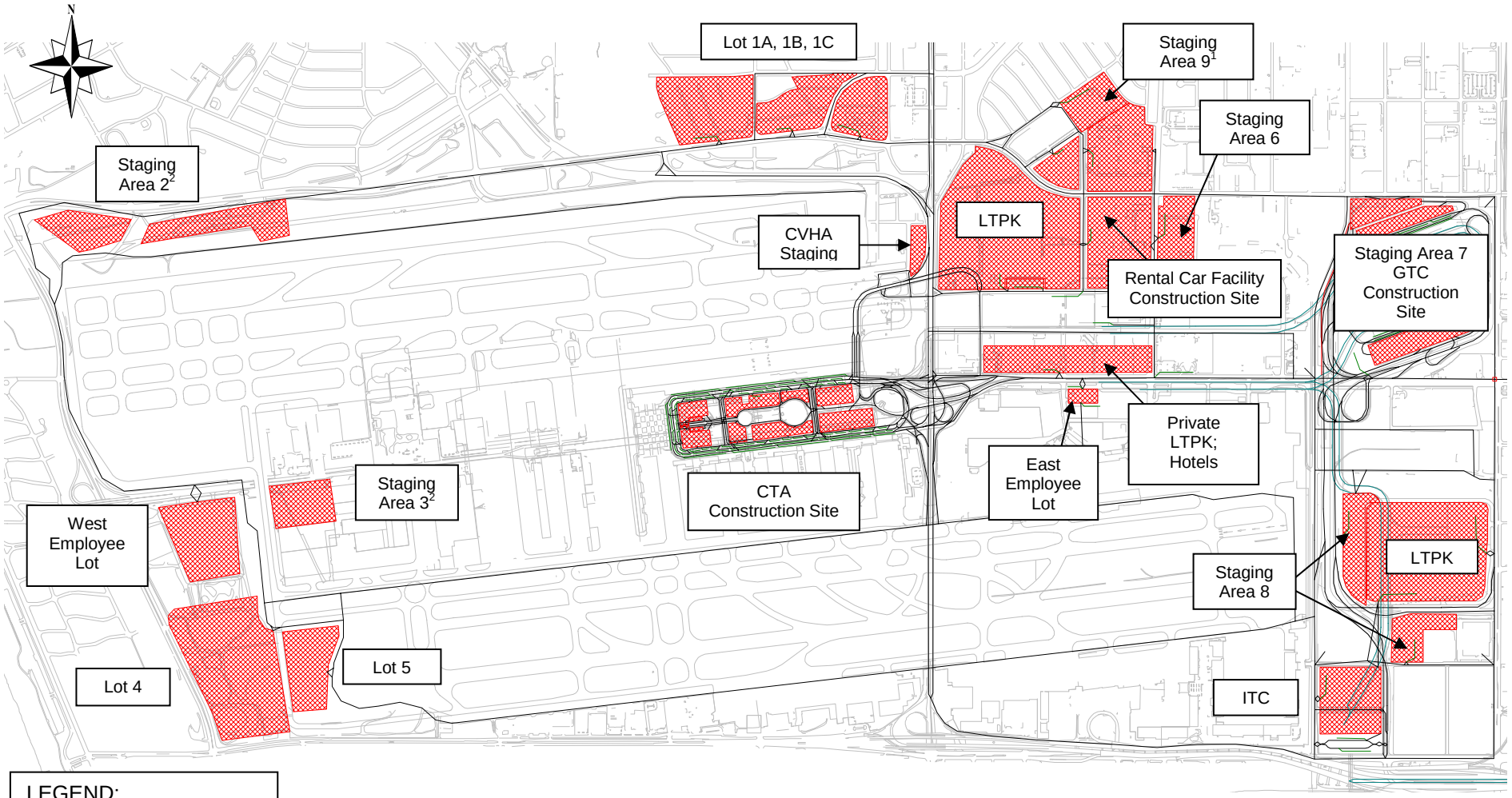
Curbfront	Dwell (min.)[1]	Average Vehicle Curb Length (ft.)
CTA Departures		
Private Auto/Limo	2.3	25
Employee Private Auto	0.5	25
Taxi	2.3	25
Door-to-Door Vans	1.4	30
Courtesy Vehicles	1.1	35
Buses[2]	1.3	50
CTA Arrivals		
Private Auto/Limo[3]	2.3	25
Employee Private Auto	0.5	25
Taxi	4.7	25
Door-to-Door Vans	1.0	30
Courtesy Vehicles	1.2	35
Buses	2.0	50
CTA Departures		
Scheduled Buses	1.3	50
CTA Arrivals		
Scheduled Buses	2.0	50

1 Source: LAX Master Plan: Existing Conditions Working Paper, dated April 19, 1996, with 10% reduction for planned curbfront improvements.

2 Includes Charter and Public Transit Buses.

3 Revised for security conditions premise for Alternative D, as well as "desired dwell time" aspect of simulation analysis methodology. (previously 4.7 minutes)

Source: JKH Mobility Services, February 2003.



Notes:

1. The vehicles shown in Staging Area 9 are now known to utilize the adjacent Staging Area 1. This effects 50 percent of the employees working at the Rental Car Facility Construciton Site and for the purposes of the roadways modeled, the impacts are insignificant.
2. No vehicles were routed to Staging Areas 2 and 3 during Year 2008; therefore they are not included in the On-Airport Model.

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7.2.2.1.3 Close-In Public Parking

In 2008, all CTA parking will be replaced with the Intermodal Transportation Center (ITC) and all air passengers and visitors will park at the ITC during construction. The ITC would accommodate 9,127 stalls. All passengers and visitors would board shuttle buses from the ITC to access the CTA since the automated people mover (APM) system would not be in operation.

7.2.2.1.4 Remote Parking

The existing long-term public parking system will remain unchanged in the interim year scenario. Lots B and a portion of Lot C will remain in operation. Long-term parkers in Lots B and C will be transported by courtesy vehicle directly to the CTA.

7.2.2.1.5 Employee Parking

The employee parking system was assumed to be the same as the ultimate Alternative D (one West Employee Parking Garage and one East Employee Parking Lot) in the 2008 scenario.

7.2.2.1.6 Rental Car Facilities

The existing rental car facilities and systems was assumed to remain unchanged in the 2008 scenario (i.e., all patrons will continue to take shuttle buses between the CTA and their rental car pickup/dropoff facilities).

7.2.2.1.7 Commercial Vehicles

Taxis, limos, door-to-door vans, private parking and hotel/motel commercial vehicles are assumed to operate similarly to the current conditions with their patrons picked up and dropped off at the CTA terminal curbfronts. The Charter Buses were assumed to pick up and drop off their patrons at the CTA curbfronts. Likewise the initial "planned" model of the Interim Year Construction Activity routed the regional mass transit system buses to the CTA terminal curbfronts. Based on LAWA review of the planned model, the regional buses were routed to the ITC for the Mitigated Construction Model.

7.2.2.2 Trip Generation Assumptions

Trip generation assumptions were made in two categories: construction-related and flight-related. The following sections discuss these assumptions.

7.2.2.2.1 Construction-Related Trip Generation

The construction of the parking facilities in conjunction with the ITC near Imperial Highway will be completed in year 2006, allowing for the demolition of the CTA parking facilities. A part of the construction activity simulated in the modeled case study is construction traffic moving to, from, and within the CTA where new, expanded Terminal Facilities are being built.

The construction model simulates the construction movement of craft labor vehicles to and from nine staging sites located strategically around the CTA. The craft laborers are transported from the staging sites to the work sites by an exclusive shuttle service. Offsite truck trips are modeled from the work sites to three representative model boundary nodes, (North, East and South). Onsite truck trips are modeled between the work sites and two batch sites located West of the Airport. The routing of these onsite truck trips is primarily via airport service roads.

The construction sites constitute the CTA Terminal Facility, consolidated RAC, and the GTC. The APM system guideway will be under construction between the GTC and the CTA, and between the ITC and the CTA. The APM maintenance facility will be located in the basement of the ITC. A tunnel for the baggage system will be built between the GTC and the CTA; however, the main component of the tunnel will be completed by 2006.

7.2.2.2.1.1 Construction Labor Force Trips

The following sections describe the basis for distribution of the craft labor forces and the associated trip generation of the modeled construction traffic movements. The labor forces were extracted from the MARRS work force histograms provided in the July 11, 2002 (and subsequent update reports) Construction Impacts Input Data Construction Analysis Report, with supplemental craft work force

histograms provided on August 5, 2002. In response to a set of JKH/KHA questions dated July 30, 2002, MARRS defined the peak construction year from July 2007 through June 2008. Upon further review of the construction activity for the 2008 peak year, the second quarter of the year 2008 was used to obtain the labor man-hour work force requirements and construction truck trips for the development of the On-Airport Interim Year Construction Model. The full volumes of the calculated construction trips by time of day were applied to both the Airport Peak and Commuter Peak Models.

Table S26, Craft Labor Distribution and Trips Alternative D, Year 2008, shows the methodology and calculations used to obtain the daily labor for each of the construction work sites. Similar methodologies were applied in the past analysis of construction impacts of the other Master Plan alternatives documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

Table S26

Craft Labor Distribution and Trips Alternative D, Year 2008

Work Site	Labor Hours per Quarter X 1000 From MARRS Histograms[1]	Weekly Labor Hours (Hours/quarter divided by 13 weeks)
APM	725	55,769
Baggage	18	1,385
CTA	1,447	111,308
GTC	956	73,538
RAC	137	10,538
Offsite	47	3,615

Work Site	Daily Labor Hours (Hours/week divided by 6 days)	Daily Labor Force (Hours/day divided by 8.33 hours)	Percent Per Area
APM	9,295	1,116	21.8
Baggage	231	28	0.5
CTA	18,551	2,227	43.5
GTC	12,256	1,471	28.7
RAC	1,756	211	4.1
Offsite	603	72	1.4

Total Labor force per day 5,125 construction employees

[1] MARRS Services. Supplemental Histograms LAX Master Plan Alternative D Compilation of Draft Environmental Impact Statement (DEIS) Construction Impacts Input Data. August 5, 2002.

Source: MARRS Services. Supplemental Histograms LAX Master Plan Alternative D Compilation of Draft Environmental Impact Statement (DEIS) Construction Impacts Input Data. August 5, 2002.

Each quarter is comprised of 13 weeks, therefore the labor hours per quarter was divided by 13 to determine the average labor hours per week. As with the other Master Plan alternatives, 6 work days were assumed per week. To determine the daily labor hours, the average labor hours per week was divided by 6, the average number of workdays per week. Finally the average labor hours per day was divided by 8.33 hours, the average shift duration.[11] These calculations resulted in an average number of 5,215 construction employees per day. The resulting employees are then distributed between the six construction areas.

7.2.2.2.1.2 Craft Labor Vehicle and Transit Trips

The labor force employees for each shift are assigned as vehicle trips on the roadway system and associated person trips on the construction labor shuttle buses according to normal work commute times for each work shift. Trips accessing the site for the first shift travel between 6:00 and 7:00 a.m., with corresponding egressing trips between 3:30 and 4:30 p.m. Similarly the second shift trips access the

[11] MARRS response to JKH/KHA Questions. August 16, 2002. See Attachment G of this report for more detail.

staging areas between 2:30 and 3:30 p.m. and egress between midnight and 1:00 a.m. Finally the third shift trips access between 11:00 p.m. and midnight and egress between 7:00 and 8:00 a.m.[12]

The assumed private auto vehicle-occupancy for the Craft Labor Force work trips is 1.55 occupants per vehicle for the home-to-work commute. The average vehicle occupancy of 1.55 occupants per vehicle accounts for the carpooling vehicles of the labor force.

7.2.2.2.1.3 Construction Truck Trips

Table S27, Craft Labor Distribution and Trips Alternative D, Year 2008, shows the calculations to determine the number of trucks assigned to each category of on-site circulation and off-site access/egress truck trips. MARRS histograms were used to determine the quarterly truck trips for the model input derivation. As with the calculations to determine the daily employees, the trips per quarter were divided by 13 to determine the weekly truck trips. These weekly truck trips were than divided by 6 to determine the daily truck trips. The daily truck trips were than distributed by work area using the resulting distribution calculated for the employee trips in **Table S26**.

Table S27

Craft Labor Distribution and Trips Alternative D, Year 2008

	Offsite Truck Trips[1]	Onsite Truck Trips[1]			
Trips per quarter	83,000	36,000[2]			
Weekly Truck Trips (13 weeks/quarter)	6,385	2,769			
Daily Truck Trips (6 Days per week)	1,064	462			
	Work Force % from Previous	**Distribution at Offsite Truck Trips**		**Distribution of Onsite Truck Trips**	
Work Site	**Table**	**Per day**	**Percent**	**Per day**	**Percent**
APM	21.8	232	21.8	100	21.8
Baggage	0.5	6	0.5	2	0.5
CTA	43.5	462	43.5	201	43.5
GTC	28.7	305	28.7	133	28.7
RAC	4.1	44	4.1	19	4.1
Offsite Roads	1.4	15	1.4	7	1.4

1 MARRS Services. LAX Master Plan Alternative D Compilation of Draft Environmental Impact Statement (DEIS) Construction Impacts Input Data. May 21, 2003.

2 These 36,000 onsite truck trips are based on the July 11, 2002 MARRS Services Construction Report. The May 21, 2003 update of the construction report cites 37,000 onsite truck trips in Attachment B09. These additional truck trips only produce an additional 12 daily onsite truck trips, which were deemed insignificant to the accuracy of the analysis.

Source: MARRS Services. LAX Master Plan Alternative D Compilation of Draft Environmental Impact Statement (DEIS) Construction Impacts Input Data. May 21, 2003.

7.2.2.2.2 Flight-Related Trip Generation

Another trip generation component is the flight schedule on-airport ground traffic during the peak construction years. Because the peak construction years do not coincide with the 2005 and 2015 analysis years, it was necessary to develop a new flight schedule to account for flight-generated passenger trips. The resulting flight schedule has 89,694 originating passengers and 90,501 terminating passengers, an activity level 4.3 percent less than the 2015 flight schedule.

The Alternative D, Year 2008 Interim Year Construction Case Study uses the Year 2005 No Action/No Project Alternative passenger characteristics and mode choice as the air passenger input data baseline,

12 Landrum & Brown response to JKH/KHA Questions August 1, 2002. See Attachment G of this report for more information.

as previously described in the Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

7.2.2.2.2.1 Air Passenger Activity

Landrum & Brown prepared a flight schedule and associated flight specific air passenger enplanement/deplanement activity as part of their earlier airfield and air traffic forecasting process.[13] These flight records include assignments of aircraft to specific gates within the CTA.

The flight schedule represents the total air passenger activity for an average summer weekday in the year 2008. This is designated as the "Airport Design Day" and serves as the basis for trip production during the study period called "Airport Peak Hour."

The total air passenger activity for the summer Airport Design Day (as defined by the flight schedule) is factored down by 30 percent across the board in order to estimate the level of air passenger activity for a spring day, the basis for commuter peak hour activity. This reduction factor was determined from the previously published Master Plan studies by Leigh Fisher and Associates, and it has been consistently applied throughout the EIS/EIR process.

This seasonal adjustment is due to the fact that the environmental comparisons for the "commuter peak" for the Los Angeles area are based on a typical spring time day. This reduced air passenger activity scenario is then used to simulate the total airport activity. The vehicle-trips and the roadway demand data is extracted from the model results for the a.m. and p.m. commuter peak times for use in the other environmental and off-airport analyses. It is not a pure factoring of vehicle activity, since the commercial vehicles in particular remain close to the same activity level as during the summer periods, and only the private auto activity reduces proportionally. However, for purposes of the 2008 Interim Year Peak Construction Activity model, only traffic impacts will be addressed.

In addition to factoring the flight schedule, a number of delivery and service vehicles traveling to the terminal and landside facilities were added to the model during the a.m. and p.m. peak hours. Comprised in this vehicle population are operational vehicles such as LAWA operations and maintenance vehicles, police vehicles, airline vehicles, and delivery vehicles supplying goods to concessions and other central terminal area offices. These vehicle trips are not flight related and typically occur during non-airport peak hours and were distributed between the CTA, GTC, and ITC.

To generate the delivery/service vehicle trips in Alternatives A, B and C, a post processing factoring procedure was used, documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. For the Alternative D analysis, a pre-processing procedure was used where an additional 10 percent of the total hourly vehicle trips generated in the model were applied to the hours surrounding the commuter peak hours as bi-directional round trips, factored to represent historical data trends of background traffic in the CTA. The generation and distribution of delivery service vehicles will be refined in further studies during advanced planning.

The number of connecting air passengers was specified by flight within the flight schedule provided by Landrum & Brown. In general, there is a 35 percent connection rate for international passengers and a 21 percent connection rate for domestic passengers and a 55 percent connection rate for commuter passengers. Additionally 50 percent of the connections are assumed to be inter-terminal, (i.e., movements between terminals), and 50 percent are assumed to be intra-terminal, (i.e., movements within the same terminal).

7.2.2.2.2.2 Visitor Activity

In addition to the air passengers, visitors are modeled in the 2008 Interim Year, Peak Construction Activity model. Visitors that come to the airport to either see an originating passenger off ("Well-Wisher") or meet a Terminating Passenger ("Meeter/Greeter") have their trip activity generated from the air passenger activity. The specific relationship of visitor activity versus air passenger activity has been established for all alternatives in previous Master Planning work.

The visitor trips are assumed to be by private autos which come to the airport, park in short term parking at the ITC and take the bus to the CTA, then reverse their path and leave the airport an hour or so later.

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[13] Flight Schedule provided by Landrum & Brown. September 4, 2002.

This visitor trip pattern includes both an accessing and an egressing vehicle trip and two bus trips for each one-way trip of the corresponding originating and terminating passenger. By definition, the visitor automobile is specifically identified by the vehicle parking in short term parking with the visitor occupants leaving the vehicle and traveling to the CTA to accompany the air passenger.

Since the CTA lots are closed during the interim year, all visitors park at the ITC thus increasing the travel distance for visitors to the airport. Due to the displaced parking, a decrease in visitor activity with a corresponding increase in curb-drop and curb-pick up activity is expected during the interim year. Specifically, domestic visitors will be decreased by 50 percent from the other master plan alternatives and the international visitors will be decreased by 25 percent from previous assumptions.[14] This results in a visitor ratio of 0.19 visitors per domestic and commuter passenger (originating and terminating) and a ratio of 0.41 visitors per international passenger (originating and terminating).[15]

Vehicles that wait at a curbfront to pick-up or drop-off an air passenger (i.e., the driver does not leave the vehicle) are not considered "visitor" vehicles, rather they are considered "curb drop-off or pick-up" vehicles. However, a small portion of the short-term parking visitors were assumed to drive to the CTA to drop passengers, then recirculate to the ITC to park, from which the visitor travels back to the CTA via the ITC shuttle bus to meet up with the air passenger again.

Table S28, ALPS™ Model Trip Assignment Validation Alternative D, Year 2008, Airport Design Day Daily Total Trips, shows the validation of the ALPS™ trip assignments for the Airport Design Day simulation. This table indicates that the model generates person trips to the terminals equivalent to the trips anticipated by the flight schedule.

The level of activity and air passenger characteristics served by 2008 Interim Year Peak Construction Activity model is assumed to be similar to the 2005 No Action/No Project Alternative documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. Furthermore, the characteristic use of the curbfront facilities and access modes has also been defined for Year 2008 in accord with the 2005 No Action/No Project characteristics documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

Table S28

ALPS™ Model Trip Assignment Validation Alternative D, Year 2008, Airport Design Day Daily Total Trips

	In			Out		
All Terminals	**Flight Schedule**	**Modeled Results**	**Difference**	**Flight Schedule**	**Modeled Results**	**Difference**
Air Passengers						
Originating	89,694	90,361	0.74%	-	-	
Terminating	-	-		90,501	89,586	-1.01%
Visitors						
Well Wishers	22,422	22,422	0.00%	22,422	22,198	-1.00%
Meeter Greeters	22,716	22,489	-1.00%	22,716	22,489	-1.00%

Source: JKH Mobility Services, February 2003.

7.2.2.2.2.3 Terminal Employee Activity

The terminal employee activity for the 2008 Construction Interim Year Alternative D Case Study is the same level of person trip activity as was defined for the 2005 No Action/No Project Alternative documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. Only terminal area employees were modeled in the on-airport model.

[14] Transportation Working Group Conference Call. September 30, 2002.

[15] ITC Roadway Configuration Meeting with participants from LAWA, URS, PTG, L&B and JKH/KHA. September 23, 2002.

The distribution of employee trips is assumed as follows:

- 65 percent driving private autos, distributed between the two employee parking areas,
- 30 percent will be dropped and picked up at the East Employee Parking Lot curbfronts, and
- 5 percent will travel by Public Transit to the ITC.

New security directives from TSA will require that all airport employees pass through a security screening point before reporting to their work station in the CTA or ITC. Two such screening points have been assumed in this model - one at the West Employee Parking Garage and one at the East Employee Parking Lot.

Terminal area employees driving private autos were first assigned to the East Employee Parking Lot until that lot reached capacity. The remaining terminal employees were the routed to the West Employee Parking Garage. Specifically 58 percent of the terminal employees driving private autos park in the West Employee Parking Garage (38 percent of total terminal employees), and 42 percent park in the East Employee Parking Lot (27 percent of total terminal employees). In both cases of employees arriving or departing the employee lots; those employees will ride the employee shuttle to the CTA, which travels on airfield service roadways and does not impact the facilities of the Interim Year Model of the CTA facilities.

CTA destined employees take an employee shuttle bus over the AOA roads to reach the terminals. The ITC destined employees take a different employee shuttle that operates over the AOA roads to the southeast end of the airfield and then crosses over Aviation to enter the ITC. The West Employee Parking Garage activity also includes all other airport employee parking, including employees bused over AOA roadways to cargo, service and maintenance areas. The East Employee Parking Lot handles employees destined to the CTA (95 percent) and ITC (5 percent).

7.2.2.2.2.4 Time Distribution Curves

Time shifts are applied to air passenger enplanements and deplanements at the gate in order to estimate when the landside demand loading will occur. These shifts are applied over a defined distribution either in advance of the time of enplaned flight departure, or after the time of deplaned flight arrival. The generic descriptive term for these time shifts that is used within ALPS™ terminology is "Time Distribution Curves" (earlier reports used the terms lead/lag curve). The access and egress time distribution curves used in the Year 2008 Alternative D Peak Construction Activity studies are identical to those used in the other Master Plan alternatives, documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. **Figures S18**, Access Time Distribution Curves, Alternative D, Year 2008, and **S19**, Egress Time Distribution Curves, Alternative D, Year 2008, present the accessing and egressing time distribution curves for International and Domestic Passengers.

Figure S18 Access Time Distribution Curves, Alternative D, Year 2008

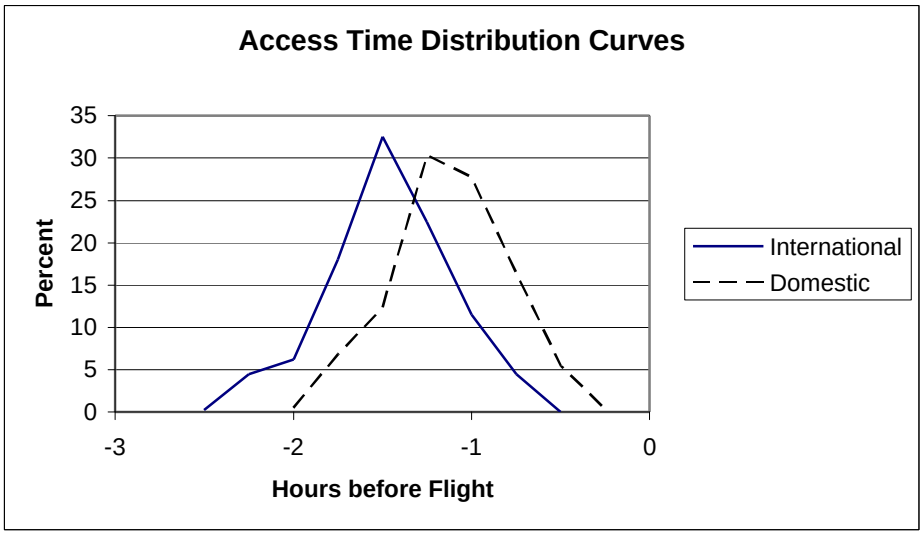
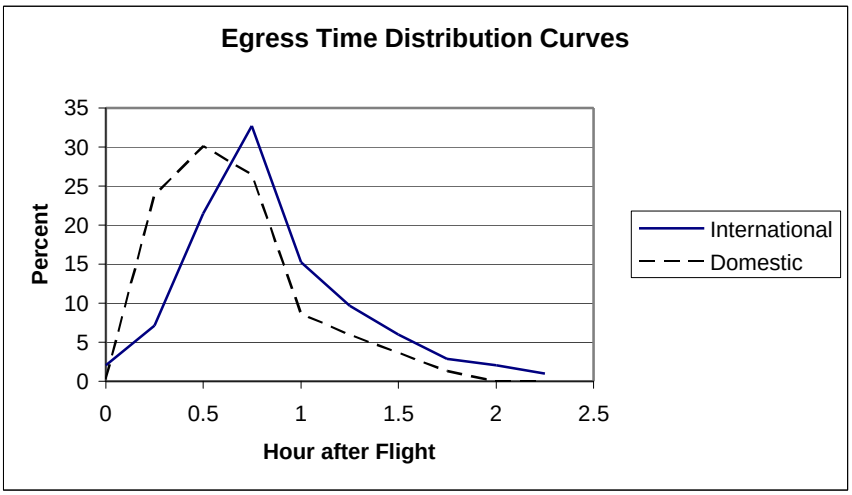


Figure S19 Egress Time Distribution Curves, Alternative D, Year 2008



The visitor time distribution with respect to the flight time matches the air passengers' time distribution in **Figures S18** and **S19** for the portion of the trip that they accompany the passenger. The remaining portion of the trip has a much more compressed period in which the visitors enter or leave the airport without the air passenger.

These time shifts could change, as passengers become more familiar with the new airport procedures and policies concerning airport security. However, no arbitrary adjustments were made to the time distribution curves for the 2008 Interim Year Peak Construction Activity model compared to the other alternatives studied previously. Any spreading of the distribution over a longer period of time could possibly reduce the peaking effects of demand on airport landside facilities, but such assessments were beyond the scope of this study.

7.2.2.2.2.5 Travel Classifications

A "travel classification" is defined as a combination of access/egress mode and trip purpose. It also has information about vehicle occupancy and passenger car equivalent (PCE) ratios, among other parameters. The Travel Classifications used in the 2008 Interim Year Peak Construction Activity model are defined by the parameters given in **Table S29**, Travel Class Characteristics Alternative D, Year 2008. Specifically, each travel classification in the model is represented by a mode split, vehicle occupancy, PCE or ratio of the average vehicle length of the travel class compared to an average passenger car. Within ALPS™, each travel class has a unique designator identified in the final column of **Table S29**.

In addition to the air passengers, the terminal employees are assigned to three travel classifications also shown in **Table S29**.

Table S29

Travel Class Characteristics Alternative D, Year 2008

Travel Classification	Mode Split[1]	Avg. Vehicle Occupancy[2]	PCEs[2]	Model Designation
Domestic Air Passengers				
(Includes Commuter Air Passengers)				
Private Auto	54.40%			
Curb Drop/Pick-up	39.95%	1.55	1.0	CURB
Short Term Parking[3]	4.55%	1.55	1.0	STPK
Long Term Parking[4]	9.90%	1.55	1.0	LTPK
Rental Car	18.60%	1.73	1.0	RENT
Taxicab	5.00%	1.45	1.0	TAXI
Door to Door Van	5.60%	2.63	1.2	DVAN
Hotel/Motel Shuttle	4.00%	4.00	1.5	CVEH
Charter/Tour Bus	4.00%	22.30	2.0	CBUS
Public Transit Bus/Rail	1.50%	21.00	2.0	PBTR
FlyAway Bus[5]	6.90%	18.30	2.0	SBUS[5]
International Air Passengers				
Private Auto	50.10%			
Curb Drop/Pick-up	33.40%	1.55	1.0	CURB
Short Term Parking[3]	6.80%	1.55	1.0	STPK
Long Term Parking[4]	9.90%	1.55	1.0	LTPK
Rental Car	17.20%	1.73	1.0	RENT
Taxicab	5.40%	1.45	1.0	TAXI
Door to Door Van	3.60%	2.63	1.2	DVAN
Courtesy Vehicles (Hotel/Motel)	6.10%	4.00	1.5	CVEH
Charter/Tour Bus	6.20%	22.30	2.0	CBUS
Public Transit Bus/Rail	2.00%	21.00	2.0	PBTR
FlyAway Bus[5]	9.40%	18.30	2.0	SBUS[4]
Terminal Employees				
Private Auto	95.00%			
Curb Drop/Pick-up	30.00%	1.44	1.0	EMPL
Parking	65.00%	1.44	1.0	EMPPK
Public Transit Bus/Rail	5.00%	21.00	2.0	EMPPBT
Construction Traffic - Craft Labor				
Private Auto	90.00%	1.55	1.0	LABOR
Public Transit Bus/Rail	10.00%	21.00	2.0	LABOR
Construction Traffic - Trucks				
Haul Trucks	100.00%	1	2.5	TRUK

1 Source: Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR and Transportation Working Group Conference Call, September 2002.

2 Source: Tables 2.4-3 and 2.4-4, Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR, September 2000.

3 Same Vehicles as Visitor Classification - vehicles on roads assigned by Visitor trips

4 The Long Term Parking includes the Daily Park Patrons

5 The Flyaway Bus mode replaces the Scheduled Bus mode from the other Alternative case studies.

Source: JKH Mobility Services, February 2003.

It is important to note that the definition of mode and trip purpose distributions (labeled “mode split” in the table), are based primarily on the passenger characteristics defined for 2005 No Action/No Project, documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR, with the modifications to the visitor populations as discussed in Section 7.2.2.2.2.2 above.

With certain travel classifications, there are further divisions of the characteristic trips which are representative of choices people make within the landside. Every “sub-modal split” has a specific trip

purpose oriented travel path defined for the associated trips. **Table S30**, Sub-Modal Splits, states the assumed sub-modal splits applied in the 2008 Interim Year Peak Construction Activity Model preliminary simulation runs. These splits are also consistent with prior models used in previous environmental studies, where comparable facilities exist.

Table S30

Sub-Modal Splits

Sub-Mode	Percent
Auto Curb Pick-up (Air Passenger meets vehicle at curb)	
Direct to CTA Curb then Exit	45%
Direct to CTA Curb , Recirculate to Curb again, then Exit	50%
CTA-ITC Bus to ITC Curb, Auto at ITC curb, then exit	5%
Auto Curb Drop-off (Air Passenger dropped at curb)	
Direct to CTA Curb then exit	80%
Recirculate to CTA Curb then exit	15%
Auto to ITC drop-off, CTA-ITC bus to CTA Curb	5%
Auto Short Term Parking (visitors park the vehicle and travel to CTA)	
Accessing Well-Wisher[1]	
Direct to ITC Parking	75%
Curb drop then recirculate to ITC Parking	25%
Accessing Meeter/Greeter	
Direct to ITC Parking	75%
Curb drop then recirculate to ITC Parking	25%
Egressing Well-Wisher	
ITC Parking then exit	95%
ITC Parking, CTA Curb then exit	5%
Egressing Meeter/Greeter	
ITC Parking then exit	75%
ITC Parking exit, the CTA Curb	25%
Auto Long Term Parking (Accessing and egressing)[2]	
Daily Park at ITC	31%
Curb Stop and ITC Parking (recirculate)	16.5%
Direct to(from) Remote Long Term Lot (shuttle to CTA)	6.5%
Curb Stop and Remote Long Term Lot (shuttle to CTA)	8%
Direct to(from) Off-Airport Private Parking (Shuttle van to CTA curb)	38%
Auto Rental Car (Accessing and Egressing)	
Direct to RAC	80%
Recirculate to/from CTA curb from RAC	20%
Taxi	
Accessing Air Passengers	
Direct to CTA then Exit (Deadheading out)	80%
Curb and Recirculate to Commercial Vehicle Hold Lot	20%
Egressing Air Passengers	
Commercial Vehicle Hold Lot to CTA Curb, then Exit	20%
Entrance to Commercial Vehicle Hold lot, then CTA Curb (Deadheading in)	80%
Employee Parking (Accessing & Egressing)	
Direct to(from) East Employee Parking Lot	42%
Direct to(from) West Employee Parking Garage	58%

1 Source: Transportation Working Group Conference Call, September 2002.

2 Source: ITC Roadway Configuration Meeting with representatives from LAWA, URS, L&B, PTG and JKH/KHA. September 23, 2002.

Source: JKH Mobility Services, February 2003.

7.2.2.3 Trip Distribution Assumptions

The originations and terminations for construction trips were key factors in the distribution of trips. The origination point for construction trips is dependent on whether the trip is an on-site trip or an off-site trip. The origination point for on-site trips was assumed to be a staging area. The staging areas are shown above in **Figure S17**.

Off-site trips that terminate at the specific project sites within the on-airport roadways are assumed to originate from locations that access the airport from the north, south and east. In addition to the truck trips, the labor trips for construction employees accessing or egressing the staging areas during the shift changes were modeled. The termination point for all trips was assumed to be the location of the project office or a specific project staging area.

7.2.2.3.1 Construction Labor Force Trips

Table S31, Staging Area Percent Distribution by Work Site Alternative D, Year 2008, lists the distribution of the craft labor that is located at each staging site. Each of the construction areas are supported by a number of staging areas. For example, of all the construction employees working at the APM, 70 percent will use staging area 8A and 30 percent will use Staging Area 6. The staging sites are the locations where the construction labor force parks, receives their daily work assignments and obtains supervisory and construction management office support.

Table S31

Staging Area Percent Distribution by Work Site Alternative D, Year 2008

	Staging Site								
Work Site	**1A**	**1B**	**1C**	**CTA**	**6**	**7**	**8A**	**8B**	**9**
APM					30%		70%		
Baggage					40%	60%			
CTA	50%	30%		20%					
GTC					20%	60%		20%	50%
RAC			50%						
Offsite[2]						60%		50%	

[1] MARRS Services response to JKH/KHA Questions. August 29, 2002.
[2] MARRS Services response to JKH/KHA Questions. August 29, 2002.

Source: MARRS Services, August 29, 2002.

The percent of labor force employees for each work site were distributed originally as directed in the question/answer document, Attachment G of this report. Based on the distributions provided by MARRS, there were some further assumptions implemented to further distribute the labor force by work site. Specifically, Staging Area 8 was broken down into Staging Areas 8A and 8B for modeling purposes. Staging Area 8A represents the south staging area and handles the APM Work Force and Staging Area 8B represents the northern staging area and handles a percent of the GTC and Offsite Work Force. Furthermore Staging Area 1 was segregated into three separate staging areas: 1A, 1B and 1C. Staging areas 1A and 1B handle a percentage of the CTA Work Force and Staging Area 1C handles a percentage of the RAC Work Force.

By distributing the labor force calculated in **Table S26** by the staging area, the daily labor force can be further distributed by work site. The results of this total distribution in labor force (construction employees) per area are shown in **Table S32**, Daily Labor Force for Each Staging Site Alternative D, Year 2008. Similar to **Table S32**, **Table S33**, Percent of Daily Labor Force at Each Staging Site Alternative D, Year 2008, provides the percent of the daily labor force at each staging area.

Table S32

Daily Labor Force for Each Staging Site Alternative D, Year 2008

Work Site	Staging Site									
	1A	1B	1C	CTA	6	7	8A	8B	9	Total
APM					335		781			1116
Baggage					11	17				28
CTA	1114	668		445						2227
GTC					294	883		294		1471
RAC			105						105	211
Offsite						36		36		72
Total	1114	668	105	445	640	936	781	330	105	5125
Labor Force Percent to/from Staging Sites	22%	13%	2%	9%	12%	18%	15%	6%	2%	100%

Source: JKH Mobility Services, February 2003.

Table S33

Percent of Daily Labor Force at Each Staging Site Alternative D, Year 2008

Work Site	Staging Site									
	1A	1B	1C	CTA	6	7	8A	8B	9	Total
APM					6.5%		15.2 %			21.8%
Baggage					0.2%	0.3%				0.5%
CTA	21.7%	13.0%		8.7%						43.5%
GTC					5.7%	17.2%		5.7%		28.7%
RAC			2.1%						2.1%	4.1%
Offsite						0.7%		0.7%		1.4%
Labor Force Percent to/from Staging Sites	21.7%	13.0%	2.1%	8.7%	12.5 %	18.3%	15.2 %	6.4%	2.1%	100.0%

Source: JKH Mobility Services, February 2003.

As a final breakdown of craft labor trips, the daily labor force for some of the general work sites are assigned to a number of segmented work sites. For example, the APM construction occurs at the GTC, RAC, CTA, ITC, Maintenance Shops and along the guideway length. **Table S34**, Distribution of Work Force For Each Work Site and Staging Site Pair (Percent Used for Each Route) Alternative D, Year 2008, provides an overall percentage breakdown of the Craft Labor Forces assigned to each Work Site/Staging Site pair. Within **Table S34** the total labor force percent to and from the staging sites was taken from **Table S33** and was distributed for staging areas that supplied work force to a number of work sites. The percentages presented in **Table S34** were used in the on-airport model as route percentages for the construction traffic.

Table S34

Distribution of Work Force For Each Work Site and Staging Site Pair (Percent Used for Each Route)
Alternative D, Year 2008

		Staging Site								
Labor Type	**Work Site**	**1A**	**1B**	**1C**	**CTA**	**6**	**7**	**8A**	**8B**	**9**
APM - 7A	ITC & Shops							4.6%		
APM - 7A	Line							3.0%		
APM - 7A	CTA							7.6%		
APM - 9	RAC					1.3%				
APM - 9	GTC					5.2%				
Baggage - 8	GTC						0.2%			
Baggage - 8	Line						0.1%			
Baggage - 9	CTA					0.2%				
CTA - 1A	CTA	21.7%								
CTA - 1B	CTA		13.0%							
CTA - CTA	CTA				8.7%					
GTC - 8	GTC						17.2%			
GTC - 9	GTC					5.7%				
GTC - 7B	GTC								5.7%	
RAC - 1C	RAC			2.1%						
RAC - 6	RAC									2.1%
Offsite - 7B	Roadways								0.7%	
Offsite - 8	Roadways						0.7%			
Labor Force Percent to/from Staging Sites		**21.7%**	**13.0%**	**2.1%**	**8.7%**	**12.5 %**	**18.3%**	**15.2%**	**6.4%**	**2.1%**

Source: JKH Mobility Services, February 2003.

For the APM and Baggage Handling Systems, employees were destined to a number of work locations from each staging area. Specifically, the 15 percent of the APM Labor force using Staging Area 8A was assigned to three work sites: 30 percent to the ITC Station/Maintenance Shops, 20 percent to the guideway between the ITC and the CTA, and 50 percent to the APM alignment in the CTA. Applying these percentages to the percent of labor force at each staging area (found in **Table S43**) results in 4.5 percent from Staging area 8A to the ITC & Shops (30 percent of 15 percent), 3.0 percent to the APM line (20 percent of 15 percent) and 7.5 percent to the CTA (50 percent of 15 percent). Similarly, the APM workforce using Staging Area 6 was destined to the APM stations at the RAC (20 percent) and the GTC (80 percent). Finally, the Baggage Handling System employees using Staging Area 7 were distributed between the GTC work site (67 percent) and the tunnel line (33 percent).

Using the histograms provided by MARRS on May 21, 2003, the Daily Craft Labor activity was distributed into three shifts. The three shifts represented in the model correspond to the shift schedule provided by MARRS in their August 14, 2002 response to the July 30, 2002 set of questions. **Table S35**, Distribution of Activity between Work Shifts Alternative D, Year 2008, provides the distribution of the Craft Labor Forces for each Work Shifts and Staging Site. To calculate the percent for each shift, the labor force hours for each shift was divided by the total. The breakdown of labor force by shift was then applied to the daily labor force for each staging site to determine the labor force that arrives at the staging areas for each shift. The resulting labor force per shift is shown in **Table S35.**

Table S35

Distribution of Activity between Work Shifts Alternative D, Year 2008

			Percent of work force/shift
Total Work Force[1]	3,489,000	Hrs per quarter	
First Shift Labor Force	2,871,000	Hrs per quarter	82.3
Second Shift Labor Force	401,000	Hrs per quarter	11.5
Third Shift Labor Force	217,000	Hrs per quarter	6.2

Labor Force for First Shift

	Staging Site									
Work Site	**1A**	**1B**	**1C**	**CTA**	**6**	**7**	**8A**	**8B**	**9**	**Total**
APM					275		643			918
Baggage					9	14				23
CTA	916	550		367						1,833
GTC					242	726		242		1,211
RAC			87						87	174
Offsite						30		30		60
Total	916	550	87	367	526	770	643	272	87	4,217

Labor Force for Second Shift

	Staging Site									
Work Site	**1A**	**1B**	**1C**	**CTA**	**6**	**7**	**8A**	**8B**	**9**	**Total**
APM					38		90			128
Baggage					1	2				3
CTA	128	77		51						256
GTC					34	101		34		169
RAC			12						12	24
Offsite						4		4		8
Total	128	77	12	51	73	107	90	38	12	588

Labor Force for Third Shift

	Staging Site									
Work Site	**1A**	**1B**	**1C**	**CTA**	**6**	**7**	**8A**	**8B**	**9**	**Total**
APM					21		49			69
Baggage					1	1				2
CTA	69	42		28						139
GTC					18	55		18		92
RAC			7						7	13
Offsite						2		2		4
Total	69	42	7	28	40	58	49	20	7	318

[1] MARRS Services. LAX Master Plan Alternative D Compilation of Draft Environmental Impact Statement (DEIS) Construction Input Data. May 21, 2003.

[2] There is a slight difference between the sum of the craft labor by work site within the Supplemental Histograms provided by MARRS represented in Table S26 and the total Craft Labor (Workforce) provided in MARRS' May 21, 2003 Construction Impacts Input Data Report, presented in Table S38.

Source: JKH Mobility Services, February 2003.

7.2.2.3.2 Craft Labor Vehicle and Transit Trips

The directional distribution of both accessing and egressing person-trips for Craft Labor has been established as 36 percent from the north, 27 percent from the east and 27 percent from the south, as estimated by MARRS (Attachment G of this report). In addition, the remaining 10 percent or the Craft

Labor person trips was assumed to use public transit, resulting in 10 percent of construction employees passing through the ITC via either the Green Line or regional bus routes. A dedicated shuttle bus takes these construction employees to the various work sites or staging areas.

7.2.2.3.3 Construction Truck Trips

Table S36, Truck Trips per Shift Alternative D, Year 2008, presents the calculation of the number of truck trips per shift assigned to each of the various work sites. Specifically, the daily truck trips per work site calculated in **Table S27** were distributed into shifts based on the percent workforce per shift presented in **Table S35**.

Table S36

Truck Trips per Shift Alternative D, Year 2008

Work Shift	First Shift		Second Shift		Third Shift	
Onsite work Hours	7:00 AM - 3:30 PM		3:30 PM - 12:00 AM		12:00 AM - 7:00 AM	
Offsite work hours	11:00 AM - 3:30 PM		7:00 PM - 12:00 AM		12:00 AM - 6.30 AM	
Percent Work force per shift from work force work book	82.3		11.5		6.2	
Work Site	**Offsite**	**Onsite**	**Offsite**	**Onsite**	**Offsite**	**Onsite**
APM	191	83	27	12	14	6
Baggage	5	2	1	0	0	0
CTA	380	165	53	23	29	12
GTC	251	109	35	15	19	8
RAC	36	16	5	2	3	1
Offsite	12	5	2	1	1	0
Total	876	380	122	53	66	27

Source: JKH Mobility Services, February 2003.

Table S37, Percent of Offsite Truck Trips from Boundaries to Work Sites Percent of Onsite Truck Trips from Work Sites to Batch Plant Sites Alternative D, Year 2008, provides the percent of off-site truck trips assigned to each work site and the percent of on-site truck trips routed between the work site and the batch plant serving the work site. These values are similar to the percent distributions of work force by work site found above in **Table S36**, but are grouped by work site area.

Table S37

Percent of Offsite Truck Trips from Boundaries to Work Sites Percent of Onsite Truck Trips from Work Sites to Batch Plant Sites Alternative D, Year 2008

Work Type	Work Site	Percent	Central Plant Access	Batch Plant
APM	ITC & Shops	4.57	South Service Road	5
APM	Line North	2.18	Midfield Service Road	4
APM	Line South	2.18	South Service Road	5
APM	CTA	7.62	Midfield Service Road	4
APM	GTC	5.23	South Service Road	5
Baggage	CTA	0.22	Midfield Service Road	4
Baggage	Line	0.11	South Service Road	5
Baggage	GTC	0.22	South Service Road	5
CTA	CTA	43.45	Midfield Service Road	4
GTC	GTC	28.71	South Service Road	5
RAC	RAC	4.11	North Service Road	4
Offsite	Arbor Vitae	0.35	South Service Road	5
Offsite	Aviation	0.35	South Service Road	5
Offsite	Century	0.35	South Service Road	5
Offsite	La Cienega	0.35	South Service Road	5

Source: JKH Mobility Services, February 2003.

The directional distribution of off-site truck trips accessing the site has been established by MARRS as 40 percent from the north, 30 percent from the east, and 30 percent from the south (Attachment G of this report). The times of day when on-site trucks are circulating are given in **Table S36**, as are the different times of day when off-site trucks travel to and from the site. These off-site truck activity times reflect assumed restrictions during peak traffic hours.

7.3 Construction Impact Analyses

On-airport ground transportation construction impact analyses were conducted for the analysis Year 2008 with the forecasting procedures discussed in the preceding sections and Section 2.2 above. As stated previously, the airport traffic volumes used were based on the air passenger and staff requirements from the provided flight schedules for each analysis year. The construction trips were based on specific project information provided by MARRS.

The forecast vehicular and pedestrian volumes for Alternative D analysis year 2008 are presented in the following sections for the airport design day. Significant project impacts, those impacts that degrade the LOS below the goal LOS standards, are also discussed in this section.

The on-airport roadway forecasts are divided into “terminal area” (on-site) and “remote facilities” (off-site). On-site facilities can only be accessed through airport owned roadways. Off-site facilities are accessed from non-airport owned roadways. In the Alternative D, Year 2008, the “terminal area” forecasts include the CTA. The ITC and some of the staging areas are categorized as “remote facilities” since access can occur from both on-site and off-site roadways. The additional “remote facilities” such as the rental car lots, off-site parking facilities and some of the construction staging areas, are included under the category of “indirect” areas. Forecasts for the remote and indirect facilities are synonymous to driveway counts and include private autos and shuttle buses. The shuttle buses are also counted in the area forecasts when appropriate.

The Alternative D ground transportation forecasts and impacts for the second quarter of Year 2008 are discussed in this section.

7.3.1 On-Airport Roadway Forecasts and Impacts

7.3.1.1 Forecasts

Table S38, On-Airport Travel Classification, 2008 Alternative D, summarizes the on-airport ground transportation forecasts grouped by travel classification (mode), for analysis year 2008 during the three peak periods (a.m., noon, p.m.). The shuttle volumes are consistent with the other Master Plan

alternatives, documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR. In some instances, the number of shuttles is higher than the number of private autos entering or exiting the lot during the same hour, but was kept constant for consistency between alternatives.

Table S38

On-Airport Travel Classification, 2008 Alternative D

Location	AM Peak Hour		Airport Peak		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
CTA						
Private Vehicles/Other[1]	2245	2246	5259	5260	2250	2550
RAC Shuttles[1]	300	300	394	394	294	294
Private Parking Shuttles[3]	78	78	105	105	83	83
Hotel Shuttles[4]	110	110	140	140	115	115
ITC-CTA Bus Shuttle System[5]	64	64	151	151	82	82
Long Term Public Parking Shuttles from Lot B[6]	13	13	13	13	13	13
Long Term Public Parking Shuttles from Lot C[6]	12	12	12	12	12	12
MTA Buses[7]	30	30	30	30	30	30
Charter Buses[8]	90	90	90	90	90	90
Delivery/Service Vehicles[9]	600	600	0	0	724	722
Subtotal	3542	3543	6194	6195	3993	3991
CTA Staging/Work Area						
Construction Employees, Private Autos[10]	0	0	0	0	0	0
Construction On-Site Trucks[11]	22	22	22	22	3	3
Construction Off-Site Trucks[11]	0	0	97	97	0	0
Construction Buses[12]	0	0	0	0	0	0
Subtotal	22	22	119	119	3	3
Intermodal Center						
Private Auto, Curb-Drop[13]	73	73	172	172	82	82
Public Parking Structure (private autos)[14]	1065	958	2584	2281	930	1395
ITC-CTA Bus Shuttle System[5]	64	64	151	151	82	82
Employee Shuttles from East Employee Parking Lot[15]	1	1	1	1	1	1
Delivery/Service Vehicles[9]	32	32	0	0	38	38
Cargo Employees[16]	*	*	*	*	*	*
Cargo Employee Shuttles[16]	*	*	*	*	*	*
Subtotal	1235	1128	2908	2605	1133	1598
Construction On-Site Trucks[11]	2	2	2	2	0	0
Construction Off-Site Trucks[11]	0	0	8	8	0	0
Construction Buses[12]	0	0	0	0	0	0
Subtotal	2	2	10	10	0	0
"Indirect" (non CTA or ITC)						
Rental Cars (private autos)[17]	379	234	781	639	265	430
RAC Shuttles[2]	300	300	394	394	294	294
Commercial Vehicle Holding Lot	165	130	389	356	198	240
Private Long Term Parking (private autos)[18]	87	54	180	148	60	99
Private Parking Shuttles[3]	78	78	105	105	83	83
Public Parking Long Term, Lot B (private autos)[19]	16	10	33	27	11	18
Public Parking Long Term, Lot C (private autos)[19]	16	10	33	27	11	18
Long Term Public Parking Shuttles from Lot B[6]	13	13	13	13	13	13
Long Term Public Parking Shuttles from Lot C[6]	12	12	12	12	12	12
Cargo Employees in Lot C[16]	*	*	*	*	*	*
Cargo Employee Shuttles from Lot C[16]	*	*	*	*	*	*
West Employee Parking Garage, Terminal Employees (private autos)[20]	249	67	157	206	194	285
West Employee Parking Garage, Cargo Employees (private autos)[20]	*	*	*	*	*	*
East Employee Parking Lot, Terminal Employees	176	47	111	146	137	202

Table S38

On-Airport Travel Classification, 2008 Alternative D

Location	AM Peak Hour		Airport Peak		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
Parking (private autos)[20]						
East Employee Parking Lot, Terminal Employees Curb-Drop (private autos)[20]	251	251	289	289	382	382
Employee Shuttles at East Employee Parking Lot[15]	1	1	1	1	1	1
Subtotal	1743	1207	2498	2363	1661	2077
GTC Staging/Work Area						
Construction On-Site Trucks[11]	15	15	15	15	2	2
Construction Off-Site Trucks[11]	0	0	65	64	0	0
Construction Buses[12]	0	0	0	0	0	0
RAC Work Area						
Construction On-Site Trucks[11]	3	3	3	3	0	0
Construction Off-Site Trucks[11]	0	0	12	12	0	0
Construction Buses[12]	0	0	0	0	0	0
Line Work Area (Century)						
Construction On-Site Trucks[11]	1	1	1	1	0	0
Construction Off-Site Trucks[11]	0	0	4	4	0	0
Construction Buses[12]	0	0	0	0	0	0
Road Work Areas						
Construction On-Site Trucks[11]	0	0	0	0	0	0
Construction Off-Site Trucks[11]	0	0	0	0	0	0
Construction Buses[12]	0	0	0	0	0	0
Staging Area 1						
Construction Employees, Private Autos[10]	0	0	0	0	0	0
Construction Buses[12]	0	0	0	0	0	0
Staging Area 4 - Batch Plant						
Construction On-Site Trucks[11]	25	25	25	25	3	3
Staging Area 5 - Batch Plant						
Construction On-Site Trucks[11]	17	17	17	17	2	2
Staging Area 6						
Construction Employees, Private Autos[10]	0	0	0	0	0	0
Construction Buses[12]	0	0	0	0	0	0
Staging Area 7 (GTC)						
Construction Employees, Private Autos (10)[0]	0	0	0	0	0	0
Construction Buses[12]	0	0	0	0	0	0
Staging Area 8						
Construction Employees, Private Autos[10]	0	0	0	0	0	0
Construction Buses (12)	0	0	0	0	0	0
Staging Area 9						
Construction Employees, Private Autos[10]	0	0	0	0	0	0
Construction Buses[12]	0	0	0	0	0	0
Subtotal	61	61	142	141	7	7

* data produced by off-airport analysis

[1] Other travel classifications include taxis, limos, door-to-door vans, schedule (flyaway) buses. Also includes private autos dropping air passengers at curb prior to parking.

[2] All Rental Car Patrons (on-airport and off-airport) accessing the airport will use a courtesy vehicle to travel between the CTA and the RAC.

Table S38

On-Airport Travel Classification, 2008 Alternative D

Location	AM Peak Hour		Airport Peak		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound

[3] The Private Parking Shuttles are a component of the Courtesy Vehicles. All Private parking patrons travel to the CTA using courtesy vehicles.

[4] The Hotel Shuttles are a component of the Courtesy Vehicles. All Hotel patrons travel to the CTA using courtesy vehicles.

[5] All people travel between the ITC and the CTA using a dedicated Bus Shuttle System, prior to the completion of the APM.

[6] Public Parking Shuttles travel between the Long Term Public Parking Lots (Lot B and Lot C) and the ITC prior to the construction of the APM.

[7] MTA Buses travel to and from the CTA curbfronts.

[8] Charter Buses drop passengers at the CTA curbfronts. Staging for the Charter Buses is located north of the 96th Street Bridge.

[9] A number of vehicles were added to the trip production during the a.m. and p.m. commuter peak hours to account for service and delivery vehicles accessing the CTA and ITC.

[10] The Construction Employees traveling to and from the construction sites by private autos, park their private vehicles in the various staging areas. Shift times do not correspond to the peak hours, therefore there are no labor force vehicle trips during the peak hours.

[11] Off-Site Construction Trucks originate in the various construction sites and travel to and from the model boundaries. On-site Construction Trucks travel between construction sites and to the Batch Plants. Off-Site Construction trips do not occur during the commuter peak hours

[12] Construction Buses are used by construction employees traveling between the staging areas and various construction sites. Since the shift times do not correspond with the peak hours represented in the table, there are no bus trips generated for the peak hours.

[13] A percentage of curb-drop and pick-up by private autos occurs at the ITC, which is represented by this trip production item.

[14] Public Parking represents the daily and short-term parking in the structure adjacent to the ITC. Parking patrons will travel between the ITC and the CTA using the dedicated buses.

[15] A percentage of parking and curb drop employees destined for the CTA (95%) or the ITC (5%) use the East Employee Parking Lot. Terminal employees destined to the CTA use a shuttle bus traveling on airside roadways to access the CTA and are not represented in this model. Employees destined to the ITC travel on an employee shuttle using the airside roadways and off-airport roadways to access the ITC. Employees traveling by public transit will board the ITC-CTA Shuttle Bus system at the ITC to access the CTA.

[16] The Cargo Employees at Lot B and Lot C, and their corresponding shuttles will be generated in the off-airport model by Parsons Transportation Group. Similarly the Cargo Employee Component of the West Employee Parking Garage will be generated by Parsons Transportation Group.

[17] This represents the rental cars utilizing on-airport and off-airport facilities. Rental car patrons will travel to and from the CTA using courtesy vehicles.

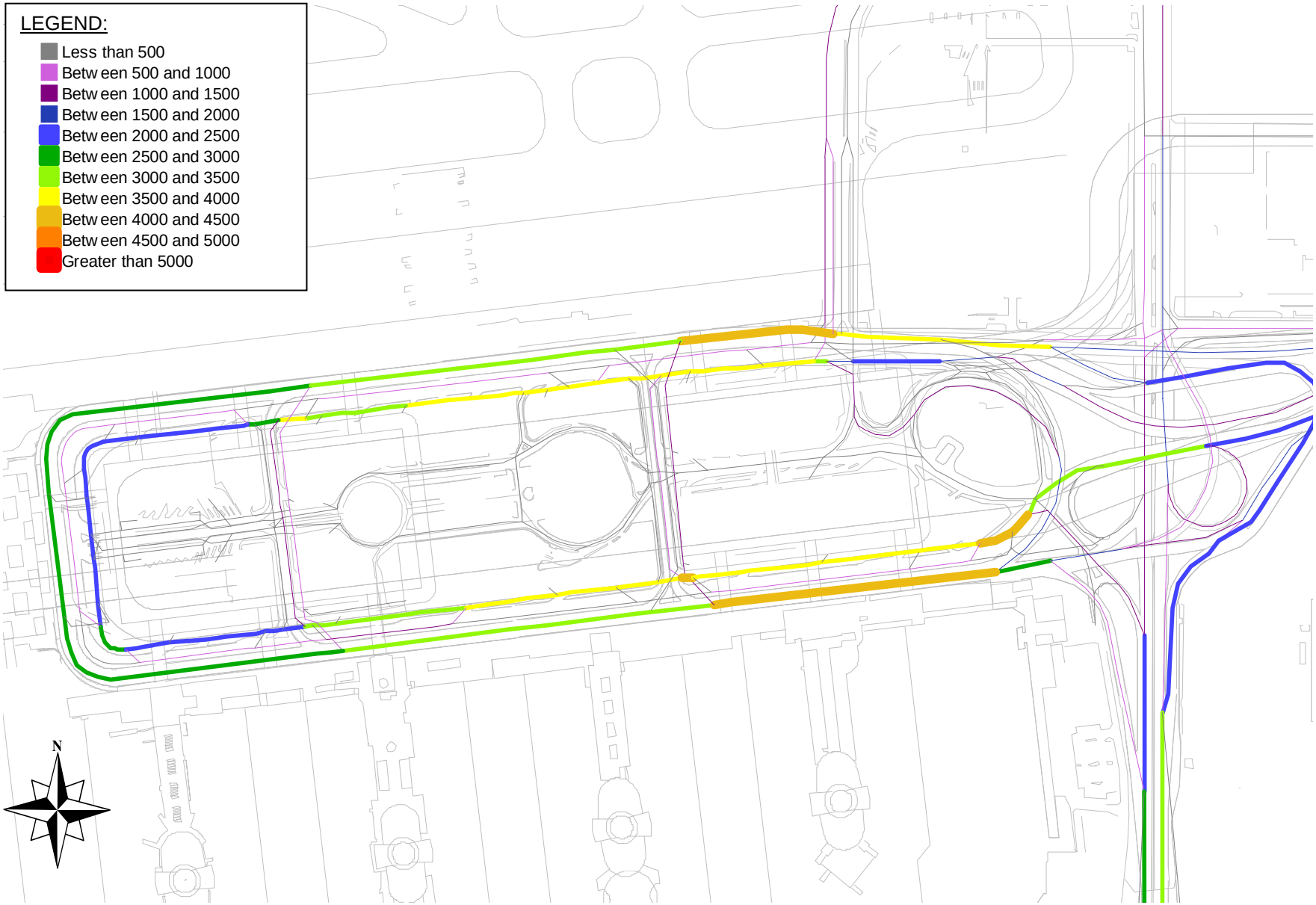
[18] This represents the private auto vehicles traveling to the off-airport lots to park then take a shuttle to the CTA. These patrons have two modes of travel, a private auto trip and a shuttle trip.

[19] This represents the private autos utilizing the Lot B Surface Long Term lot located south of the GTC, and Lot C. These patrons have two modes of travel, a private auto trip and a shuttle trip.

[20] The West Employee Parking Garage roadway connections are not modeled in the Construction model, and only the lot entries/exits are modeled. The private autos for terminal employees accessing and egressing the West Employee Parking Garage and the East Employee Parking Lot are presented here. Terminal employees include people working in the CTA and the ITC. All employee curb-drop occurs at the East Employee Parking Lot and non-terminal employees are not represented in these numbers. The employee shuttle buses traveling on AOA roadways only are not modeled.

Source: JKH Mobility Services, February 2003.

The maximum traffic volume assignment for the 2008 Alternative D on-airport ground access forecasts onto the roadway system is provided in **Figure S20,** On-Airport Ground Transportation Maximum Hourly Forecasts, Alternative D, Year 2008. The hourly forecasts in **Figure S20** represent the maximum hourly volume throughout the day. In most instances the maximum hourly volume occurs during the Airport Peak Hour (11:00 a.m. to noon), however in some segments the maximum hourly volume begins in the preceding hour (10:00 a.m. to 11:00 a.m.). The resulting maximum volume to capacity ratios for the on-airport roadways can be seen in **Figure S21**, On-Airport Ground Transportation Maximum Volume to Capacity Ratios, Alternative D, Year 2008. As with the maximum hourly forecasts, the maximum volume to capacity ratios presented in **Figure S21** represent the maximum volume to capacity ratios throughout the day. Detailed demand information, including individual construction route volumes and their associated paths, can be seen in Attachment H of this report.



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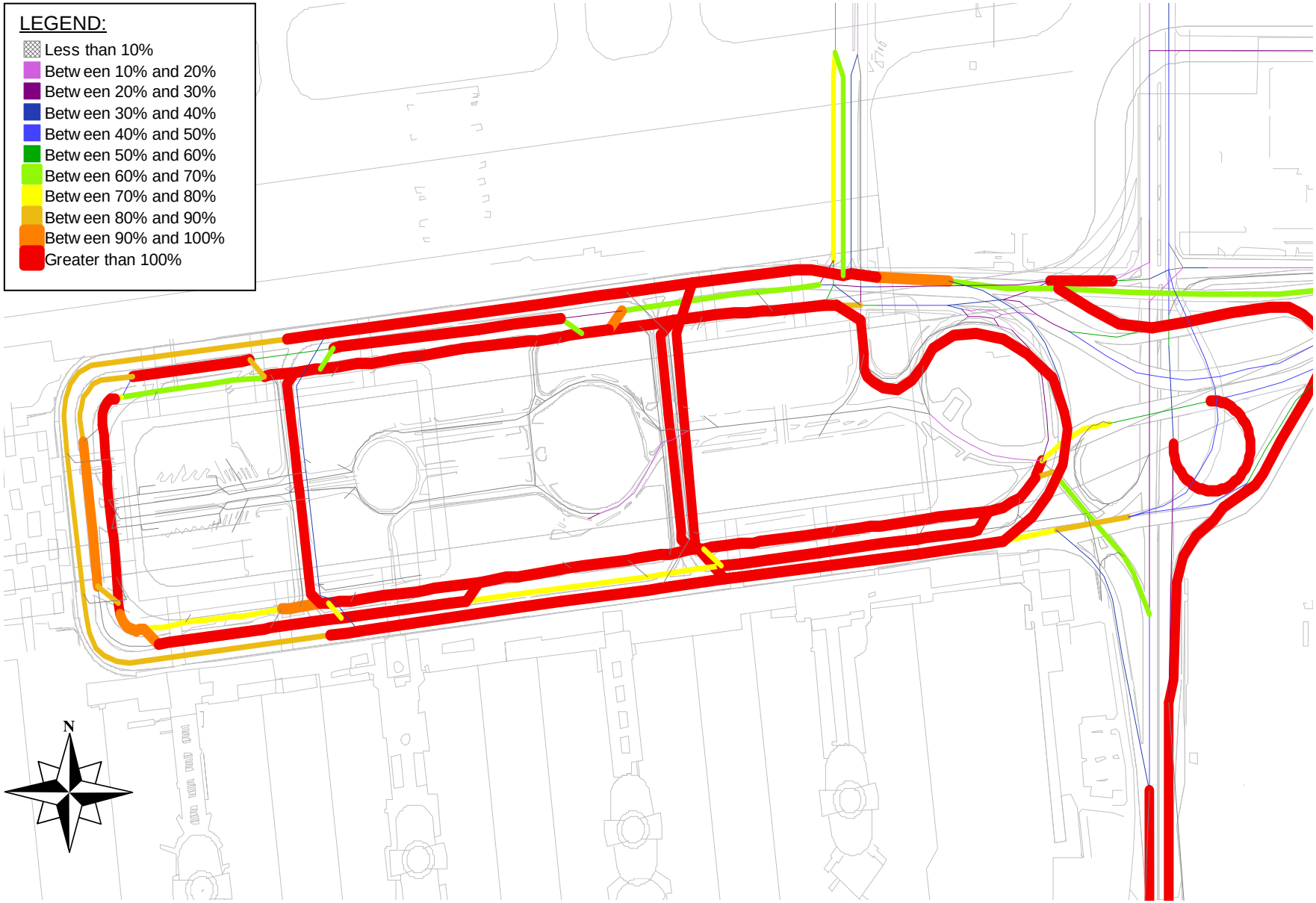
On-Airport Ground Transportation Maximum Hourly Forecasts, Alternative D, Year 2008

Figure S20



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On-Airport Ground Transportation Maximum Volume to Capacity Ratios, Alternative D, Year 2008

Figure S21

7.3.1.2 Impacts

The ground access impacts on the CTA for Alternative D, Year 2008, result in many capacity deficiencies throughout the CTA. Additionally, the ITC must handle 2,918 entering vehicles and 2,615 exiting vehicles including construction and air passenger vehicles. These demand loadings and the levels of service are consistent with the results presented for the 2005 No Action/No Project Alternative documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report,* of the Draft EIS/EIR. Specifically, during the airport peak hour for the No Action/No Project Alternative, Year 2005, the On-Airport Ground Transportation Level of Service[16] for the CTA roadways is LOS F at both the upper and lower level terminal curbfronts and many of the access and egress ramps as illustrated in **Table S39**, CTA Level of Service Comparisons Airport Peak Hour. Some of the mitigation measures recommended in that study would also be relevant to address these overload conditions forecast for the 2008 Interim Construction Scenario.

Table S39

CTA Level of Service Comparisons Airport Peak Hour

	2005 NA/NP Alternative[1]			2008 Alternative D		
Location	**Volume**	**V/C Ratio**	**LOS**	**Volume**	**V/C Ratio**	**LOS**
Upper						
Terminal 1	4565	1.86	F	3589	1.46	F
Terminal 2	4232	1.72	F	2811	1.14	F
Terminal 3				2213	0.90	D
TBIT	2416	0.98	E	2213	0.90	D
Terminal 4	1640	0.66	B	2213	0.90	D
Terminal 5	2170	0.87	D	2811	1.14	F
Terminal 6				2811	1.14	F
Terminal 7	1936	0.88	D	3589	1.64	F
Terminal 8				3589	1.64	F
Lower						
Terminal 1	4443	1.20	F	3799	1.03	F
Terminal 2	4261	1.39	F	3336	1.08	F
Terminal 3				2338	0.76	C
TBIT	3950	1.61	F	2338	0.95	E
Terminal 4	2923	0.94	E	2338	0.75	C
Terminal 5	3518	1.13	F	3217	1.03	F
Terminal 6				3216	1.03	F
Terminal 7	3353	1.29	F	3680	1.42	F
Terminal 8				3680	1.42	F

[1] Source: Kimley-Horn and Associates. Appendix of Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

Source: JKH Mobility Services, February 2003.

7.3.2 Pedestrian Conveyance Forecasts and Impacts

During the construction of Alternative D in Year 2008, the CTA operations are substantially altered due to the demolition of the parking structures internal to the CTA and the opening of the ITC. The ITC will handle all short-term and daily parking. While the APM system is being constructed to link the ITC to the CTA, a fleet of ITC-CTA buses will be used to move air passengers and visitors between the ITC and the CTA.

[16] Kimley-Horn and Associates. Appendix of Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

During the construction year, Year 2008, the airport peak hour requires 153 passes of the ITC-CTA Bus System through the ITC to carry the ridership demand. Initial model runs, when the buses traversed both the arrivals and departures level, resulted in an average round trip time exceeding one hour. Thus, a very large bus fleet of over 150 buses would be required.

7.4 Mitigation

Many of the problems identified in the 2005 No Action/No Project Alternative and documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR remain, even with the removal of the CTA parking. Specific mitigation improvements to the Construction model that were made in this construction scenario, include:

- Rerouting of ITC-CTA buses to use only one exclusive curbfront on the outside lanes. The existing parking entry and exit bays where available can be slightly modified to facilitate this new curbfront.
- Better signage to maximize the use of the through lanes and limit vehicles in the interior lanes.
- More detailed layout of the ITC to appropriately evaluate the demand loadings.
- Restrict construction vehicles to a construction only roadway at the site of the existing close-in parking, thus limiting the mix of construction vehicles and airport traffic.
- Exclusive curbfront for Labor Bus and ITC-CTA Bus in the CTA.

Problems also occurred with the ITC-CTA Shuttle Bus system that resulted in a round trip time exceeding one hour. A mitigation measure to improve the level of service and a more reasonable bus fleet size is to route the buses only to the lower level. Furthermore, the existing curbfronts in the arrival levels could not handle the 153 buses during the airport peak hour; therefore, an exclusive curbfront for the ITC-CTA buses was modeled at the arrivals level away from the terminal face. Since the parking is removed, the exclusive ITC-CTA curbfronts can conceptually utilize the existing parking access and egress bays as their curb-cut. The actual length of the ITC-CTA curbfront should be studied in more detail during advanced planning, in particular when the buses are selected, to ensure that there is sufficient curbfront capacity for the actual bus lengths and volumes.

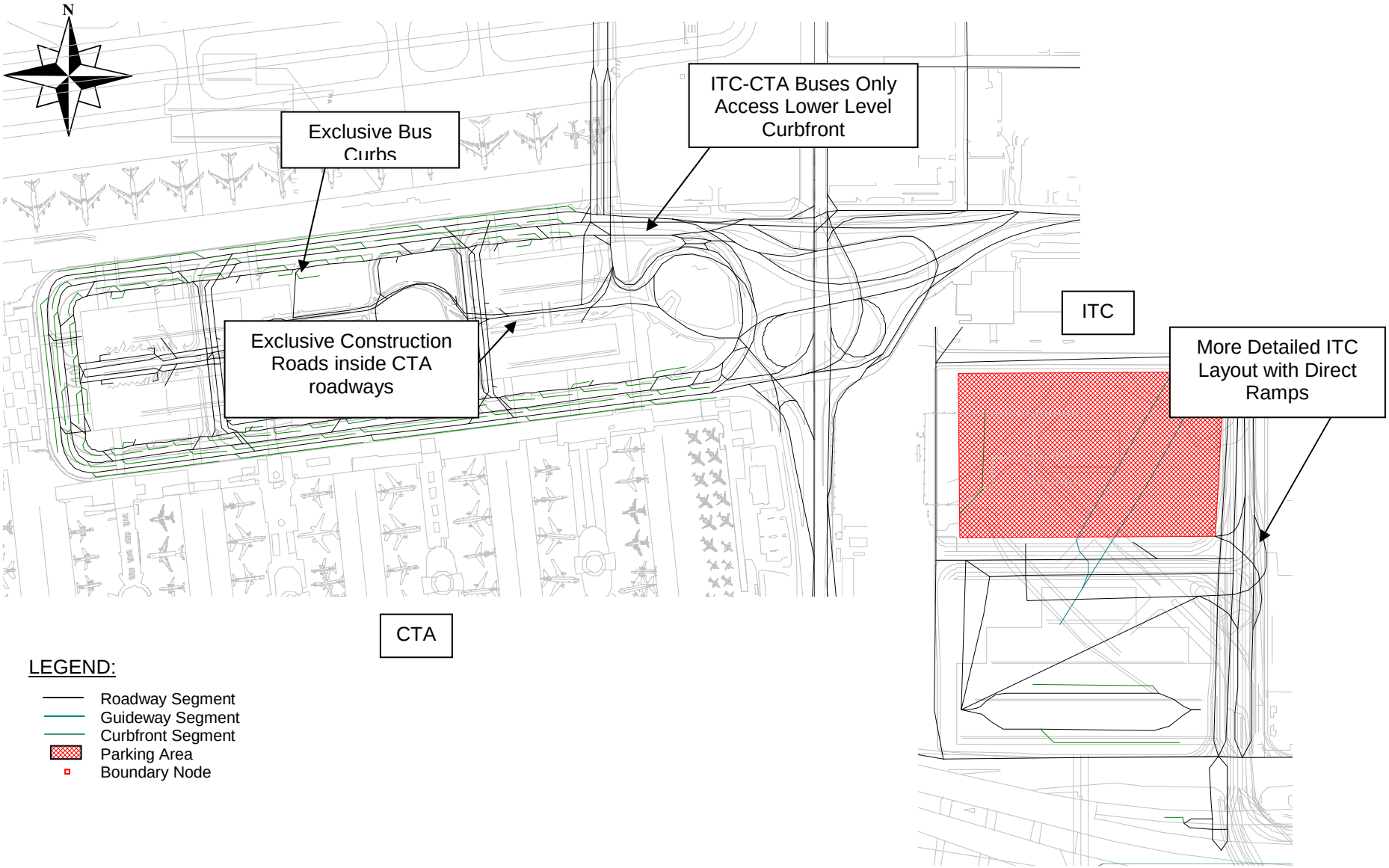
7.4.1 Mitigated Roadway Network

Based on the preliminary analysis of the defined Alternative D, Year 2015 model in conjunction with the construction model analysis, a mitigated roadway layout was created that addressed some of the capacity concerns. Although the GTC is under construction during the Year 2008, the access and egress roadways are in operation to facilitate construction traffic. The most notable changes to the GTC roadways in mitigation were the additional ramps at 111th Street and the direct ramps from I-105. In addition, the ITC is in full operation and handles both air passenger traffic and some construction traffic. The ITC roadways were modeled using the Year 2015 Alternative D Mitigated Roadway configuration provided by Landrum & Brown on November 1, 2002. This layout includes direct access and egress ramps between the ITC/GTC and I-105. In addition to the direct ramps into the GTC to and from the I-105, there is a surface level interchange that also provides access to the ITC. The direct entry ramps are only used by parking private autos, and all other vehicles must use the street level entrance, whereas the egressing ramps can be used by all vehicles.

Additional mitigation measures incorporated into the Mitigated Interim Construction Year Alternative D, Year 2008 model included the addition of exclusive curbfronts for the ITC-CTA buses, rerouting of the ITC-CTA buses, and exclusive construction roadways internal to the CTA. The resulting roadway network for Mitigated Alternative D, Year 2008 is shown in **Figure S22**, ALPS™ Structural Segment Model, Mitigated Alternative D, Year 2008. Note that this figure is best viewed in color. **Figure S22** only highlights the on-airport roadway segments. The complete ALPS™ Structural Roadway Model can be viewed in **Figure S17.**

7.4.2 Mitigated Forecasts and Impacts

The Mitigated Alternative D ground transportation forecasts and impacts for Year 2008 are discussed in this section.



LAX Master Plan
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ALPS Structural Segment Model, Mitigated Alternative D, Year 2008

Figure
S22

7.4.2.1 On-Airport Roadway Forecasts and Impacts

Even with some mitigation measures, the CTA roadways operate similarly to the levels of service presented in both the No Action/No Project Alternative and the Alternative C Construction Year 2004 Airport Peak Hour, presented in Figures 4.1.1.1-6, 4.1.1.1-7 and 7.6.3.1.1-2 of Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.[17] **Table S40**, CTA Level of Service Comparisons Mitigated Alternative D, Airport Peak Hour, below shows the LOS for each of the terminal curbfronts in the Mitigated Alternative D, Year 2008 model. **Table S41**, ITC Volumes and Level of Service Mitigated Alternative D, Year 2008, below shows the LOS for ITC roadways in the Mitigated Alternative D, Year 2008 model.

Table S40

CTA Level of Service Comparisons Mitigated Alternative D, Airport Peak Hour

Location	2008 Alternative D			2008 Alternative D, Mitigated		
	Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS
Upper						
Terminal 1	3589	1.46	F	3410	1.38	F
Terminal 2	2811	1.14	F	2633	1.06	F
Terminal 3	2213	0.90	D	2035	0.82	D
TBIT	2213	0.90	D	2035	0.82	D
Terminal 4	2213	0.90	D	2035	0.80	C
Terminal 5	2811	1.14	F	2633	1.03	F
Terminal 6	2811	1.14	F	2633	1.03	F
Terminal 7	3589	1.64	F	3410	1.53	F
Terminal 8	3589	1.64	F	3410	1.53	F
Lower						
Terminal 1	3799	1.03	F	3620	0.89	D
Terminal 2	3336	1.08	F	3159	0.94	E
Terminal 3	2338	0.76	C	2287	0.68	B
TBIT	2338	0.95	E	2287	0.85	D
Terminal 4	2338	0.75	C	2287	0.61	B
Terminal 5	3217	1.03	F	3159	0.84	D
Terminal 6	3216	1.03	F	3159	0.84	D
Terminal 7	3680	1.42	F	3620	1.16	F
Terminal 8	3680	1.42	F	3620	1.16	F

Source: JKH Mobility Services, February 2003.

[17] Kimley-Horn and Associates, Inc. Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR, September 2000.

Table S41

ITC Volumes and Level of Service Mitigated Alternative D, Year 2008

Segment	Volume (vehicles)	Lanes	Capacity (pcph)	LOS	Capacity Addition (pcph)	Final LOS
Southbound ITC Entrance Ramp	1,187	1	1,800	B		
Northbound ITC Entrance Ramp	752	1	1,800	A		
Street Level Entrance	988	3	2,400	A		
Southbound ITC Exit Ramp	991	1	800	F	1,800	A
Northbound ITC Exit Ramp	1,293	1	800	F	1,800	C
Street Level Exit	183	3	2,400	A		
Street Level Bus Only Exit	157	2	1,600	A		

Source: JKH Mobility Services, February 2003.

Additionally, as in the No Action/No Project Alternative documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR, the recirculation roadway from the upper level to the lower level also experiences high volumes, and thus a LOS F, due to the number of courtesy vehicles. Specifically, during the airport peak hour there are:

- 25 On-Airport Long Term Park Courtesy Vehicles (Lot B and Lot C Buses)
- 105 Off-Airport Long Term Park Courtesy Vehicles
- 394 Rental Car Courtesy Vehicles
- 140 Hotel/Motel Courtesy Vehicles

These volumes of commercial vehicles are consistent with the other master plan alternatives documented in Technical Report 3a, *On-Airport Surface Transportation Technical Report*, of the Draft EIS/EIR.

Figure S23, On-Airport Ground Transportation Maximum Hourly Forecasts, Mitigated Alternative D, Year 2008, illustrates the maximum hourly volumes for the on-airport roadway segments and **Figure S24**, On-Airport Ground Transportation Maximum Volume to Capacity Ratios, Mitigated Alternative D, Year 2008, illustrates the maximum volume to capacity ratios for the on-airport roadway segments. The hourly forecasts in **Figure S23** and the maximum volume to capacity ratios presented in **Figure S24** represent the maximum throughout the day. In most cases the maximum hour occurs during the Airport Peak Hour (11:00 a.m. to noon), however in some segments the maximum begins in the preceding hour (10:00 a.m. to 11:00 a.m.). Note that these figures are best viewed in color.

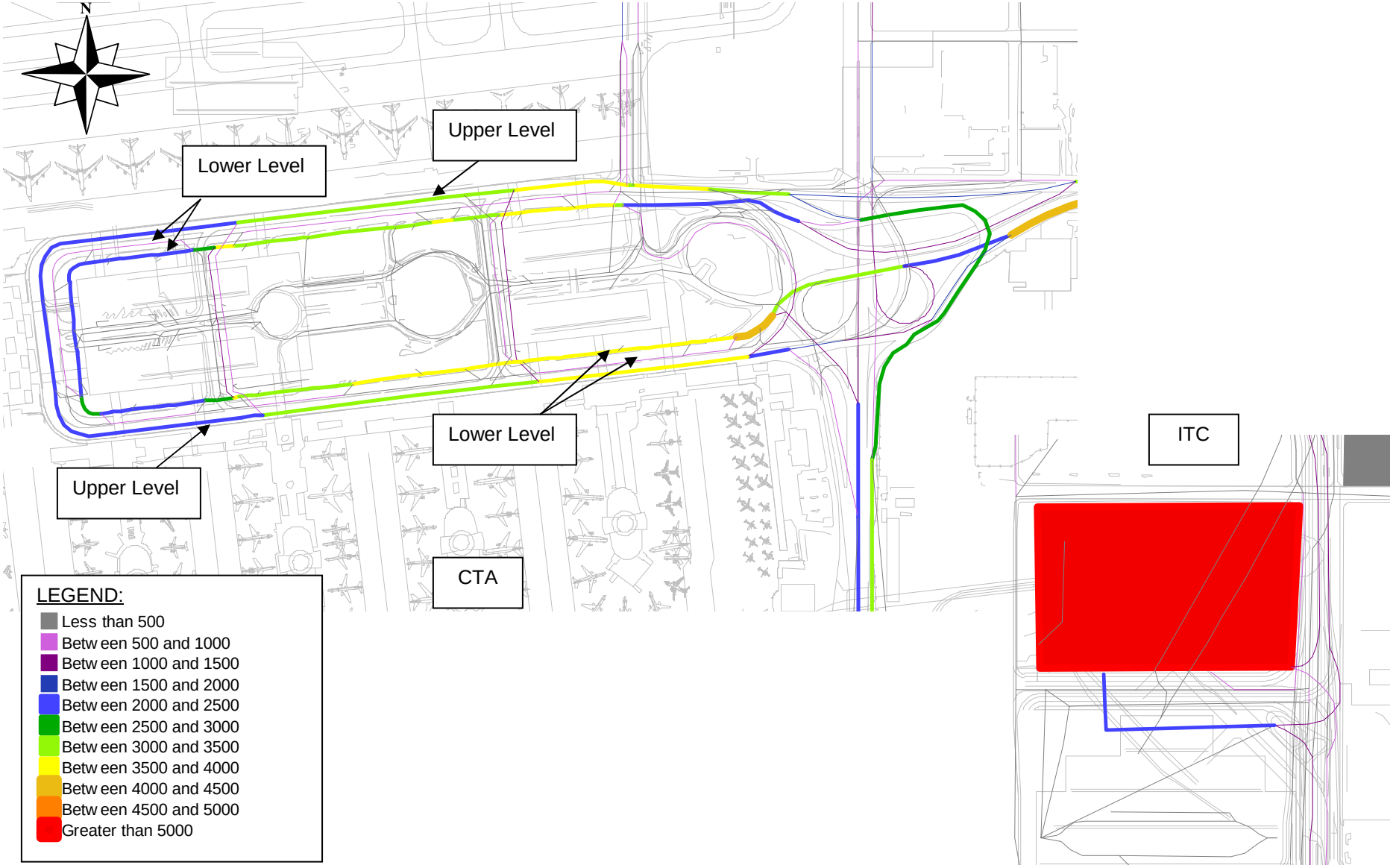
To further improve the curbfront operations of the CTA, all construction traffic destined to the CTA was separated from the air passenger traffic west of Sepulveda Boulevard and enters at the CTA. Instead of traveling along the CTA curbfronts, the construction traffic was assigned to access the staging and work area through temporary construction roadways into the interior of the CTA loop. These roadways can utilize existing roadways that are no longer in use by air passenger related vehicles due to the removal of parking within the CTA.

Using the Landrum & Brown layout with the provided number of lanes, the direct ramps entering and exiting the ITC experience capacity problems resulting in a LOS F. The individual ramp volumes and LOS are illustrated in **Table S41**. Particular attention should be paid to the access and egress ramps during advanced planning to ensure that sufficient capacity is provided. Additionally, the internal movements of the ITC should be addressed during advanced planning to ensure that circulation problems entering and exiting the system do not back up onto the ramps (e.g., queues developing at ticket machines entering the Parking Structure).

7.4.2.2 Pedestrian Conveyance Forecasts and Impacts

Mitigation to handle the ITC-CTA buses at the CTA curbfronts was required since the buses could not be handled at the existing curbfronts. First the buses were only routed to the arrivals level curbfront.

The mitigated construction model continues to require 153 passes of the ITC-CTA Bus System to handle the air passenger and visitor demands. The resulting average trip time for these buses is 38 minutes.



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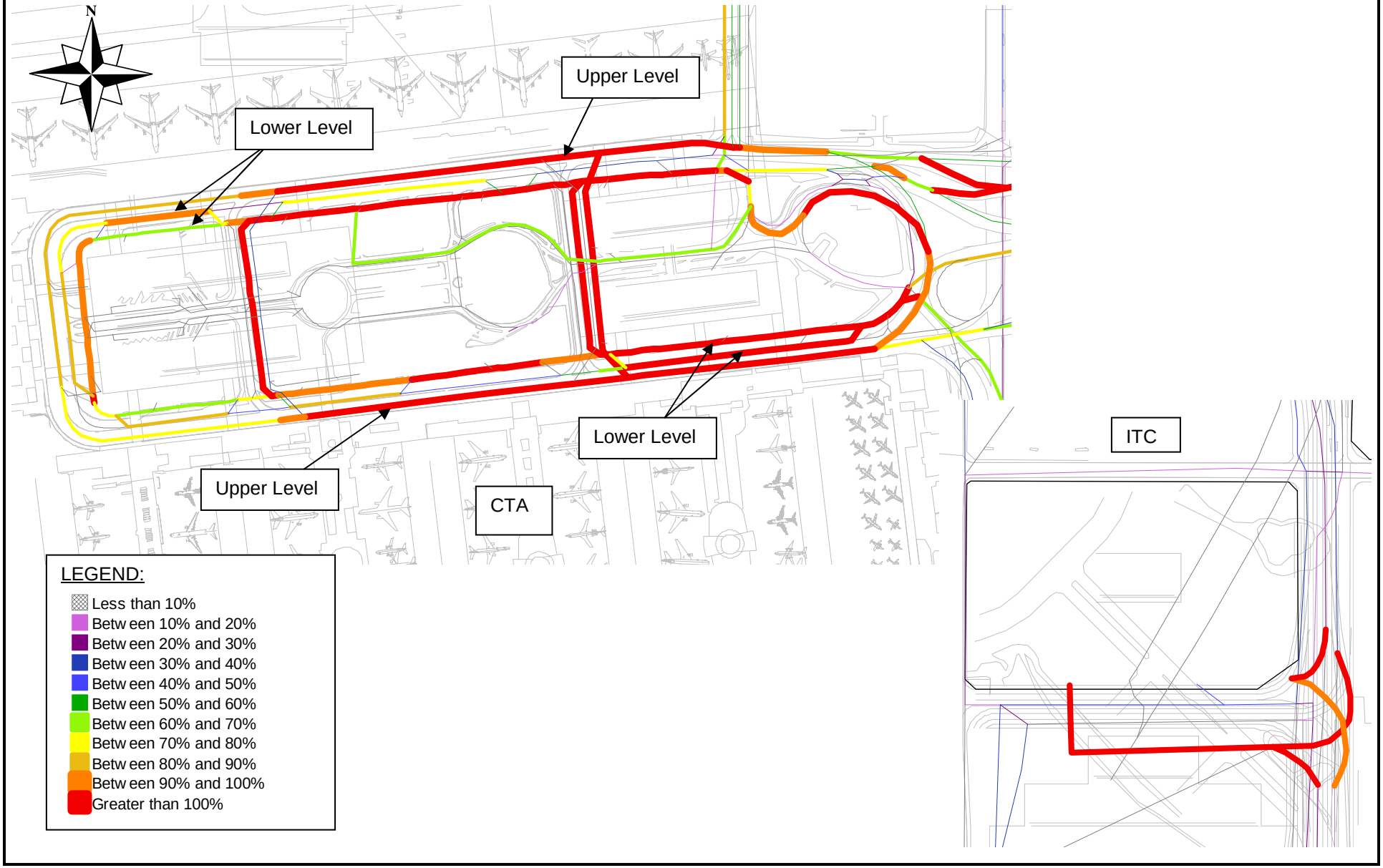
On-Airport Ground Transportation Maximum Hourly Forecasts, Mitigated Alternative D, Year 2008

Figure
S23



LAX Master Plan
Supplement to the Draft EIS/EIR

On-Airport Ground Transportation Maximum Volume to Capacity Ratios, Mitigated Alternative D, Year 2008

Figure
S24

The average round trip time includes the one-minute dwell at each of the CTA curbfronts and a two-minute dwell at the ITC. To handle this frequency of passes, a fleet size of 98 buses will be required assuming a maximum occupancy of 30 passengers per bus.

Recent policies issued at some airports, in particular with rental car buses, have prohibited standing passengers on large buses while the bus is in motion. If such a "no standing" policy were to be established by LAWA, when combined with the need for luggage racks, the maximum occupancy of the ITC-CTA buses could be lowered to around 23 to 24 passengers, which would in turn increase the required passes to 196 passes and the fleet size to 126 buses.

7.5 Recommendations and Policies

To minimize the impacts of the construction process, several policies and recommendations were identified. These are provided in Section 4.3.1, *On-Airport Surface Transportation* (subsection 4.3.15), of the Supplement to the Draft EIS/EIR.

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Attachment A

Demand Volumes

Table A1

DEMAND VOLUMES
2015 ALTERNATIVE D
AM PEAK HOUR

Location	Description	INBOUND					
		Hourly Volumes	Mitigated Hourly Volumes	v/c	Mitigated v/c	LOS	Mitigated LOS
GTC	ACCESS/EGRESS						
	Imperial, South	1345	1149	0.30	0.26	A	A
	La Cienega	153	990	0.05	0.22	A	A
	Aviation	135	67	0.07	0.03	A	A
	111th Street		522		0.24		A
	Eastbound Century	1143	1072	0.59	0.56	A	A
	Westbound Century						
	Northbound GTC Access Road	1633	1705	0.27	0.29	A	A
	Southbound GTC Egress Road						
	CURBFRONT, UPPER LEVEL						
	North Pier, Curbfront A (Curb 1)	574	608	0.42	0.45	A	A
	North Pier, Curbfront B (Curb 2)	292	292	0.18	0.18	A	A
	South Pier, Curbfront A (Curb 3)	634	634	0.46	0.46	A	A
	South Pier, Curbfront B (Curb 4)	318	318	0.20	0.20	A	A
	CURBFRONT, LOWER LEVEL						
	North Pier, Curbfront A (Curb 1)	491	468	0.18	0.18	A	A
	North Pier, Curbfront B (Curb 2)	85	85	0.03	0.03	A	A
	South Pier, Curbfront A (Curb 3)	446	446	0.17	0.17	A	A
	South Pier, Curbfront B (Curb 4)	199	199	0.06	0.06	A	A
ITC	ACCESS/EGRESS RAMPS						
	La Cienega		387		0.16		A
	Northbound Ramps		238		0.13		A
	Southbound Ramps		387		0.22		A
RECIRCULATION							
	East Return Loop	145	176	0.18	0.22	A	A
	South Return Ramp to West	604	604	0.37	0.37	A	A
	West Return Ramp to South	180	211	0.18	0.21	A	A
REMOTE							
	Public Surface Lot	69	69				
	Close-in GTC Parking	879	879				
	ITC Parking	1395	1395				
	Private Parking	249	249				
	RAC	473	473				
	East Employee Lot	433	430				
	West Employee Lot	136	139				
	CVHA Staging	195	195				

Source: JKH Mobility Services, 2003.

Table A2

DEMAND VOLUMES
2015 ALTERNATIVE D
AM PEAK HOUR

Location	Description	OUTBOUND					
		Hourly Volumes	Mitigated Hourly Volumes	v/c	Mitigated v/c	LOS	Mitigated LOS
GTC	ACCESS/EGRESS						
	Imperial, South	1312	1367	0.29	0.31	A	A
	La Cienega	84	515	0.03	0.12	A	A
	Aviation						
	111th Street		518		0.24		A
	Eastbound Century	366	444	0.21	0.25	A	A
	Westbound Century	723	668	0.46	0.43	A	A
	Northbound GTC Access Road						
	Southbound GTC Egress Road	1396	1380	0.23	0.23	A	A
	CURBFRONT, UPPER LEVEL						
	North Pier, Curbfront A (Curb 1)	574	608	0.42	0.45	A	A
	North Pier, Curbfront B (Curb 2)	292	292	0.18	0.18	A	A
	South Pier, Curbfront A (Curb 3)	634	634	0.46	0.46	A	A
	South Pier, Curbfront B (Curb 4)	318	318	0.20	0.20	A	A
	CURBFRONT, LOWER LEVEL						
	North Pier, Curbfront A (Curb 1)	491	468	0.18	0.18	A	A
	North Pier, Curbfront B (Curb 2)	85	85	0.03	0.03	A	A
	South Pier, Curbfront A (Curb 3)	446	446	0.17	0.17	A	A
	South Pier, Curbfront B (Curb 4)	199	199	0.06	0.06	A	A
ITC	ACCESS/EGRESS RAMPS						
	La Cienega		116		0.04		A
	Northbound Ramps		108		0.15		A
	Southbound Ramps		255		0.32		A
RECIRCULATION							
	East Return Loop						
	South Return Ramp to West						
	West Return Ramp to South						
REMOTE							
	Public Surface Lot	46	46				
	Close-in GTC Parking	617	623				
	ITC Parking	975	968				
	Private Parking	218	218				
	RAC	243	243				
	East Employee Lot	420	417				
	West Employee Lot	125	128				
	CVHA Staging	141	141				

Source: JKH Mobility Services, 2003.

Table A3

DEMAND VOLUMES
2015 ALTERNATIVE D
AIRPORT PEAK HOUR

Location	Description	INBOUND					
		Hourly Volumes	Mitigated Hourly Volumes	v/c	Mitigated v/c	LOS	Mitigated LOS
GTC	ACCESS/EGRESS						
	Imperial, South	2729	3122	0.61	0.70	B	C
	La Cienega	821	2167	0.28	0.48	A	A
	Aviation	550	281	0.28	0.14	A	A
	111th Street		1884		0.86		D
	Eastbound Century	1716	1569	0.88	0.81	D	D
	Westbound Century						
	Northbound GTC Access Road	4101	4245	0.69	0.71	B	C
	Southbound GTC Egress Road						
	CURBFRONT, UPPER LEVEL						
	North Pier, Curbfront A (Curb 1)	885	945	0.63	0.67	B	B
	North Pier, Curbfront B (Curb 2)	562	562	0.35	0.35	A	A
	South Pier, Curbfront A (Curb 3)	949	949	0.68	0.68	B	B
	South Pier, Curbfront B (Curb 4)	534	534	0.33	0.33	A	A
	CURBFRONT, LOWER LEVEL						
	North Pier, Curbfront A (Curb 1)	1146	1092	0.40	0.38	A	A
	North Pier, Curbfront B (Curb 2)	602	603	0.19	0.19	A	A
	South Pier, Curbfront A (Curb 3)	1066	1066	0.37	0.37	A	A
	South Pier, Curbfront B (Curb 4)	602	603	0.19	0.19	A	A
ITC	ACCESS/EGRESS RAMPS						
	La Cienega		754		0.31		A
	Northbound Ramps		300		0.17		A
	Southbound Ramps		754		0.42		A
RECIRCULATION							
	East Return Loop	432	450	0.54	0.56	A	A
	South Return Ramp to West	789	789	0.47	0.47	A	A
	West Return Ramp to South	635	653	0.64	0.65	B	B
REMOTE							
	Public Surface Lot	109	109				
	Close-in GTC Parking	1700	1697				
	ITC Parking	2714	2717				
	Private Parking	336	336				
	RAC	861	861				
	East Employee Lot	249	247				
	West Employee Lot	85	87				
	CVHA Staging	422	423				

Source: JKH Mobility Services, 2003.

Table A4

DEMAND VOLUMES
2015 ALTERNATIVE D
AIRPORT PEAK HOUR

Location	Description	OUTBOUND					
		Hourly Volumes	Mitigated Hourly Volumes	v/c	Mitigated v/c	LOS	Mitigated LOS
GTC	ACCESS/EGRESS						
	Imperial, South	3240	3493	0.73	0.78	C	C
	La Cienega	747	1863	0.25	0.42	A	A
	Aviation						
	111th Street		1981		0.91		E
	Eastbound Century	1014	1054	0.57	0.59	A	A
	Westbound Century	971	903	0.60	0.57	B	A
	Northbound GTC Access Road						
	Southbound GTC Egress Road	3988	4031	0.67	0.68	B	B
	CURBFRONT, UPPER LEVEL						
	North Pier, Curbfront A (Curb 1)	885	945	0.63	0.67	B	B
	North Pier, Curbfront B (Curb 2)	562	562	0.35	0.35	A	A
	South Pier, Curbfront A (Curb 3)	949	949	0.68	0.68	B	B
	South Pier, Curbfront B (Curb 4)	534	534	0.33	0.33	A	A
	CURBFRONT, LOWER LEVEL						
	North Pier, Curbfront A (Curb 1)	1146	1092	0.40	0.38	A	A
	North Pier, Curbfront B (Curb 2)	602	603	0.19	0.19	A	A
	South Pier, Curbfront A (Curb 3)	1066	1066	0.37	0.37	A	A
	South Pier, Curbfront B (Curb 4)	602	603	0.19	0.19	A	A
ITC	ACCESS/EGRESS RAMPS						
	La Cienega		571		0.20		A
	Northbound Ramps		563		0.72		C
	Southbound Ramps		414		0.52		A
RECIRCULATION							
	East Return Loop						
	South Return Ramp to West						
	West Return Ramp to South						
REMOTE							
	Public Surface Lot	107	107				
	Close-in GTC Parking	1769	1785				
	ITC Parking	2819	2802				
	Private Parking	332	333				
	RAC	836	836				
	East Employee Lot	216	215				
	West Employee Lot	57	58				
	CVHA Staging	416	416				

Source: JKH Mobility Services, 2003.

Table A5

DEMAND VOLUMES
2015 ALTERNATIVE D
PM PEAK HOUR

Location	Description	INBOUND					
		Hourly Volumes	Mitigated Hourly Volumes	v/c	Mitigated v/c	LOS	Mitigated LOS
GTC	ACCESS/EGRESS						
	Imperial, South	1296	1324	0.29	0.30	A	A
	La Cienega	56	499	0.02	0.11	A	A
	Aviation	106	38	0.05	0.02	A	A
	111th Street		599		0.27		A
	Eastbound Century	1267	1229	0.65	0.64	B	B
	Westbound Century						
	Northbound GTC Access Road	1458	1495	0.24	0.25	A	A
	Southbound GTC Egress Road						
	CURBFRONT, UPPER LEVEL						
	North Pier, Curbfront A (Curb 1)	477	522	0.36	0.39	A	A
	North Pier, Curbfront B (Curb 2)	144	144	0.09	0.09	A	A
	South Pier, Curbfront A (Curb 3)	517	517	0.39	0.39	A	A
	South Pier, Curbfront B (Curb 4)	240	239	0.15	0.15	A	A
	CURBFRONT, LOWER LEVEL						
	North Pier, Curbfront A (Curb 1)	718	677	0.26	0.25	A	A
	North Pier, Curbfront B (Curb 2)	354	355	0.11	0.11	A	A
	South Pier, Curbfront A (Curb 3)	675	675	0.25	0.25	A	A
	South Pier, Curbfront B (Curb 4)	264	264	0.08	0.08	A	A
ITC	ACCESS/EGRESS RAMPS						
	La Cienega		166		0.07		A
	Northbound Ramps		208		0.12		A
	Southbound Ramps		166		0.09		A
RECIRCULATION							
	East Return Loop	265	275	0.33	0.34	A	A
	South Return Ramp to West	663	663	0.40	0.40	A	A
	West Return Ramp to South	369	379	0.37	0.38	A	A
REMOTE							
	Public Surface Lot	53	53				
	Close-in GTC Parking	710	710				
	ITC Parking	1118	1118				
	Private Parking	237	237				
	RAC	310	310				
	East Employee Lot	450	448				
	West Employee Lot	102	104				
	CVHA Staging	209	209				

Source: JKH Mobility Services, 2003.

Table A6

DEMAND VOLUMES
2015 ALTERNATIVE D
PM PEAK HOUR

Location	Description	OUTBOUND					
		Hourly Volumes	Mitigated Hourly Volumes	v/c	Mitigated v/c	LOS	Mitigated LOS
GTC	ACCESS/EGRESS						
	Imperial, South	1567	1472	0.35	0.33	A	A
	La Cienega	82	551	0.03	0.13	A	A
	Aviation						
	111th Street		763		0.35		A
	Eastbound Century	644	668	0.36	0.37	A	A
	Westbound Century	732	708	0.46	0.45	A	A
	Northbound GTC Access Road						
	Southbound GTC Egress Road	1649	1657	0.28	0.28	A	A
	CURBFRONT, UPPER LEVEL						
	North Pier, Curbfront A (Curb 1)	477	522	0.36	0.39	A	A
	North Pier, Curbfront B (Curb 2)	144	144	0.09	0.09	A	A
	South Pier, Curbfront A (Curb 3)	517	517	0.39	0.39	A	A
	South Pier, Curbfront B (Curb 4)	240	239	0.15	0.15	A	A
	CURBFRONT, LOWER LEVEL						
	North Pier, Curbfront A (Curb 1)	718	677	0.26	0.25	A	A
	North Pier, Curbfront B (Curb 2)	354	355	0.11	0.11	A	A
	South Pier, Curbfront A (Curb 3)	675	675	0.25	0.25	A	A
	South Pier, Curbfront B (Curb 4)	264	264	0.08	0.08	A	A
ITC	ACCESS/EGRESS RAMPS						
	La Cienega		200		0.07		A
	Northbound Ramps		195		0.26		A
	Southbound Ramps		315		0.39		A
RECIRCULATION							
	East Return Loop						
	South Return Ramp to West						
	West Return Ramp to South						
REMOTE							
	Public Surface Lot	69	69				
	Close-in GTC Parking	925	933				
	ITC Parking	1475	1466				
	Private Parking	257	258				
	RAC	466	466				
	East Employee Lot	577	572				
	West Employee Lot	210	215				
	CVHA Staging	245	245				

Source: JKH Mobility Services, 2003.

Attachment B

Air Quality Data

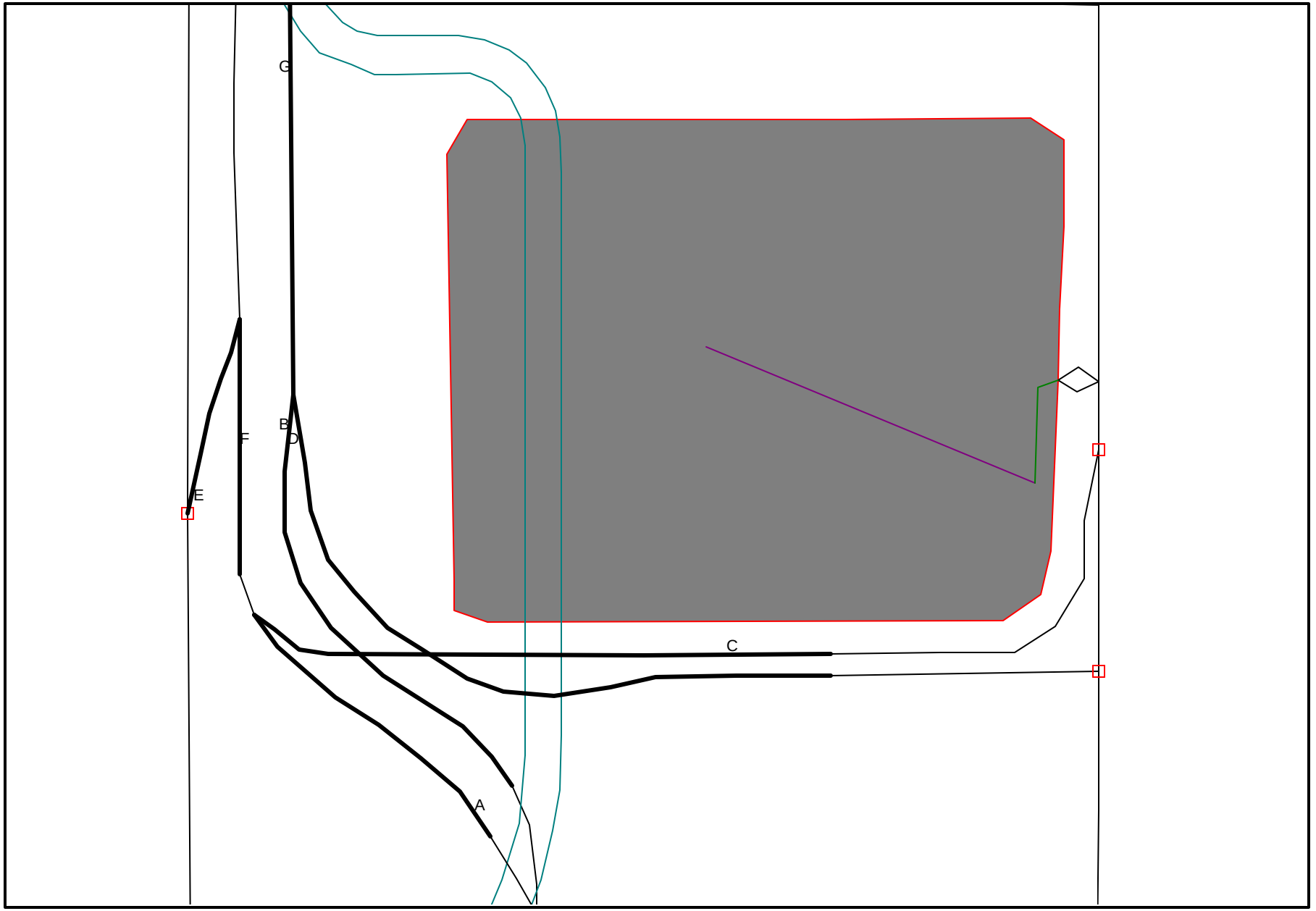
Planned Alternative D, Year 2015

Alternative D, Year 2015, Planned

Segment Reference List

A	NB Imperial7
B	SB Imperial1
C	"WB La Cienega, Entrance2"
D	"EB La Cienega, Exit1"
E	AVIAEN (Aviation Entrance)
F	GTC Entrance2
G	GTC Exit
H	EB Century to W. GTC Entrance2
I	GTC Entrance6
J	EB Century to S. GTC Entrance
K	W. GTC Exit6
L	S. GTC Exit5
M	"CENTEBIN (EB Century, Entrance)"
N	"CENTEBEX (EB Century, Exit)"
O	S. GTC Exit4
P	W. GTC Entrance1
Q	S. GTC Entrance1
R	S. GTC Entrance2
S	W. GTC Entrance2
T	"S. GTC Recirculate, South"
U	"S. GTC Recirculate, North"
V	S. GTC Recirculate to W. GTC
W	W. GTC Recirculate to S. GTC
X	W. GTC Recirculate2
Y	Century Exit Loop1
Z	S. GTC Entrance3
AA	"CENTWBEX (WB Century, Exit2)"
AB	Century Exit Loop2
AC	WB Century Exit1
AD	S. Exit3
AE	S. GTC Entrance4
AF	S. GTC Exit2
AG	South Recirculator2
AH	S. GTC Entrance6
AI	S. GTC Exit1
AJ	"Pier 3 Parking, South Exit WB"
AK	"Pier 3 Parking, South Exit EB"
AL	S. GTC Entrance7
AM	E. GTC Exit2
AN	"Pier 3 Parking, E. Entrance"
AO	E. GTC Entrance1
AP	W. GTC Entrance3
AQ	W. GTC Exit5
AR	"Pier 3 Parking, West Entrance"
AS	"South Pier, Curbfront B, Entrance"
AT	E. GTC Entrance2
AU	"CVHA Stage Lot, W. Entrance"
AV	W. GTC Entrance4
AW	"North Pier, Curbfront A, Entrance1"
AX	W. GTC Exit4
AY	"South Pier, Curbfront B, Exit"
AZ	"South Pier, Curbfront B, Departures Exit"
BA	"South Pier, Curbfront B, Arrivals Exit"
BB	"South Pier, Curbfront B, Departures Entrance"

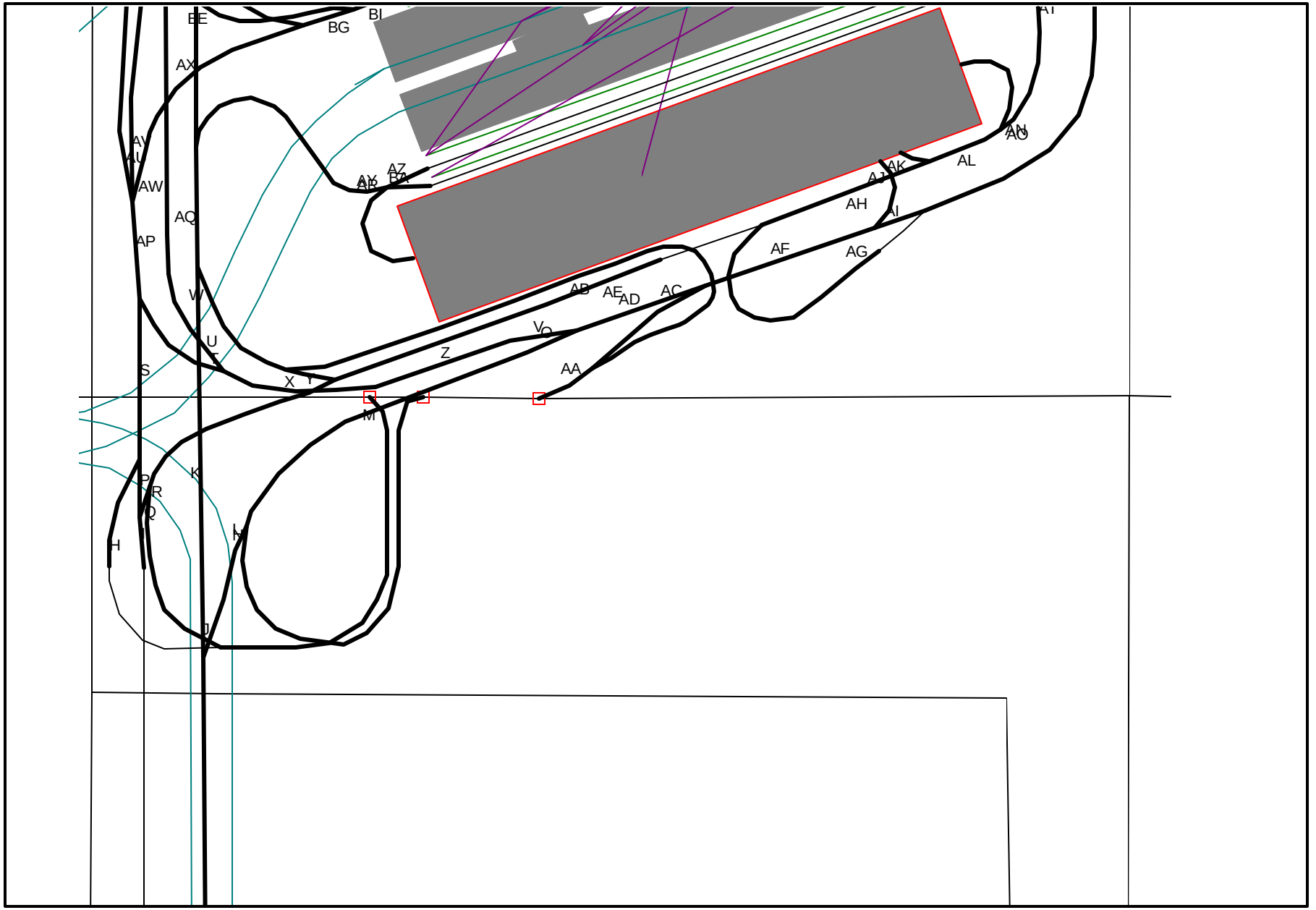
BC	"South Pier, Curbfront B, Arrivals Entrance"
BD	W. GTC Exit3
BE	"CVHA Ramp to South Pier, Curbfront A"
BF	Pier 2 Parking Recirculator
BG	"South Pier, Curbfront A, Entrance2"
BH	"South Pier, Curbfront A, Arrivals Entrance2"
BI	"South Pier, Curbfront A, Departures Entrance"
BJ	"South Pier, Curbfront A, Arrivals Exit"
BK	"South Pier, Curbfront A, Departures Exit2"
BL	"Pier 2 Parking, East Recirculate Entrance"
BM	"South Pier, Curbfront A, Exit"
BN	"South Pier, Curbfront A, Recirculate to E. GTC Entry"
BO	E. GTC Entrance3
BP	E. GTC Exit1
BQ	W. GTC Exit2
BR	P2 Exit
BS	"North Pier, Curbfront B, Exit"
BT	"Pier 2 Parking, West Exit"
BU	"Pier 2 Parking, West Entrance"
BV	"North Pier, Curbfront B, Arrivals Exit"
BW	"North Pier, Curbfront B, Departures Exit"
BX	"Pier 2 Parking, East Entrance"
BY	"North Pier, Curbfront B, Arrivals Entrance"
BZ	"North Pier, Curbfront B, Departures Entrance"
CA	"North Pier, Curbfront B, Entrance"
CB	E. GTC Entrance4
CC	E. GTC Entrance5
CD	"North Pier, Curbfront A, Entrance2"
CE	Pier 1 Recirculation 2
CF	W. GTC Exit1
CG	"Pier 1 Parking, West Entrance"
CH	"North Pier, Curbfront A, Arrivals Entrance"
CI	"North Pier, Curbfront B, Departures Entrance"
CJ	"North Pier, Curbfront A, Arrivals Exit"
CK	"North Pier, Curbfront A, Departures Exit"
CL	"North Pier, Curbfront A, Exit to Park1"
CM	"North Pier, Curbfront A, Exit"
CN	CVEH Entry
CO	East Return Loop
CP	"Pier 1 & CVHA, Exit Road"
CQ	"CVHA Stage Lot, South Exit"
CR	"Pier 1 Parking, Exit"
CS	"CVHA Stage Lot, East Entrance"
CT	"Peir 1 Parking, East Entrance"
CU	"North Pier, Curbfront A, Exit to Park 2"
CV	"CVHA Stage Lot, Aviation Entrance"
CW	"CVHA Stage Lot, Aviation Exit"



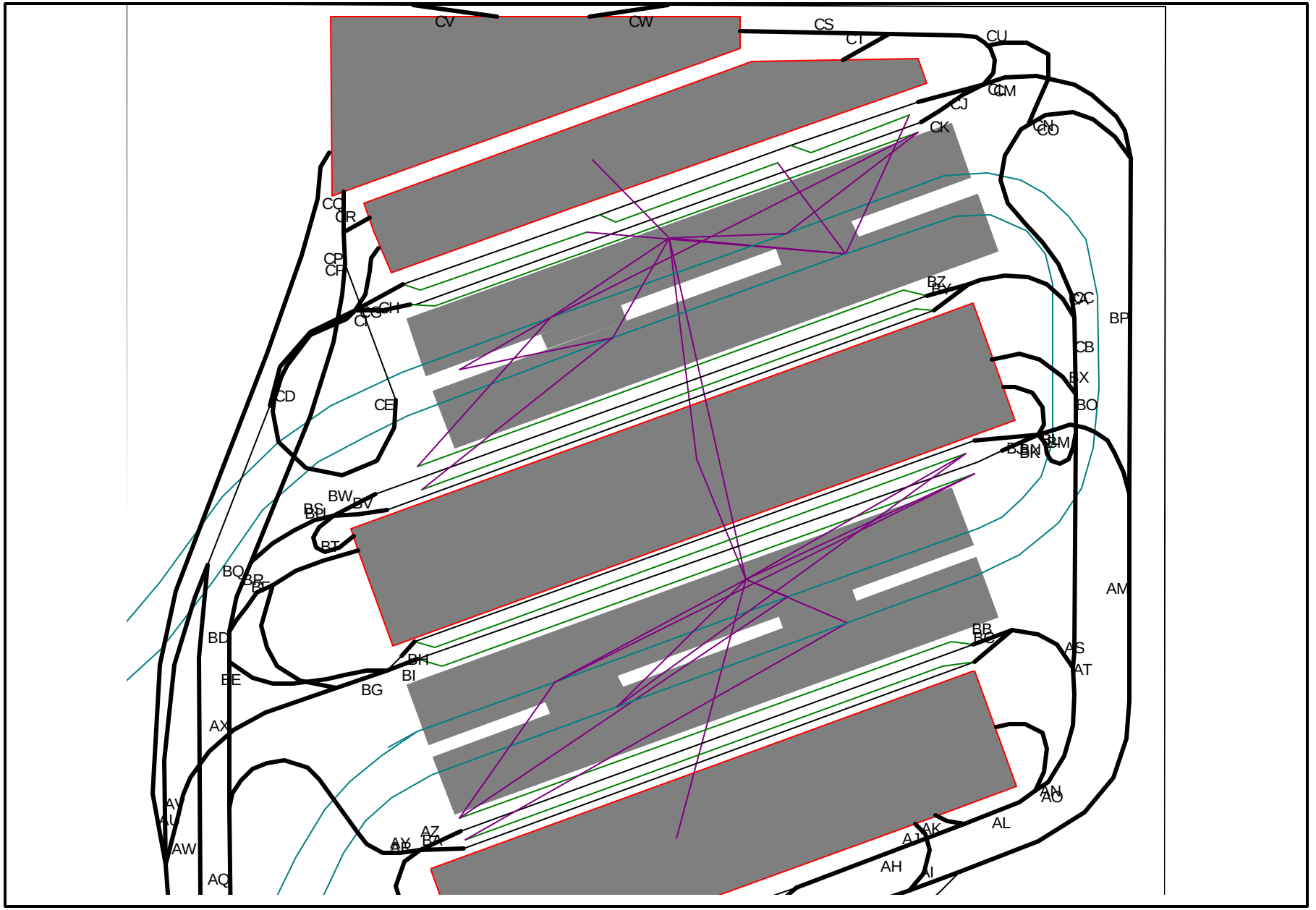
LAX Master Plan
Supplement to the Draft EIS/EIR

Segment Labels 1

Figure
B1



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Segment Labels 2**	Figure **B2**



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Segment Labels 3**	Figure **B3**

LAX Master Plan
Air Quality Data
Alternative: 2015 Alternative D, Planned
Airport Peak Hour (11AM-12)

Table B1

Segment	NB Imperial7	SB Imperial1	WB La Cienega, Entrance2	EB La Cienega, Exit1	AVIAEN (Aviation Entrance)	GTC Entrance2	GTC Exit	EB Century to W. GTC Entrance2
% Passenger Vehicle	96%	96%	96%	96%	95%	96%	96%	71%
% Light Duty Trucks	4%	4%	4%	4%	5%	4%	4%	6%
% Medium Bus	0%	0%	0%	0%	0%	0%	0%	23%
% Heavy Bus	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	2729	3240	821	747	550	3550	3988	977
Average Speed (mph)	32	30	35	36	27	29	31	19

Segment	GTC Entrance6	EB Century to S. GTC Entrance	W. GTC Exit6	S. GTC Exit5	CENTEBIN (EB Century, Entrance)	CENTEBEX (EB Century, Exit)	S. GTC Exit4	W. GTC Entrance1
% Passenger Vehicle	96%	100%	100%	92%	84%	95%	93%	92%
% Medium Bus	4%	0%	0%	8%	3%	5%	7%	8%
% Heavy Bus	0%	0%	0%	0%	13%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	4101	739	2033	1954	1716	1014	2968	2048
Average Speed (mph)	30	22	32	17	20	24	28	32

Segment	S. GTC Entrance1	S. GTC Entrance2	W. GTC Entrance2	S. GTC Recirculate, South	S. GTC Recirculate, North	S. GTC Recirculate to W. GTC	W. GTC Recirculate to S. GTC	W. GTC Recirculate2
% Passenger Vehicle	100%	100%	85%	12%	19%	14%	100%	100%
% Medium Bus	0%	0%	7%	0%	0%	0%	0%	0%
% Heavy Bus	0%	0%	7%	88%	81%	86%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	2053	2792	3025	511	278	789	1005	635
Average Speed (mph)	22	19	22	22	35	33	34	23

Segment	Century Exit Loop1	S. GTC Entrance3	CENTWBEX (WB Century, Exit2)	Century Exit Loop2	WB Century Exit1	S. Exit3	S. GTC Entrance4	S. GTC Exit2
% Passenger Vehicle	100%	100%	74%	100%	59%	77%	100%	74%
% Medium Bus	0%	0%	2%	0%	4%	5%	0%	5%
% Heavy Bus	0%	0%	23%	0%	37%	18%	0%	21%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	370	3427	971	370	601	3757	3427	4358
Average Speed (mph)	26	22	24	25	22	27	22	28

Segment	South Recirculator2	S. GTC Entrance6	S. GTC Exit1	Pier 3 Parking, South Exit WB	Pier 3 Parking, South Exit EB	S. GTC Entrance7	E. GTC Exit2	Pier 3 Parking, E. Entrance
% Passenger Vehicle	0%	100%	72%	100%	100%	100%	72%	100%
% Medium Bus	0%	0%	6%	0%	0%	0%	6%	0%
% Heavy Bus	0%	0%	23%	0%	0%	0%	23%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	0%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	0	3427	3979	379	84	3511	3979	269
Average Speed (mph)	25	24	29	24	25	23	29	25

Segment	E. GTC Entrance1	W. GTC Entrance3	W. GTC Exit5	Pier 3 Parking, West Entrance	South Pier, Curbfront B, Entrance	E. GTC Entrance2	CVHA Stage Lot, W. Entrance	W. GTC Entrance4
% Passenger Vehicle	100%	75%	100%	100%	100%	100%	100%	81%
% Medium Bus	0%	6%	0%	0%	0%	0%	0%	6%
% Heavy Bus	0%	19%	0%	0%	0%	0%	0%	13%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	3242	3535	3038	144	1137	2106	94	1702
Average Speed (mph)	22	20	31	25	23	32	28	33

Segment	North Pier, Curbfront A, Entrance1	W. GTC Exit4	South Pier, Curbfront B, Exit	South Pier, Curbfront B, Departures Exit	South Pier, Curbfront B, Arrivals Exit	South Pier, Curbfront B, Departures Entrance	South Pier, Curbfront B, Arrivals Entrance	W. GTC Exit3
% Passenger Vehicle	67%	100%	100%	100%	100%	100%	100%	97%
% Medium Bus	7%	0%	0%	0%	0%	0%	0%	3%
% Heavy Bus	26%	0%	0%	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	1740	2045	993	534	602	534	602	2235
Average Speed (mph)	17	24	24	22	23	22	23	22

Segment	CVHA Ramp to South Pier, Curbfront A	Pier 2 Parking Recirculator	South Pier, Curbfront A, Entrance2	South Pier, Curbfront A, Arrivals Entrance2	South Pier, Curbfront A, Departures Entrance	South Pier, Curbfront A, Arrivals Exit	South Pier, Curbfront A, Departures Exit2	Pier 2 Parking, East Recirculate Entrance
% Passenger Vehicle	62%	100%	69%	70%	66%	70%	66%	100%
% Medium Bus	38%	0%	7%	9%	10%	9%	10%	0%
% Heavy Bus	0%	0%	25%	21%	24%	21%	24%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	189	85	1825	1066	949	1066	949	138
Average Speed (mph)	25	25	22	22	19	22	19	25

Segment	South Pier, Curbfront A, Exit	South Pier, Curbfront A, Recirculate to E. GTC Entry	E. GTC Entrance3	E. GTC Exit1	W. GTC Exit2	P2 Exit	North Pier, Curbfront B, Exit	Pier 2 Parking, West Exit
% Passenger Vehicle	68%	26%	97%	75%	95%	100%	100%	100%
% Medium Bus	7%	74%	3%	5%	5%	0%	0%	0%
% Heavy Bus	25%	0%	0%	20%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	1778	100	2205	2202	1503	733	1025	818
Average Speed (mph)	22	25	22	31	25	21	25	24

Segment	Pier 2 Parking, West Entrance	North Pier, Curbfront B, Arrivals Exit	North Pier, Curbfront B, Departures Exit	Pier 2 Parking, East Entrance	North Pier, Curbfront B, Arrivals Entrance	North Pier, Curbfront B, Departures Entrance	North Pier, Curbfront B, Entrance	E. GTC Entrance4
% Passenger Vehicle	100%	100%	100%	100%	100%	100%	100%	96%
% Medium Bus	0%	0%	0%	0%	0%	0%	0%	4%
% Heavy Bus	0%	0%	0%	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	140	602	562	509	602	562	1164	1696
Average Speed (mph)	25	23	22	22	23	22	22	24

Segment	E. GTC Entrance5	North Pier, Curbfront A, Entrance2	Pier 1 Recirculation 2	W. GTC Exit1	Pier 1 Parking, West Entrance	North Pier, Curbfront A, Arrivals Entrance	North Pier, Curbfront A, Departures Entrance	North Pier, Curbfront A, Arrivals Exit
% Passenger Vehicle	86%	72%	83%	85%	100%	73%	65%	73%
% Medium Bus	14%	5%	16%	15%	0%	7%	10%	7%
% Heavy Bus	0%	23%	0%	0%	0%	20%	25%	20%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	532	1980	382	478	331	1146	885	1146
Average Speed (mph)	23	24	25	25	24	21	20	21

Segment	North Pier, Curbfront A, Departures Exit	North Pier, Curbfront A, Exit to Park1	North Pier, Curbfront A, Exit	CVEH Entry	East Return Loop	Pier 1 & CVHA, Exit Road	CVHA Stage Lot, South Exit	Pier 1 Parking, Exit
% Passenger Vehicle	65%	75%	69%	26%	100%	85%	64%	100%
% Medium Bus	10%	25%	6%	75%	0%	16%	36%	0%
% Heavy Bus	25%	0%	25%	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	101%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	885	262	1769	99	432	859	371	488
Average Speed (mph)	20	25	22	25	24	25	24	23

Segment	CVHA Stage Lot, East Entrance	Peir 1 Parking, East Entrance	North Pier, Curbfront A, Exit	CVHA Stage Lot, Aviation Entrance	CVHA Stage Lot, Aviation Exit

			to Park 2		
% Passenger Vehicle	27%	100%	61%	67%	0%
% Medium Bus	73%	0%	39%	0%	0%
% Heavy Bus	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	33%	100%
Subtotal	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	191	170	361	137	45
Average Speed (mph)	25	25	25	25	25

Table B2

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Planned

Hour of Day	North Pier, Curbfront A				North Pier, Curbfront B		South Pier, Curbfront A				South Pier, Curbfront B		Remote
	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals	Long Term Park Curb
0-1:00	0.91%	2.13%	1.69%	3.31%	2.25%	2.18%	0.66%	1.09%	0.85%	0.36%	0.00%	1.30%	0.70%
2:00	0.26%	0.43%	0.20%	0.52%	0.82%	0.52%	0.29%	0.65%	0.79%	0.19%	0.00%	0.40%	0.23%
3:00	0.12%	0.00%	0.00%	0.04%	0.03%	0.01%	0.20%	0.36%	0.36%	0.04%	0.00%	0.30%	0.00%
4:00	0.09%	0.00%	0.00%	0.06%	0.17%	0.00%	0.14%	0.22%	0.34%	0.05%	0.00%	0.03%	0.00%
5:00	0.14%	0.00%	0.00%	0.27%	0.73%	0.00%	0.14%	0.00%	0.04%	0.47%	0.49%	0.00%	0.23%
6:00	0.53%	0.00%	0.05%	1.88%	2.36%	0.25%	0.54%	0.07%	0.20%	3.63%	3.65%	0.21%	1.40%
7:00	4.62%	0.85%	0.25%	5.01%	7.02%	1.72%	4.59%	1.09%	0.70%	7.31%	6.14%	1.57%	5.81%
8:00	4.72%	1.28%	1.38%	5.36%	6.95%	1.76%	4.73%	1.67%	2.10%	6.21%	7.62%	1.64%	5.81%
9:00	4.97%	2.55%	3.84%	6.02%	6.69%	1.76%	5.25%	3.70%	3.60%	6.56%	6.90%	4.00%	5.81%
10:00	5.55%	5.18%	6.15%	4.28%	5.57%	4.35%	5.45%	4.50%	4.72%	6.99%	7.68%	4.85%	5.81%
11:00	5.74%	5.89%	6.37%	6.66%	5.36%	5.95%	5.90%	6.53%	6.23%	6.95%	9.26%	7.28%	5.81%
12:00	7.13%	8.37%	7.72%	7.34%	9.35%	8.76%	7.21%	8.56%	8.31%	7.68%	8.37%	8.51%	5.81%
13:00	6.67%	6.52%	7.48%	6.14%	6.40%	5.36%	6.92%	7.33%	7.29%	6.27%	6.27%	6.97%	5.81%
14:00	6.69%	6.81%	9.17%	6.82%	6.09%	3.61%	6.49%	5.52%	6.64%	5.44%	4.81%	4.26%	5.81%
15:00	6.55%	6.03%	7.37%	6.43%	5.85%	4.77%	6.40%	5.15%	4.97%	5.88%	6.16%	5.50%	5.81%
16:00	6.64%	6.31%	6.77%	6.41%	5.94%	5.82%	6.51%	5.81%	5.19%	4.69%	5.38%	6.45%	5.81%
17:00	6.18%	6.95%	6.98%	5.72%	5.84%	6.60%	5.86%	5.52%	5.26%	5.35%	4.54%	5.86%	5.81%
18:00	6.25%	6.81%	5.89%	4.82%	3.14%	7.36%	6.01%	6.17%	6.96%	5.15%	5.11%	5.32%	5.81%
19:00	5.74%	4.54%	3.78%	3.10%	2.03%	6.01%	6.04%	6.17%	5.66%	5.41%	3.51%	6.72%	5.81%
20:00	6.11%	6.03%	5.43%	4.26%	2.21%	7.24%	6.04%	6.02%	6.56%	4.48%	2.85%	5.54%	5.81%
21:00	5.04%	8.01%	7.13%	6.94%	4.57%	8.52%	4.75%	6.60%	7.04%	3.96%	4.89%	6.14%	5.81%
22:00	4.97%	7.45%	6.81%	5.40%	5.31%	7.61%	4.88%	6.97%	6.77%	3.59%	3.20%	7.13%	5.81%
23:00	2.56%	4.96%	3.43%	1.88%	3.93%	6.37%	2.92%	6.39%	5.98%	2.32%	2.90%	6.39%	2.56%
24:00	1.84%	2.91%	2.13%	1.34%	1.40%	3.45%	2.10%	3.77%	3.37%	0.99%	0.34%	3.58%	1.40%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table B3

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Planned

Hour of Day	Intermodal Center		Rental Car Lot		Private Long Term Park Curb	East Employee Lot Curb	Central Terminal Area					GTC/ITC Parking		Staging	
	North Curb	South Curb	RAC Curb	Off-RAC Curb			Terminal 1	Terminal 2	TBIT	Terminal 3	Terminal 4	Park In	Park Out	Inflow	Outflow
0-1:00	1.13%	2.86%	1.84%	0.34%	0.51%	4.36%	2.28%	2.28%	0.21%	2.28%	2.28%	1.38%	1.36%	1.68%	1.65%
2:00	1.05%	1.82%	0.66%	0.17%	0.18%	3.19%	2.28%	2.28%	0.21%	2.28%	2.28%	0.32%	1.15%	0.62%	0.69%
3:00	1.05%	0.78%	0.19%	0.00%	0.15%	1.67%	2.28%	2.28%	0.21%	2.28%	2.28%	0.05%	0.39%	0.31%	0.38%
4:00	1.05%	1.43%	0.30%	0.00%	0.12%	2.49%	2.28%	2.28%	0.21%	2.28%	2.28%	0.02%	0.06%	0.29%	0.33%
5:00	1.21%	2.60%	0.63%	0.17%	0.18%	4.11%	2.28%	2.28%	0.95%	2.28%	2.28%	0.26%	0.07%	0.47%	0.24%
6:00	2.43%	3.39%	1.86%	0.68%	0.66%	4.76%	2.28%	2.28%	4.20%	2.28%	2.28%	2.13%	0.40%	1.75%	0.29%
7:00	6.03%	5.86%	4.16%	5.95%	5.74%	5.54%	5.70%	5.70%	8.27%	5.70%	5.70%	3.84%	2.35%	4.15%	1.75%
8:00	7.03%	5.34%	4.25%	5.95%	5.74%	4.24%	5.70%	5.70%	9.33%	5.70%	5.70%	4.82%	3.70%	4.34%	2.16%
9:00	7.33%	4.69%	4.82%	5.95%	5.74%	3.99%	5.70%	5.70%	10.64%	5.70%	5.70%	5.76%	4.02%	5.03%	3.55%
10:00	7.49%	4.30%	5.18%	5.95%	5.74%	2.03%	5.70%	5.70%	11.45%	5.70%	5.70%	6.29%	5.25%	5.47%	5.02%
11:00	6.53%	4.04%	6.26%	5.95%	5.74%	1.91%	4.56%	4.56%	7.10%	4.56%	4.56%	7.92%	6.17%	6.66%	6.18%
12:00	5.02%	4.17%	7.63%	5.10%	6.80%	2.18%	4.56%	4.56%	0.42%	4.56%	4.56%	7.82%	8.13%	9.24%	8.16%
13:00	5.02%	5.21%	6.28%	5.10%	6.80%	4.55%	4.56%	4.56%	0.44%	4.56%	4.56%	6.33%	7.59%	6.60%	6.81%
14:00	5.02%	5.34%	5.81%	5.10%	6.80%	5.99%	4.56%	4.56%	0.42%	4.56%	4.56%	5.80%	6.23%	6.04%	6.12%
15:00	5.02%	5.66%	5.79%	5.10%	6.80%	6.88%	5.70%	5.70%	0.55%	5.70%	5.70%	6.42%	6.05%	5.98%	5.65%
16:00	5.02%	6.25%	5.73%	5.10%	6.80%	8.67%	5.70%	5.70%	0.55%	5.70%	5.70%	6.03%	6.11%	5.81%	6.04%
17:00	6.40%	6.38%	5.75%	5.44%	6.01%	6.43%	5.70%	5.70%	6.77%	5.70%	5.70%	5.61%	5.98%	5.77%	6.20%
18:00	7.49%	5.34%	5.28%	5.44%	6.01%	4.62%	5.70%	5.70%	11.75%	5.70%	5.70%	4.62%	6.10%	5.44%	6.47%
19:00	7.03%	4.82%	4.29%	5.44%	6.01%	3.42%	5.70%	5.70%	9.63%	5.70%	5.70%	4.44%	4.68%	4.50%	5.53%
20:00	4.31%	4.30%	4.48%	5.44%	6.01%	2.70%	5.70%	5.70%	9.75%	5.70%	5.70%	4.81%	4.40%	4.09%	5.49%
21:00	3.43%	4.04%	5.88%	5.44%	4.14%	2.43%	3.23%	3.23%	6.17%	3.23%	3.23%	6.04%	5.33%	5.63%	6.53%
22:00	1.59%	4.56%	5.86%	5.44%	4.14%	3.65%	3.04%	3.04%	0.28%	3.04%	3.04%	5.11%	6.30%	5.30%	6.53%
23:00	1.26%	3.26%	4.44%	5.44%	1.66%	5.03%	2.47%	2.47%	0.23%	2.47%	2.47%	3.04%	5.30%	3.82%	5.20%
24:00	1.05%	3.65%	2.87%	5.44%	1.51%	4.97%	2.28%	2.28%	0.21%	2.28%	2.28%	1.13%	2.89%	1.97%	3.00%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.00%	100.00%	100.00%	100.00%

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Attachment C

Air Quality Data

Mitigated Alternative D, Year 2015

Air Quality Segments - Alternative D Mitigated Model, Year 2015

Reference Segment List

A	NB Imperial3
B	SB Imperial6
C	NB Imperial4
D	SB Imperial5
E	NB Imperial6
F	SB Imperial2
G	SB Ramp into ITC STPK
H	NB Ramp into ITC STPK
I	NB Ramp out of ITC
J	SB Exit Ramp from ITC Curbfront
K	NB ITC Street Access
L	SB ITC Street Access3
M	WB ITC Road3
N	EB ITC Road3
O	NB ITC Street Access3
P	SB ITC Street Access
Q	111th Enter GTC
R	111th Exit GTC
S	NB Imperial7
T	SB Imperial1
U	ITC to La Cienega
V	"NB Imperial7, Entrance"
W	La Cienega to ITC
X	"SB Imperial1, Exit"
Y	"WB La Cienega, Entrance2"
Z	"EB La Cienega, Exit1"
AA	"EB La Cienega, Exit1"
AB	"WB La Cienega, Entrance2"
AC	AVIAEN (Aviation Entrance)
AD	GTC Entrance2
AE	GTC Exit
AF	GTC Entrance6
AG	"South Pier, Curbfront B, Entrance"
AH	"South Pier, Curbfront B, Departures Entrance"
AI	"South Pier, Curbfront B, Arrivals Entrance"
AJ	"South Pier, Curbfront B, Departures Exit"
AK	"South Pier, Curbfront B, Arrivals Exit"
AL	"South Pier, Curbfront B, Exit"
AM	"Pier 3 Parking, West Entrance"
AN	"South Pier, Curbfront A, Entrance2"
AO	"South Pier, Curbfront A, Arrivals Entrance1"
AP	"South Pier, Curbfront A, Departures Entrance"
AQ	"South Pier, Curbfront A, Departures Exit2"
AR	"South Pier, Curbfront A, Arrivals Exit"
AS	"Pier 2 Parking, East Recirculate Entrance"
AT	"South Pier, Curbfront A, Exit"
AU	"South Pier, Curbfront A, Recirculate to E. GTC Entry"
AV	"North Pier, Curbfront B, Entrance"
AW	"North Pier, Curbfront B, Departures Entrance"
AX	"North Pier, Curbfront B, Arrivals Entrance"
AY	"North Pier, Curbfront B, Departures Exit"
AZ	"North Pier, Curbfront B, Arrivals Exit"
BA	"North Pier, Curbfront B, Exit"
BB	"Pier 2 Parking, West Entrance"

BC "North Pier, Curbfront A, Entrance2"
BD "Pier 1 Parking, West Entrance"
BE "North Pier, Curbfront A, Arrivals Entrance"
BF "North Pier, Curbfront B, Departures Entrance"
BG "North Pier, Curbfront A, Arrivals Exit"
BH "North Pier, Curbfront A, Departures Exit"
BI "North Pier, Curbfront A, Exit to Park1"
BJ "North Pier, Curbfront A, Exit"
BK "CENTEBIN (EB Century, Entrance)"
BL "CENTEBEX (EB Century, Exit)"
BM EB Century to W. GTC Entrance2
BN W. GTC Entrance1
BO S. GTC Entrance1
BP EB Century to S. GTC Entrance
BQ S. GTC Entrance2
BR W. GTC Exit6
BS S. GTC Exit5
BT S. GTC Exit4
BU S. GTC Recirculate to W. GTC
BV W. GTC Entrance2
BW "S. GTC Recirculate, South"
BX "S. GTC Recirculate, North"
BY W. GTC Recirculate to S. GTC
BZ W. GTC Recirculate2
CA Century Exit Loop1
CB W. GTC Entrance3
CC W. GTC Exit5
CD W. GTC Entrance4
CE "South Pier, Curbfront A, Entrance1"
CF W. GTC Exit4
CG "CVHA Stage Lot, W. Entrance"
CH W. GTC Entrance4
CI "CVHA Ramp to South Pier, Curbfront A"
CJ W. GTC Exit3
CK W. GTC Exit2
CL P2 Exit
CM "South Pier, Curbfront A, Entrance2"
CN Pier 2 Parking Recirculator
CO "Pier 2 Parking, West Exit"
CP "North Pier, Curbfront A, Entrance1"
CQ W. GTC Exit0
CR Pier 1 Recirculation 2
CS "Pier 1 Parking, Exit"
CT W. GTC Exit1
CU "Pier 1 & CVHA, Exit Road"
CV "CVHA Stage Lot, South Exit"
CW "CVHA Stage Lot, Aviation Entrance"
CX "CVHA Stage Lot, Aviation Exit"
CY "CVHA Stage Lot, East Entrance"
CZ "Peir 1 Parking, East Entrance"
DA "North Pier, Curbfront A, Exit to Park 2"
DB CVEH Entry
DC E. GTC Entrance5
DD East Return Loop
DE E. GTC Exit1
DF "Pier 2 Parking, East Entrance"
DG E. GTC Entrance4
DH E. GTC Entrance3

DI	E. GTC Entrance2
DJ	E. GTC Exit2
DK	E. GTC Entrance1
DL	"Pier 3 Parking, E. Entrance"
DM	S. GTC Entrance7
DN	"Pier 3 Parking, South Exit EB"
DO	S. GTC Entrance6
DP	"Pier 3 Parking, South Exit WB"
DQ	S. GTC Exit1
DR	South Recirculator2
DS	S. GTC Exit2
DT	Century Exit Loop2
DU	S. GTC Entrance4
DV	S. Exit3
DW	WB Century Exit1
DX	"CENTWBEX (WB Century, Exit2)"
DY	West Exit ITC
DZ	"Pier 1 Parking, Exit"
EA	P1 Exit to Curb
EB	"Pier 1, Recirculation 1"

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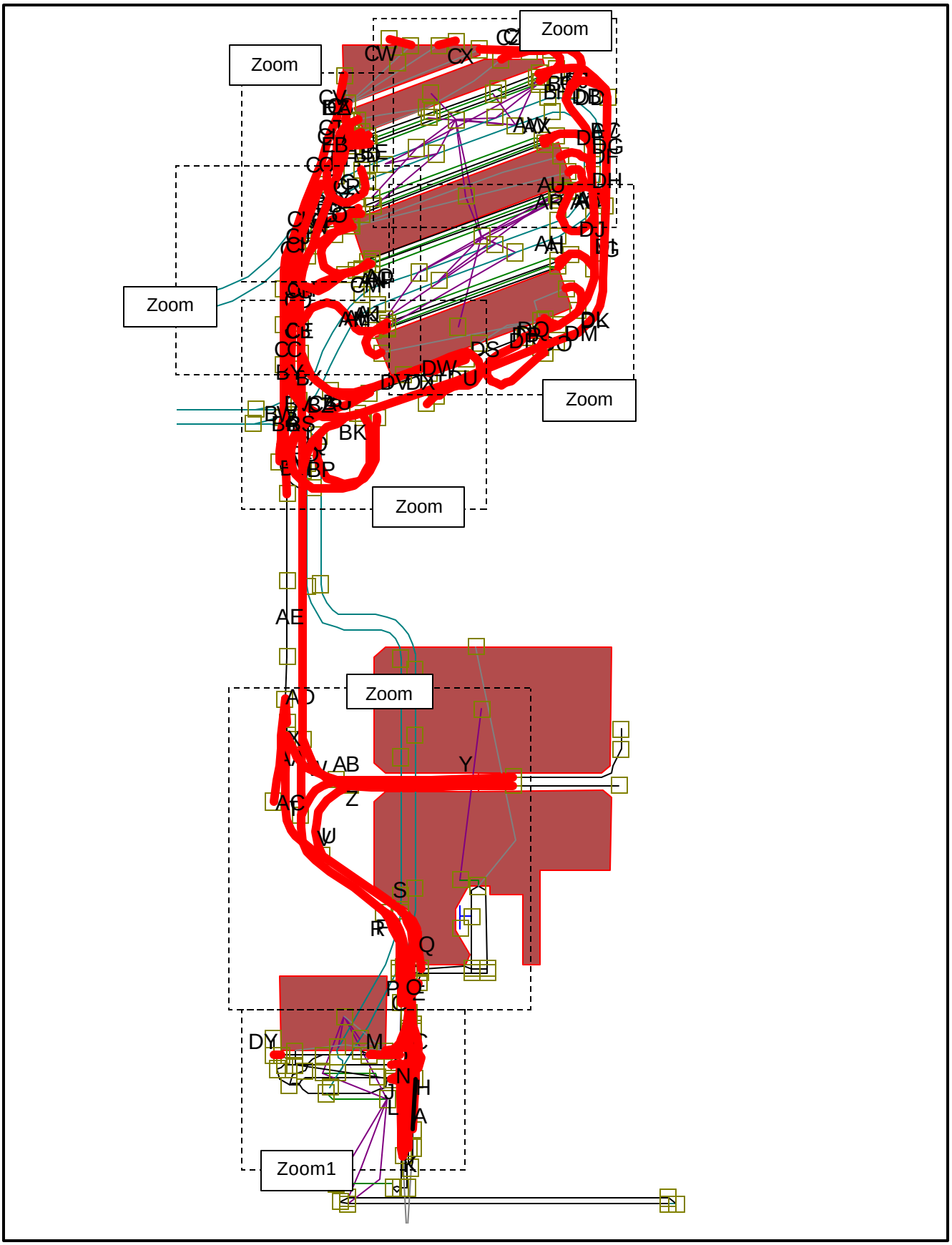
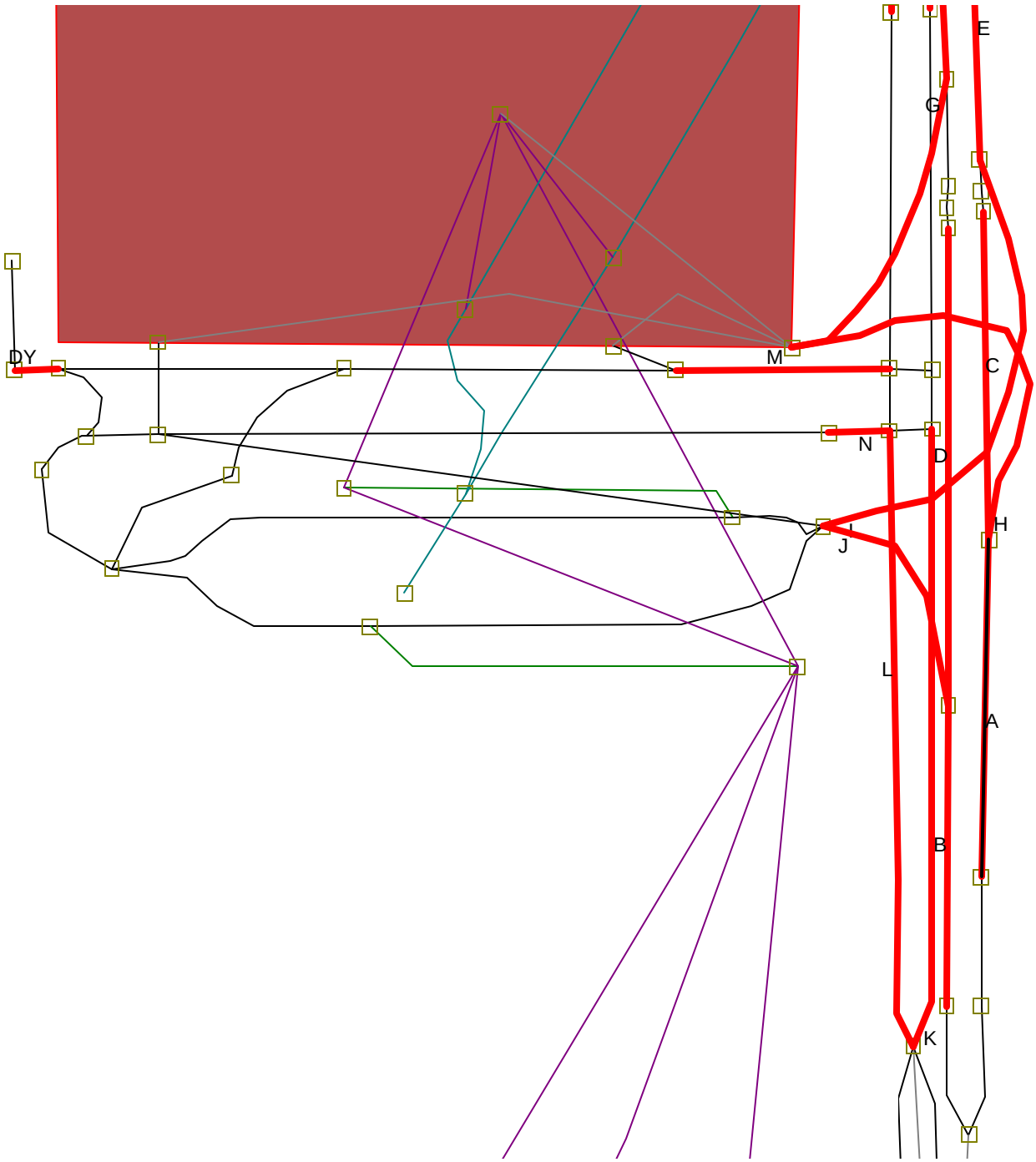
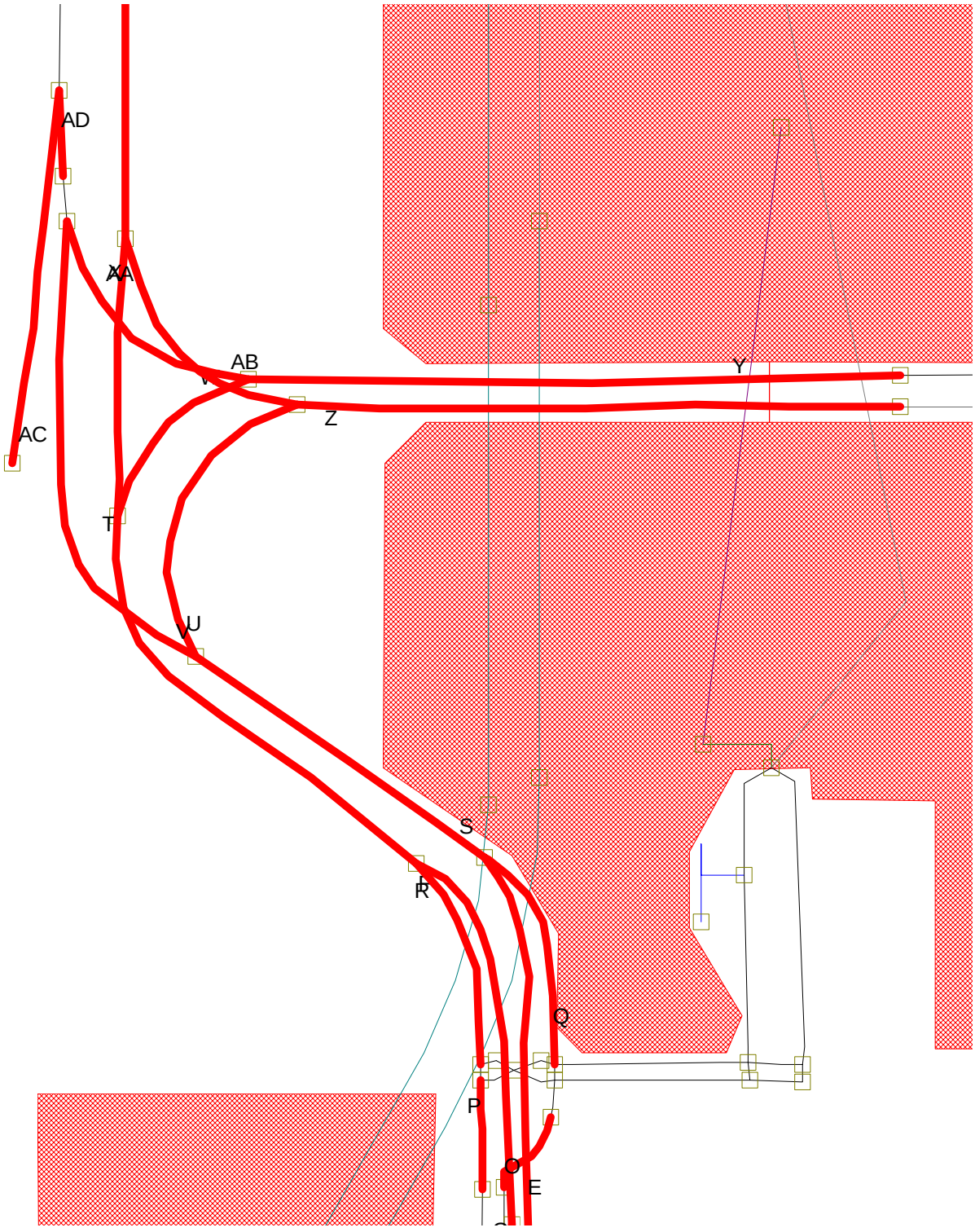


LAX Master Plan **Supplement to the Draft EIS/EIR**	**Segment Labels**	**Figure** **C1**



LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 1, ITC	Figure C2



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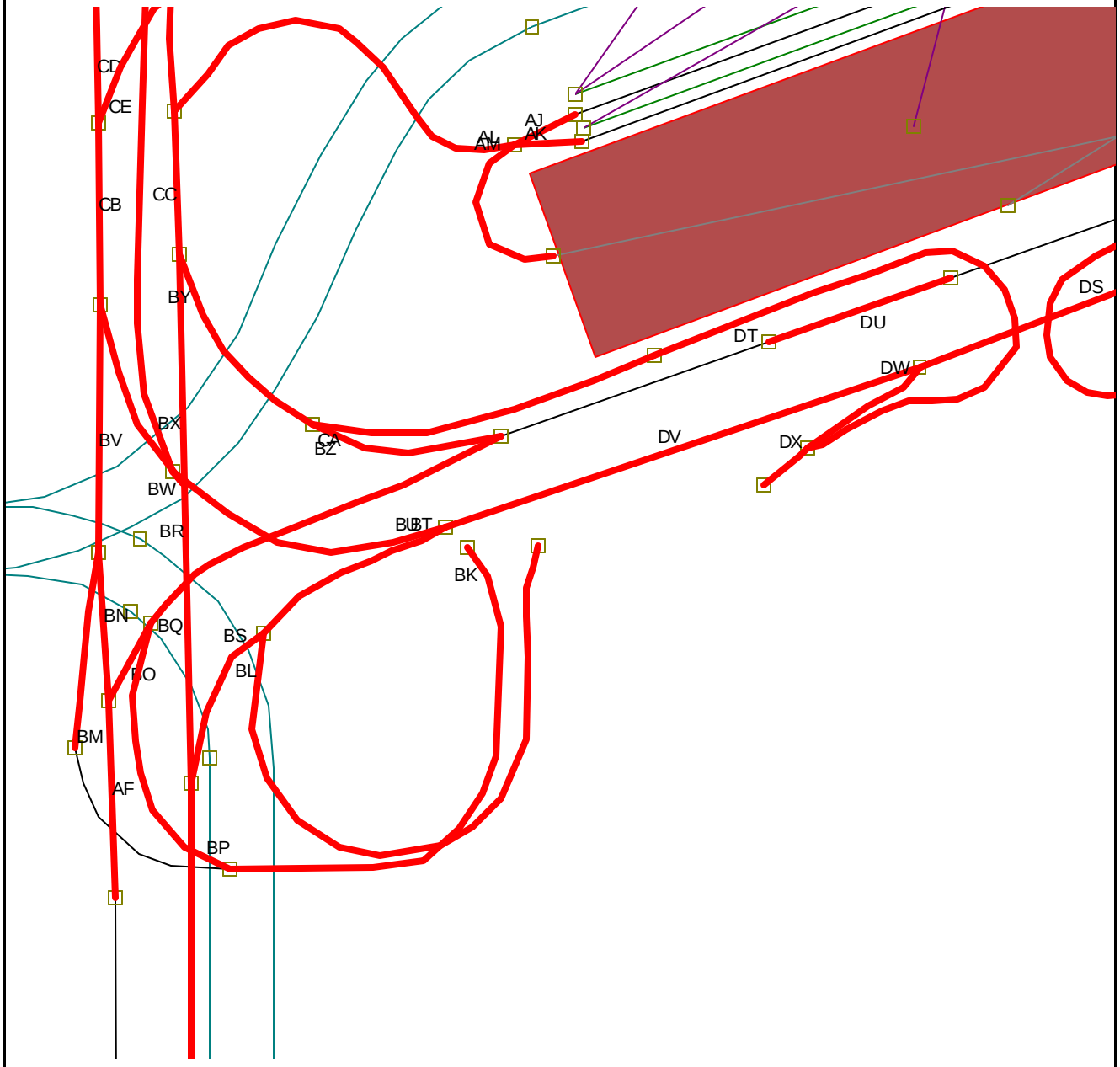
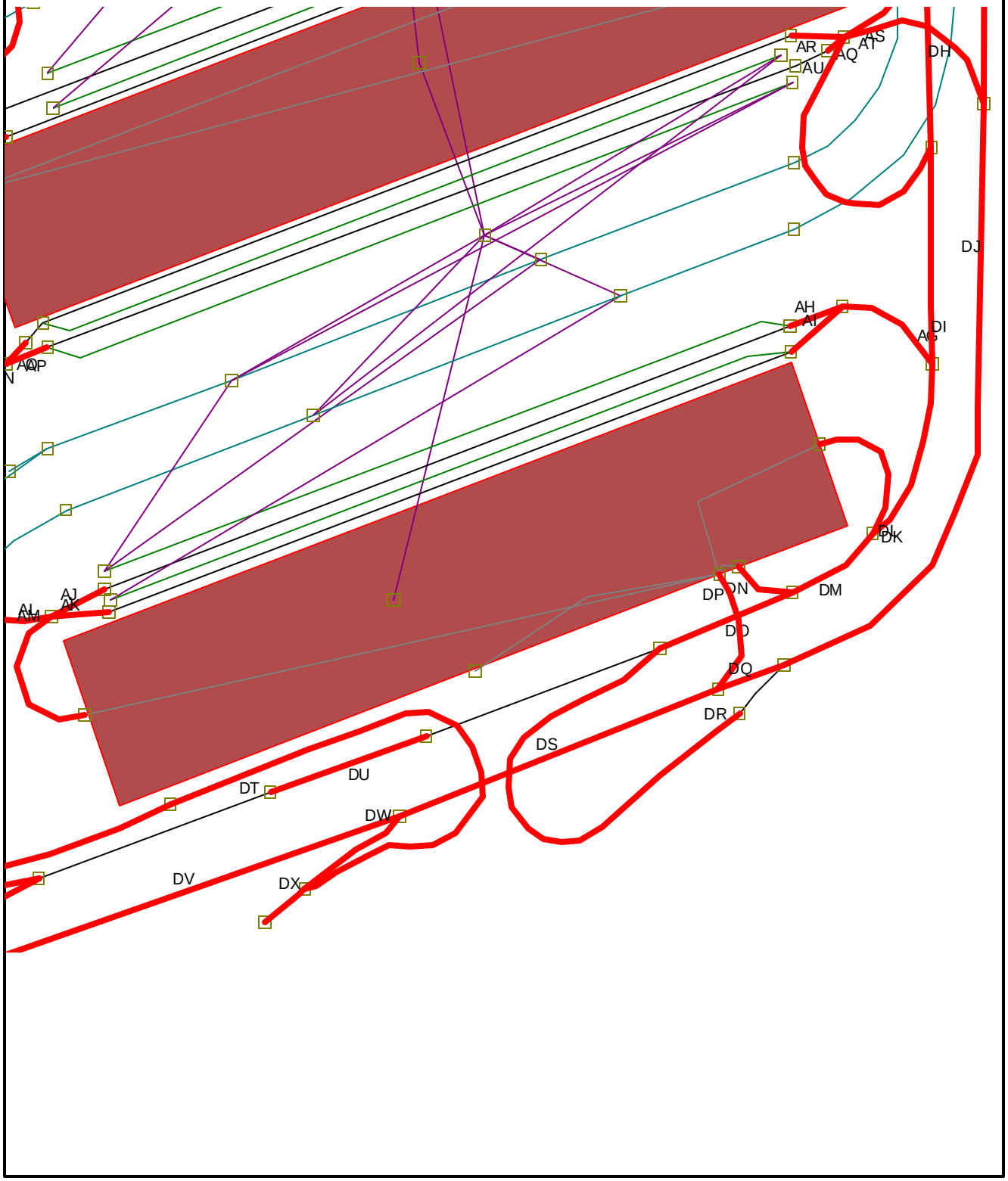
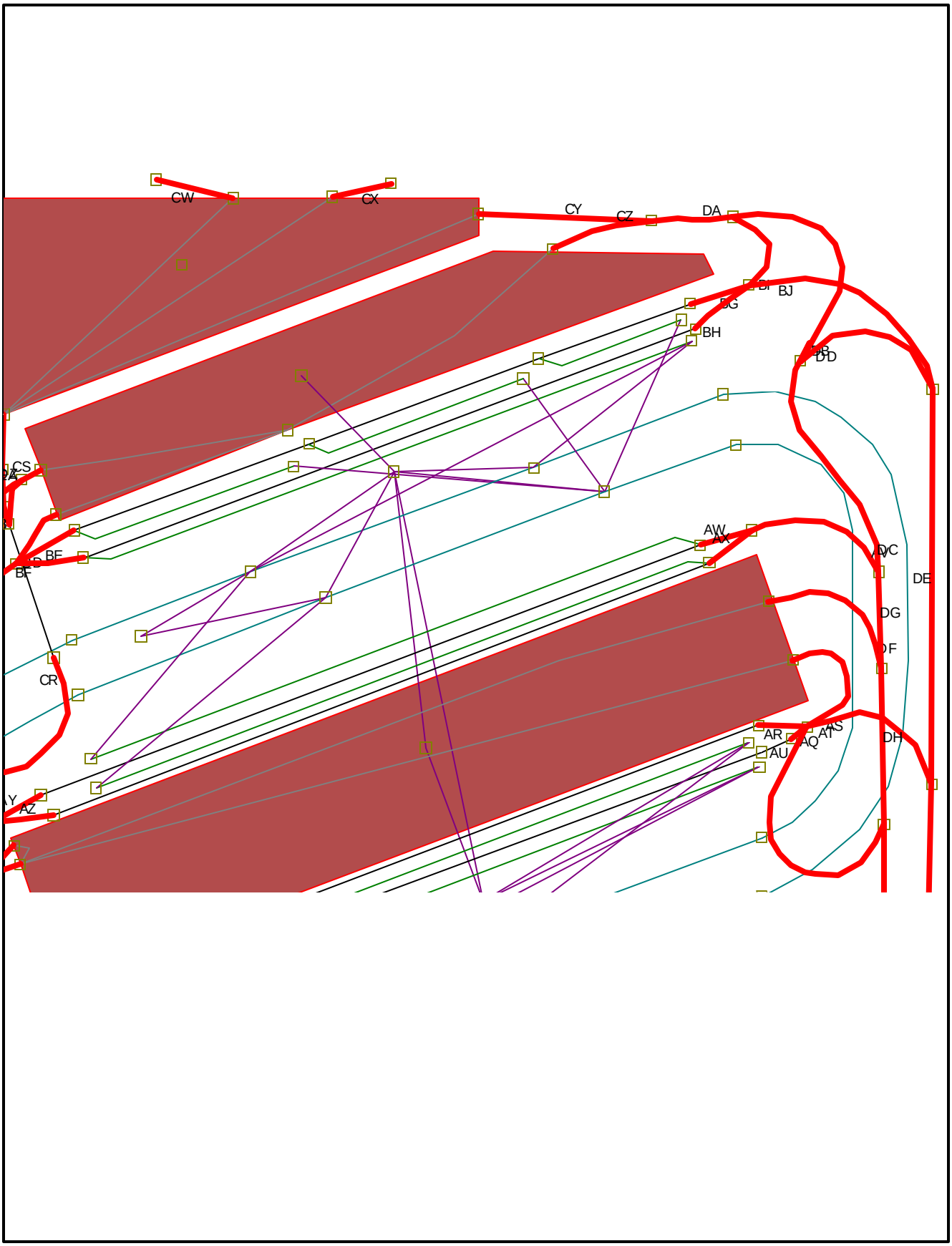


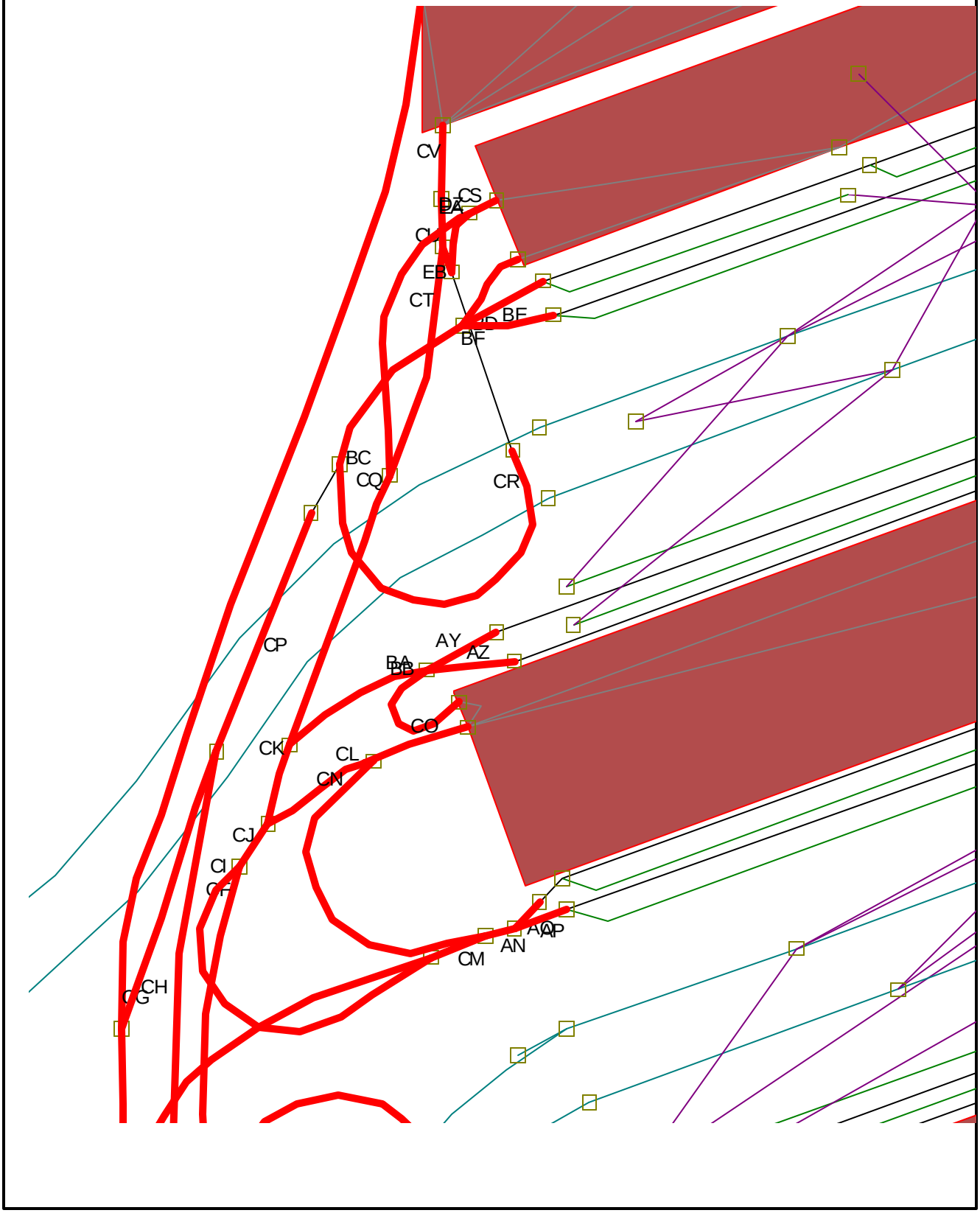
LAX Master Plan **Supplement to the Draft EIS/EIR**	**Zoom 3**	**Figure** **C4**



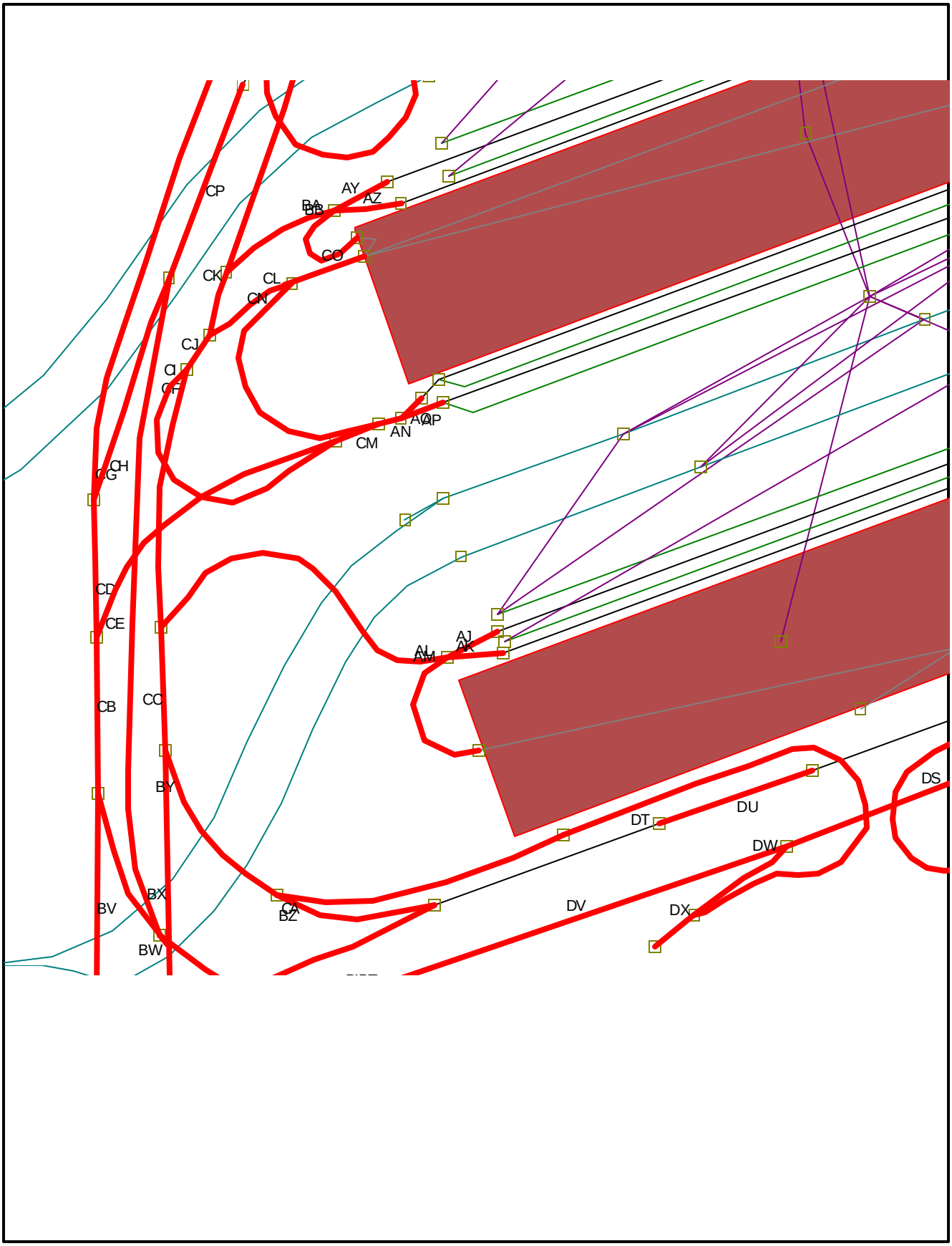
LAX Master Plan **Supplement to the Draft EIS/EIR**	**Zoom 4**	**Figure** **C5**



LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 5	Figure C6



LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 6	Figure C7



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Zoom 7**	**Figure** **C8**

Table C1

LAX Master Plan
Air Quality Data
Alternative: 2015 Alternative D, Mitigated
Airport Peak Hour (11AM-12)

Segment	NB Imperial3	SB Imperial6	NB Imperial4	SB Imperial5	NB Imperial6	SB Imperial2	SB Ramp into ITC STPK	NB Ramp into ITC STPK
% Passenger Vehicle	97%	97%	96%	96%	97%	98%	100%	100%
% Light Duty Trucks	3%	3%	4%	4%	2%	2%	0%	0%
% Medium Bus	0%	0%	0%	0%	0%	0%	0%	0%
% Heavy Bus	0%	0%	0%	0%	1%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	976	1174	676	759	1239	1513	754	300
Average Speed (mph)	36	36	35	35	35	35	25	25

Segment	NB Ramp out of ITC	SB Exit Ramp from ITC Curbfront	NB ITC Street Access	SB ITC Street Access3	WB ITC Road3	EB ITC Road3	NB ITC Street Access3	SB ITC Street Access
% Passenger Vehicle	97%	100%	96%	97%	93%	99%	97%	94%
% Medium Bus	0%	0%	3%	3%	0%	0%	2%	2%
% Heavy Bus	0%	0%	0%	0%	1%	1%	1%	1%
% Heavy Truck	3%	0%	1%	0%	5%	0%	0%	3%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	563	414	2156	2304	1784	1865	2536	2603
Average Speed (mph)	22	25	22	22	15	15	20	19

Segment	111th Enter GTC	111th Exit GTC	NB Imperial7	SB Imperial1	ITC to La Cienega	NB Imperial7, Entrance	La Cienega to ITC	SB Imperial1, Exit
% Passenger Vehicle	96%	96%	96%	97%	98%	96%	100%	96%
% Medium Bus	4%	4%	3%	3%	0%	4%	0%	4%
% Heavy Bus	0%	0%	0%	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	3%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	1884	1981	3123	3493	571	2551	754	2740
Average Speed (mph)	20	19	30	29	35	32	35	32

LAX Master Plan
Air Quality Data
Alternative: 2015 Alternative D, Mitigated
Airport Peak Hour (11AM-12)

Segment	WB La Cienega, Entrance2	EB La Cienega, Exit1	EB La Cienega, Exit1	WB La Cienega, Entrance2	AVIAEN (Aviation Entrance)	GTC Entrance2	GTC Exit	GTC Entrance6
% Passenger Vehicle	97%	97%	96%	96%	95%	96%	96%	96%
% Medium Bus	3%	3%	4%	4%	5%	4%	4%	4%
% Heavy Bus	0%	0%	0%	0%	0%	0%	0%	0%
% Heavy Truck	0%	1%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	2167	1863	1291	1413	281	3964	4031	4245
Average Speed (mph)	33	34	34	33	28	28	31	30

Segment	South Pier, Curbfront B, Entrance	South Pier, Curbfront B, Departures Entrance	South Pier, Curbfront B, Arrivals Entrance	South Pier, Curbfront B, Departures Exit	South Pier, Curbfront B, Arrivals Exit	South Pier, Curbfront B, Exit	Pier 3 Parking, West Entrance	South Pier, Curbfront A, Entrance2
% Passenger Vehicle	100%	100%	100%	100%	100%	100%	99%	68%
% Medium Bus	0%	0%	0%	0%	0%	0%	0%	9%
% Heavy Bus	0%	0%	0%	0%	0%	0%	0%	22%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	99%	100%
Noon Peak Hourly Volume (vph)	1137	534	603	534	603	993	144	2015
Average Speed (mph)	23	3	3	3	3	24	25	21

Segment	South Pier, Curbfront A, Arrivals Entrance1	South Pier, Curbfront A, Departures Entrance	South Pier, Curbfront A, Departures Exit2	South Pier, Curbfront A, Arrivals Exit	Pier 2 Parking, East Recirculate Entrance	South Pier, Curbfront A, Exit	South Pier, Curbfront A, Recirculate to E. GTC Entry	North Pier, Curbfront B, Entrance
% Passenger Vehicle	70%	66%	66%	70%	101%	68%	25%	100%
% Medium Bus	9%	10%	10%	9%	0%	7%	75%	0%
% Heavy Bus	21%	24%	24%	21%	0%	25%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	101%	100%	100%	100%
Noon Peak Hourly Volume (vph)	1066	949	949	1066	137	1779	99	1165
Average Speed (mph)	3	3	3	3	25	22	25	22

LAX Master Plan
Air Quality Data
Alternative: 2015 Alternative D, Mitigated
Airport Peak Hour (11AM-12)

Segment	North Pier, Curbfront B, Departures Entrance	North Pier, Curbfront B, Arrivals Entrance	North Pier, Curbfront B, Departures Exit	North Pier, Curbfront B, Arrivals Exit	North Pier, Curbfront B, Exit	Pier 2 Parking, West Entrance	North Pier, Curbfront A, Entrance2	Pier 1 Parking, West Entrance
% Passenger Vehicle	100%	100%	100%	100%	100%	100%	74%	100%
% Medium Bus	0%	0%	0%	0%	0%	0%	7%	0%
% Heavy Bus	0%	0%	0%	0%	0%	0%	19%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	562	603	562	603	1026	139	2367	331
Average Speed (mph)	22	23	22	23	25	25	23	24

Segment	North Pier, Curbfront A, Arrivals Entrance	North Pier, Curbfront B, Departures Entrance	North Pier, Curbfront A, Arrivals Exit	North Pier, Curbfront A, Departures Exit	North Pier, Curbfront A, Exit to Park1	North Pier, Curbfront A, Exit	CENTEBIN (EB Century, Entrance)	CENTEBEX (EB Century, Exit)
% Passenger Vehicle	72%	67%	72%	67%	75%	69%	82%	95%
% Medium Bus	8%	9%	8%	9%	25%	6%	3%	5%
% Heavy Bus	21%	24%	21%	24%	0%	25%	14%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	1092	945	1092	945	261	1776	1569	1054
Average Speed (mph)	21	19	21	19	25	22	21	24

Segment	EB Century to W. GTC Entrance2	W. GTC Entrance1	S. GTC Entrance1	EB Century to S. GTC Entrance	S. GTC Entrance2	W. GTC Exit6	S. GTC Exit5	S. GTC Exit4
% Passenger Vehicle	70%	92%	100%	100%	100%	100%	92%	94%
% Medium Bus	5%	8%	0%	0%	0%	0%	8%	6%
% Heavy Bus	25%	0%	0%	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	907	2117	2128	662	2791	2052	1980	3034
Average Speed (mph)	34	32	21	23	20	32	23	31

LAX Master Plan
Air Quality Data
Alternative: 2015 Alternative D, Mitigated
Airport Peak Hour (11AM-12)

Segment	S. GTC Recirculate to W. GTC	W. GTC Entrance2	S. GTC Recirculate, South	S. GTC Recirculate, North	W. GTC Recirculate to S. GTC	W. GTC Recirculate2	Century Exit Loop1	W. GTC Entrance3
% Passenger Vehicle	14%	85%	12%	19%	100%	100%	100%	75%
% Medium Bus	0%	7%	0%	0%	0%	0%	0%	6%
% Heavy Bus	86%	7%	88%	81%	0%	0%	0%	19%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	789	3024	511	278	992	652	340	3534
Average Speed (mph)	33	22	22	35	34	23	26	23

Segment	W. GTC Exit5	W. GTC Entrance4	South Pier, Curbfront A, Entrance1	W. GTC Exit4	CVHA Stage Lot, W. Entrance	W. GTC Entrance4	CVHA Ramp to South Pier, Curbfront A	W. GTC Exit3
% Passenger Vehicle	100%	82%	67%	100%	100%	80%	62%	97%
% Medium Bus	0%	6%	7%	0%	0%	6%	37%	3%
% Heavy Bus	0%	13%	26%	0%	0%	13%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	99%	100%
Noon Peak Hourly Volume (vph)	3044	1795	1739	2050	94	1701	190	2240
Average Speed (mph)	31	33	23	24	28	33	25	22

Segment	W. GTC Exit2	P2 Exit	South Pier, Curbfront A, Entrance2	Pier 2 Parking Recirculator	Pier 2 Parking, West Exit	North Pier, Curbfront A, Entrance1	W. GTC Exit0	Pier 1 Recirculation 2
% Passenger Vehicle	95%	100%	67%	100%	100%	72%	85%	84%
% Medium Bus	5%	0%	10%	0%	0%	5%	15%	16%
% Heavy Bus	0%	0%	23%	0%	0%	23%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	1502	739	1929	86	825	1980	476	388
Average Speed (mph)	25	21	21	25	24	24	25	25

LAX Master Plan
Air Quality Data
Alternative: 2015 Alternative D, Mitigated
Airport Peak Hour (11AM-12)

Segment	Pier 1 Parking, Exit	W. GTC Exit1	Pier 1 & CVHA, Exit Road	CVHA Stage Lot, South Exit	CVHA Stage Lot, Aviation Entrance	CVHA Stage Lot, Aviation Exit	CVHA Stage Lot, East Entrance	Peir 1 Parking, East Entrance
% Passenger Vehicle	100%	62%	64%	64%	67%	0%	27%	101%
% Medium Bus	0%	37%	36%	36%	0%	0%	73%	0%
% Heavy Bus	0%	0%	0%	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	33%	100%	0%	0%
Subtotal	100%	99%	100%	100%	100%	100%	100%	101%
Noon Peak Hourly Volume (vph)	493	190	371	371	138	45	191	169
Average Speed (mph)	23	27	25	24	25	25	25	25

Segment	North Pier, Curbfront A, Exit to Park 2	CVEH Entry	E. GTC Entrance5	East Return Loop	E. GTC Exit1	Pier 2 Parking, East Entrance	E. GTC Entrance4	E. GTC Entrance3
% Passenger Vehicle	61%	25%	87%	100%	75%	100%	96%	97%
% Medium Bus	39%	75%	13%	0%	5%	0%	4%	3%
% Heavy Bus	0%	0%	0%	0%	20%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	360	99	549	449	2225	508	1713	2221
Average Speed (mph)	25	25	23	24	30	22	20	23

Segment	E. GTC Entrance2	E. GTC Exit2	E. GTC Entrance1	Pier 3 Parking, E. Entrance	S. GTC Entrance7	Pier 3 Parking, South Exit EB	S. GTC Entrance6	Pier 3 Parking, South Exit WB
% Passenger Vehicle	100%	72%	100%	100%	100%	100%	100%	100%
% Medium Bus	0%	5%	0%	0%	0%	0%	0%	0%
% Heavy Bus	0%	22%	0%	0%	0%	0%	0%	0%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	2122	4004	3259	269	3528	85	3443	382
Average Speed (mph)	32	29	22	25	23	25	24	24

LAX Master Plan
Air Quality Data
Alternative: 2015 Alternative D, Mitigated
Airport Peak Hour (11AM-12)

Segment	S. GTC Exit1	South Recirculator2	S. GTC Exit2	Century Exit Loop2	S. GTC Entrance4	S. Exit3	WB Century Exit1	CENTWBEX (WB Century, Exit2)
% Passenger Vehicle	72%	0%	74%	100%	100%	77%	56%	73%
% Medium Bus	5%	0%	5%	0%	0%	5%	4%	3%
% Heavy Bus	22%	0%	21%	0%	0%	18%	40%	25%
% Heavy Truck	0%	0%	0%	0%	0%	0%	0%	0%
Subtotal	100%	0%	100%	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	4004	0	4386	340	3443	3822	563	903
Average Speed (mph)	29	25	28	25	22	30	23	24

Segment	West Exit ITC	Pier 1 Parking, Exit	P1 Exit to Curb	Pier 1, Recirculation 1	Subtotal
% Passenger Vehicle	0%	100%	100%	65%	89%
% Medium Bus	0%	0%	0%	35%	4%
% Heavy Bus	0%	0%	0%	0%	7%
% Heavy Truck	100%	0%	0%	0%	0%
Subtotal	100%	100%	100%	100%	100%
Noon Peak Hourly Volume (vph)	82	286	207	181	178832
Average Speed (mph)	5	25	20	25	3191

Table C2

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Mitigated

Hour of Day	North Pier, Curbfront A				North Pier, Curbfront B		South Pier, Curbfront A				South Pier, Curbfront B	
	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals
0-1:00	0.91%	2.13%	1.69%	3.31%	2.25%	2.18%	0.66%	1.09%	0.85%	0.36%	0.00%	1.30%
2:00	0.26%	0.43%	0.20%	0.52%	0.82%	0.52%	0.29%	0.65%	0.81%	0.19%	0.00%	0.40%
3:00	0.12%	0.00%	0.00%	0.04%	0.03%	0.01%	0.20%	0.36%	0.36%	0.04%	0.00%	0.30%
4:00	0.09%	0.00%	0.00%	0.06%	0.17%	0.00%	0.14%	0.22%	0.34%	0.05%	0.00%	0.03%
5:00	0.14%	0.00%	0.00%	0.27%	0.73%	0.00%	0.14%	0.00%	0.04%	0.47%	0.49%	0.00%
6:00	0.53%	0.00%	0.05%	1.88%	2.36%	0.25%	0.54%	0.07%	0.21%	3.64%	3.65%	0.21%
7:00	4.62%	0.85%	0.25%	5.01%	7.02%	1.71%	4.59%	1.09%	0.70%	7.31%	6.14%	1.57%
8:00	4.72%	1.28%	1.38%	5.36%	6.95%	1.76%	4.73%	1.67%	2.10%	6.21%	7.62%	1.64%
9:00	4.97%	2.55%	3.83%	6.02%	6.69%	1.76%	5.25%	3.70%	3.59%	6.57%	6.90%	4.01%
10:00	5.55%	5.18%	6.16%	4.28%	5.57%	4.34%	5.45%	4.50%	4.72%	6.99%	7.68%	4.85%
11:00	5.74%	5.89%	6.37%	6.66%	5.36%	5.96%	5.90%	6.53%	6.24%	6.95%	9.26%	7.28%
12:00	7.13%	8.37%	7.72%	7.34%	9.35%	8.76%	7.21%	8.56%	8.31%	7.68%	8.37%	8.52%
13:00	6.67%	6.52%	7.47%	6.14%	6.40%	5.39%	6.92%	7.33%	7.29%	6.27%	6.27%	6.98%
14:00	6.69%	6.81%	9.17%	6.82%	6.07%	3.60%	6.49%	5.52%	6.65%	5.44%	4.81%	4.25%
15:00	6.55%	6.03%	7.36%	6.43%	5.84%	4.77%	6.40%	5.15%	4.98%	5.88%	6.16%	5.51%
16:00	6.64%	6.31%	6.77%	6.41%	5.94%	5.81%	6.51%	5.81%	5.18%	4.70%	5.38%	6.46%
17:00	6.18%	6.95%	6.98%	5.72%	5.84%	6.60%	5.86%	5.52%	5.27%	5.35%	4.55%	5.86%
18:00	6.25%	6.81%	5.89%	4.82%	3.14%	7.37%	6.01%	6.17%	6.96%	5.15%	5.11%	5.33%
19:00	5.74%	4.54%	3.78%	3.10%	2.03%	6.00%	6.04%	6.17%	5.67%	5.41%	3.50%	6.73%
20:00	6.11%	6.03%	5.42%	4.26%	2.21%	7.25%	6.04%	6.02%	6.55%	4.48%	2.85%	5.54%
21:00	5.04%	8.01%	7.12%	6.94%	4.57%	8.53%	4.75%	6.60%	7.06%	3.96%	4.89%	6.13%
22:00	4.97%	7.45%	6.81%	5.40%	5.31%	7.60%	4.88%	6.97%	6.76%	3.59%	3.20%	7.14%
23:00	2.56%	4.96%	3.43%	1.88%	3.93%	6.36%	2.92%	6.39%	5.98%	2.32%	2.90%	6.40%
24:00	1.84%	2.91%	2.13%	1.34%	1.40%	3.44%	2.10%	3.77%	3.37%	0.99%	0.34%	3.58%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table C3

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Mitigated

Hour of Day	Remote Long Term Park Curb	Intermodal Center		Rental Car Lot		Private Long Term Park Curb	East Employee Lot Curb	Central Terminal Area				
		North Curb	South Curb	RAC Curb	Off-RAC Curb			Terminal 1	Terminal 2	TBIT	Terminal 3	Terminal 4
0-1:00	0.70%	0.00%	2.05%	1.82%	0.34%	0.51%	4.34%	2.28%	2.28%	0.21%	2.28%	2.28%
2:00	0.23%	0.00%	1.73%	0.66%	0.17%	0.18%	3.19%	2.28%	2.28%	0.21%	2.28%	2.28%
3:00	0.00%	0.00%	1.37%	0.19%	0.00%	0.15%	1.67%	2.28%	2.28%	0.21%	2.28%	2.28%
4:00	0.00%	0.00%	1.60%	0.30%	0.00%	0.12%	2.49%	2.28%	2.28%	0.21%	2.28%	2.28%
5:00	0.23%	0.82%	2.01%	0.61%	0.17%	0.18%	4.11%	2.28%	2.28%	0.96%	2.28%	2.28%
6:00	1.40%	4.54%	2.23%	1.86%	0.68%	0.66%	4.78%	2.28%	2.28%	4.21%	2.28%	2.28%
7:00	5.81%	8.66%	6.16%	4.15%	5.95%	5.74%	5.54%	5.70%	5.70%	8.28%	5.70%	5.70%
8:00	5.81%	9.90%	5.97%	4.25%	5.95%	5.74%	4.23%	5.70%	5.70%	9.32%	5.70%	5.70%
9:00	5.81%	11.34%	5.75%	4.82%	5.95%	5.74%	3.99%	5.70%	5.70%	10.65%	5.70%	5.70%
10:00	5.81%	12.16%	5.56%	5.18%	5.95%	5.74%	2.03%	5.70%	5.70%	11.46%	5.70%	5.70%
11:00	5.81%	7.42%	5.52%	6.26%	5.95%	5.74%	1.92%	4.56%	4.56%	7.11%	4.56%	4.56%
12:00	5.81%	0.00%	5.56%	7.64%	5.10%	6.80%	2.18%	4.56%	4.56%	0.42%	4.56%	4.56%
13:00	5.81%	0.00%	5.93%	6.28%	5.10%	6.80%	4.55%	4.56%	4.56%	0.42%	4.56%	4.56%
14:00	5.81%	0.00%	5.97%	5.80%	5.10%	6.80%	6.00%	4.56%	4.56%	0.42%	4.56%	4.56%
15:00	5.81%	0.00%	6.16%	5.80%	5.10%	6.80%	6.89%	5.70%	5.70%	0.53%	5.70%	5.70%
16:00	5.81%	0.00%	6.25%	5.73%	5.10%	6.80%	8.66%	5.70%	5.70%	0.53%	5.70%	5.70%
17:00	5.81%	6.80%	6.29%	5.75%	5.44%	6.01%	6.42%	5.70%	5.70%	6.77%	5.70%	5.70%
18:00	5.81%	12.16%	5.97%	5.29%	5.44%	6.01%	4.83%	5.70%	5.70%	11.76%	5.70%	5.70%
19:00	5.81%	9.90%	5.75%	4.29%	5.44%	6.01%	3.42%	5.70%	5.70%	9.64%	5.70%	5.70%
20:00	5.81%	10.10%	2.60%	4.48%	5.44%	6.01%	2.71%	5.70%	5.70%	9.76%	5.70%	5.70%
21:00	5.81%	6.39%	2.74%	5.88%	5.44%	4.14%	2.43%	3.23%	3.23%	6.17%	3.23%	3.23%
22:00	5.81%	0.00%	2.87%	5.67%	5.44%	4.14%	3.66%	3.04%	3.04%	0.28%	3.04%	3.04%
23:00	2.56%	0.00%	2.05%	4.42%	5.44%	1.66%	5.03%	2.47%	2.47%	0.23%	2.47%	2.47%
24:00	1.40%	0.00%	1.82%	2.86%	5.44%	1.51%	4.97%	2.28%	2.28%	0.21%	2.28%	2.28%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table C4

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Mitigated

Hour of Day	GTC/ITC Parking		Staging	
	Park In	Park Out	Inflow	Outflow
0-1:00	1.38%	1.36%	1.67%	1.65%
2:00	0.32%	1.15%	0.62%	0.69%
3:00	0.05%	0.39%	0.31%	0.39%
4:00	0.02%	0.06%	0.29%	0.33%
5:00	0.26%	0.07%	0.47%	0.24%
6:00	2.13%	0.40%	1.75%	0.29%
7:00	3.84%	2.34%	4.15%	1.75%
8:00	4.82%	3.70%	4.34%	2.16%
9:00	5.76%	4.02%	5.02%	3.55%
10:00	6.29%	5.25%	5.47%	5.02%
11:00	7.92%	6.17%	6.66%	6.18%
12:00	7.81%	8.13%	8.24%	8.16%
13:00	6.33%	7.59%	6.60%	6.81%
14:00	5.79%	6.23%	6.04%	6.12%
15:00	6.42%	6.05%	5.98%	5.65%
16:00	6.03%	6.11%	5.80%	6.04%
17:00	5.61%	5.98%	5.76%	6.20%
18:00	4.62%	6.10%	5.43%	6.47%
19:00	4.44%	4.68%	4.50%	5.53%
20:00	4.81%	4.40%	4.09%	5.49%
21:00	6.04%	5.32%	5.65%	6.55%
22:00	5.12%	6.30%	5.32%	6.55%
23:00	3.04%	5.30%	3.86%	5.24%
24:00	1.14%	2.89%	1.97%	3.00%
Total	100.00%	100.00%	100.00%	100.00%

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Attachment D

APM Ridership

Planned Alternative D, Year 2015

Table D1

ITC Loop Automated People Mover Link Volumes
Alternative D, 2015 - Airport Peak

TOTAL LINK VOLUME (people/hr)

Time (Hour Beginning)	Link ITC IB->T 4 IB	T 4 IB->T 3 IB	T 3 IB->T 2 IB	T 2 IB->T 1 IB	T 1 IB->T 1 TB	T 1 TB->T 1 OB	T 1 OB->T 2 OB	T 2 OB->T 3 OB	T 3 OB->T 4 OB	T 4 OB->ITC OB	ITC OB->ITC TB	ITC TB->ITC IB	Subtotal
12:00 AM	1065	1073	977	685	0	0	374	728	860	1032	0	0	6794
1:00 AM	247	231	194	98	0	0	376	563	690	739	0	0	3139
2:00 AM	36	40	15	5	0	0	118	176	218	254	0	0	863
3:00 AM	52	44	37	8	0	0	6	9	50	54	0	0	260
4:00 AM	270	206	128	36	0	0	1	32	43	44	0	0	759
5:00 AM	1685	1202	634	282	0	0	36	70	165	240	0	0	4314
6:00 AM	3058	2410	1421	612	0	0	167	551	1022	1433	0	0	10675
7:00 AM	3570	2590	1749	919	0	0	417	1024	1663	2240	0	0	14171
8:00 AM	4111	3215	2193	1253	0	0	753	1244	1932	2667	0	0	17368
9:00 AM	4303	3128	1972	1008	0	0	1095	1864	2751	3575	0	0	19696
10:00 AM	5415	4056	2817	1682	0	0	1083	1945	3089	4280	0	0	24365
11:00 AM	5555	4376	3142	1719	0	0	1544	2865	4240	5683	0	0	29123
12:00 PM	4452	3658	2632	1562	0	0	1550	2699	3915	5170	0	0	25639
1:00 PM	4106	3354	2565	1487	0	0	1663	2445	3514	4346	0	0	23482
2:00 PM	4461	3506	2617	1534	0	0	1472	2435	3299	4178	0	0	23502
3:00 PM	4182	3341	2620	1549	0	0	1340	2412	3263	4286	0	0	22992
4:00 PM	3863	3205	2263	1224	0	0	1474	2564	3351	4256	0	0	22201
5:00 PM	3138	2353	1599	950	0	0	1294	2365	3449	4317	0	0	19465
6:00 PM	2858	2351	1429	754	0	0	768	1465	2360	3353	0	0	15339
7:00 PM	3072	2614	1865	1176	0	0	771	1581	2576	3294	0	0	16948
8:00 PM	4125	3353	2615	1693	0	0	1207	2241	3205	3989	0	0	22428
9:00 PM	3512	2913	2205	1216	0	0	1501	2603	3496	4503	0	0	21950
10:00 PM	2118	1698	1211	533	0	0	1022	1988	2878	3740	0	0	15186
11:00 PM	777	745	625	345	0	0	470	1040	1567	2120	0	0	7690
Subtotal	70031	55658	39526	22330	0	0	20503	36909	53595	69796	0	0	368348

Table D2

ITC Loop Automated People Mover Total Boardings/Alightings
Alternative D, 2015 - Airport Peak

TOTAL BOARDINGS (people/hr)

Time	Station												
(Hour Beginning)	ITC IB	T 4 IB	T 3 IB	T 2 IB	T 1 IB	T 1 TB	T 1 OB	T 2 OB	T 3 OB	T 4 OB	ITC OB	ITC TB	Subtotal
12:00 AM	1065	26	9	15	0	0	374	354	132	172	0	0	2147
1:00 AM	247	7	9	4	0	0	376	187	127	49	0	0	1007
2:00 AM	36	6	3	0	0	0	118	58	41	36	0	0	299
3:00 AM	52	0	4	0	0	0	6	3	42	4	0	0	110
4:00 AM	270	0	0	0	0	0	1	31	11	1	0	0	314
5:00 AM	1685	1	2	0	0	0	36	34	95	76	0	0	1929
6:00 AM	3058	36	11	12	0	0	167	384	470	412	0	0	4550
7:00 AM	3570	44	30	14	0	0	417	607	639	577	0	0	5897
8:00 AM	4111	77	42	12	0	0	753	491	688	735	0	0	6908
9:00 AM	4303	88	56	32	0	0	1095	768	887	825	0	0	8054
10:00 AM	5415	161	88	43	0	0	1083	861	1144	1191	0	0	9986
11:00 AM	5555	190	112	66	0	0	1544	1322	1375	1443	0	0	11605
12:00 PM	4452	167	100	45	0	0	1550	1149	1216	1256	0	0	9934
1:00 PM	4106	95	91	30	0	0	1663	782	1069	832	0	0	8669
2:00 PM	4461	123	68	39	0	0	1472	963	863	879	0	0	8869
3:00 PM	4182	154	76	47	0	0	1340	1072	851	1023	0	0	8744
4:00 PM	3863	124	74	46	0	0	1474	1090	788	905	0	0	8364
5:00 PM	3138	133	104	50	0	0	1294	1071	1083	868	0	0	7743
6:00 PM	2858	148	70	42	0	0	768	697	895	993	0	0	6471
7:00 PM	3072	120	87	49	0	0	771	810	994	718	0	0	6621
8:00 PM	4125	139	91	63	0	0	1207	1033	965	784	0	0	8407
9:00 PM	3512	150	88	50	0	0	1501	1101	894	1007	0	0	8303
10:00 PM	2118	150	77	44	0	0	1022	966	890	862	0	0	6130
11:00 PM	777	72	37	26	0	0	470	570	526	554	0	0	3033
Subtotal	70031	2211	1330	727	0	0	20503	16406	16686	16201	0	0	144095

Table D3

TOTAL ALIGHTINGS (people/hr)

Time	Station												
(Hour Beginning)	ITC IB	T 4 IB	T 3 IB	T 2 IB	T 1 IB	T 1 TB	T 1 OB	T 2 OB	T 3 OB	T 4 OB	ITC OB	ITC TB	Subtotal
12:00 AM	0	18	104	308	685	0	0	0	0	0	1032	0	2147
1:00 AM	0	24	46	100	98	0	0	0	0	0	739	0	1007
2:00 AM	0	2	28	10	5	0	0	0	0	0	254	0	299
3:00 AM	0	9	11	29	8	0	0	0	0	0	54	0	110
4:00 AM	0	64	79	92	36	0	0	0	0	0	44	0	314
5:00 AM	0	484	570	352	282	0	0	0	0	0	240	0	1929
6:00 AM	0	685	999	821	612	0	0	0	0	0	1433	0	4550
7:00 AM	0	1024	871	844	919	0	0	0	0	0	2240	0	5897
8:00 AM	0	973	1064	952	1253	0	0	0	0	0	2667	0	6908
9:00 AM	0	1262	1212	996	1008	0	0	0	0	0	3575	0	8054
10:00 AM	0	1521	1325	1178	1682	0	0	0	0	0	4280	0	9986
11:00 AM	0	1368	1346	1488	1719	0	0	0	0	0	5683	0	11605
12:00 PM	0	961	1126	1114	1562	0	0	0	0	0	5170	0	9934
1:00 PM	0	848	879	1108	1487	0	0	0	0	0	4346	0	8669
2:00 PM	0	1079	957	1122	1534	0	0	0	0	0	4178	0	8869
3:00 PM	0	995	797	1118	1549	0	0	0	0	0	4286	0	8744
4:00 PM	0	783	1016	1085	1224	0	0	0	0	0	4256	0	8364
5:00 PM	0	919	858	700	950	0	0	0	0	0	4317	0	7743
6:00 PM	0	655	992	717	754	0	0	0	0	0	3353	0	6471
7:00 PM	0	577	837	738	1176	0	0	0	0	0	3294	0	6621
8:00 PM	0	912	829	985	1693	0	0	0	0	0	3989	0	8407
9:00 PM	0	749	795	1039	1216	0	0	0	0	0	4503	0	8303
10:00 PM	0	570	564	722	533	0	0	0	0	0	3740	0	6130
11:00 PM	0	104	157	306	345	0	0	0	0	0	2120	0	3033
Subtotal	0	16584	17462	17924	22330	0	0	0	0	0	69796	0	144095

Table D4

Inner Loop Automated People Mover Link Volumes
Alternative D, 2015- Airport Peak

TOTAL LINK VOLUME (people/hr)

Time (Hour Beginning)	Link GTC T 4->GTC T 3	GTC T 3->T 4	T 4->T 3	T 3->T 2	T 2->T 1	T 1->RAC	RAC->GTC T 2	GTC T 2->GTC T 1	GTC T 1->GTC T 4	Subtotal
12:00 AM	10	108	251	280	918	1493	915	427	0	4401
1:00 AM	14	64	134	185	453	768	474	259	0	2349
2:00 AM	0	15	59	87	158	253	151	74	0	796
3:00 AM	0	4	14	36	48	57	175	3	0	337
4:00 AM	78	180	108	15	43	47	325	0	0	797
5:00 AM	669	1529	887	59	113	152	350	21	0	3780
6:00 AM	1042	2501	1568	174	687	831	829	112	0	7745
7:00 AM	1413	2574	1243	193	832	1245	1151	355	0	9005
8:00 AM	1295	2638	1555	408	960	1967	1430	823	0	11077
9:00 AM	1558	3051	1688	404	1429	3002	2278	1305	0	14714
10:00 AM	1914	3450	1841	580	1863	3446	2443	1305	0	16842
11:00 AM	1754	3408	2024	758	2810	4901	3524	1748	0	20927
12:00 PM	1268	2582	1652	698	2184	4240	3171	1715	0	17509
1:00 PM	1044	2100	1296	607	1625	4102	3077	2016	0	15866
2:00 PM	1337	2487	1470	637	1949	3997	2907	1662	0	16446
3:00 PM	1194	2052	1235	710	2264	4154	3060	1521	0	16189
4:00 PM	939	2089	1512	698	2375	4423	3073	1654	0	16764
5:00 PM	1065	2050	1275	677	2440	4210	2937	1444	0	16098
6:00 PM	742	1891	1483	630	1889	2926	1897	843	0	12302
7:00 PM	621	1531	1174	586	2080	3335	2262	1005	0	12595
8:00 PM	1063	1937	1150	612	2428	4276	3049	1509	0	16024
9:00 PM	813	1646	1167	672	2429	4463	3256	1690	0	16135
10:00 PM	664	1252	928	676	2247	3466	2438	1014	0	12683
11:00 PM	102	277	443	534	1484	2172	1250	515	0	6777
Subtotal	20597	41415	26155	10914	35709	63926	46421	23020	0	268158

Table D5

Inner Loop Automated People Mover Total Boardings/Alightings
Alternative D, 2015 - Airport Peak
TOTAL BOARDINGS (people/hr)

Time (Hour Beginning)	Station									
	GTC T 4	GTC T 3	T 4	T 3	T 2	T 1	RAC	GTC T 2	GTC T 1	Subtotal
12:00 AM	10	98	153	128	637	576	57	0	0	1658
1:00 AM	14	50	83	101	268	315	50	0	0	882
2:00 AM	0	15	43	44	71	94	43	0	0	311
3:00 AM	0	4	10	26	12	9	171	0	0	232
4:00 AM	78	101	7	8	27	5	306	0	0	533
5:00 AM	669	860	27	31	55	39	306	0	0	1987
6:00 AM	1042	1459	109	65	513	144	321	0	0	3653
7:00 AM	1413	1161	82	110	639	413	256	0	0	4075
8:00 AM	1295	1344	211	198	552	1007	171	0	0	4776
9:00 AM	1558	1493	195	210	1025	1574	121	0	0	6174
10:00 AM	1914	1536	306	274	1283	1583	93	0	0	6988
11:00 AM	1754	1654	370	387	2053	2091	107	0	0	8416
12:00 PM	1268	1314	338	360	1486	2057	235	0	0	7058
1:00 PM	1044	1056	240	367	1018	2477	264	0	0	6465
2:00 PM	1337	1150	321	316	1312	2048	235	0	0	6719
3:00 PM	1194	858	377	333	1554	1890	349	0	0	6555
4:00 PM	939	1150	362	335	1678	2048	142	0	0	6655
5:00 PM	1065	985	290	387	1764	1770	128	0	0	6388
6:00 PM	742	1149	334	297	1259	1036	93	0	0	4910
7:00 PM	621	910	264	322	1494	1255	93	0	0	4958
8:00 PM	1063	873	276	336	1816	1848	100	0	0	6312
9:00 PM	813	834	333	339	1757	2034	164	0	0	6273
10:00 PM	664	588	339	336	1571	1219	199	0	0	4917
11:00 PM	102	176	267	267	951	687	57	0	0	2506
Subtotal	20597	20818	5337	5577	24795	28217	4061	0	0	109402

Table D6

TOTAL ALIGHTINGS (people/hr)

Time (Hour Beginning)	Station GTC T 4	GTC T 3	T 4	T 3	T 2	T 1	RAC	GTC T 2	GTC T 1	Subtotal
12:00 AM	0	0	10	98	0	0	635	488	427	1658
1:00 AM	0	0	14	50	0	0	344	215	259	882
2:00 AM	0	0	0	15	0	0	144	78	74	311
3:00 AM	0	0	0	4	0	0	53	172	3	232
4:00 AM	0	0	78	101	0	0	28	325	0	533
5:00 AM	0	0	669	860	0	0	108	329	21	1987
6:00 AM	0	0	1042	1459	0	0	323	717	112	3653
7:00 AM	0	0	1413	1161	0	0	351	796	355	4075
8:00 AM	0	0	1295	1344	0	0	708	607	823	4776
9:00 AM	0	0	1558	1493	0	0	846	973	1305	6174
10:00 AM	0	0	1914	1536	0	0	1096	1137	1305	6988
11:00 AM	0	0	1754	1654	0	0	1484	1776	1748	8416
12:00 PM	0	0	1268	1314	0	0	1304	1457	1715	7058
1:00 PM	0	0	1044	1056	0	0	1289	1061	2016	6465
2:00 PM	0	0	1337	1150	0	0	1325	1245	1662	6719
3:00 PM	0	0	1194	858	0	0	1444	1539	1521	6555
4:00 PM	0	0	939	1150	0	0	1493	1418	1654	6655
5:00 PM	0	0	1065	985	0	0	1402	1493	1444	6388
6:00 PM	0	0	742	1149	0	0	1121	1055	843	4910
7:00 PM	0	0	621	910	0	0	1165	1257	1005	4958
8:00 PM	0	0	1063	873	0	0	1327	1540	1509	6312
9:00 PM	0	0	813	834	0	0	1371	1566	1690	6273
10:00 PM	0	0	664	588	0	0	1227	1423	1014	4917
11:00 PM	0	0	102	176	0	0	979	735	515	2506
Subtotal	0	0	20597	20818	0	0	21567	23401	23020	109402

Table D7

Outer Loop Automated People Mover Link Volumes
Alternative D, 2015 - Airport Peak

TOTAL LINK VOLUME (people/hr)

Time (Hour Beginning)	Link GTC T 4->GTC T1	GTC T1->GTC T 2	GTC T 2->RAC	RAC ->T 1	T 1->T 2	T 2->T 3	T 3->T 4	T 4->GTC T3	GTC T3->GTC T 4	Subtotal
12:00 AM	0	890	1588	1678	632	120	218	398	237	5761
1:00 AM	0	117	460	387	239	53	188	224	62	1730
2:00 AM	0	0	99	61	52	27	73	109	52	473
3:00 AM	0	0	56	249	210	110	122	69	4	821
4:00 AM	0	37	175	620	506	241	130	11	0	1720
5:00 AM	0	396	902	1765	1205	567	332	125	51	5343
6:00 AM	0	782	2074	3422	2395	845	738	777	421	11455
7:00 AM	0	1028	2271	3572	2317	800	1049	1103	501	12642
8:00 AM	0	1335	2677	3818	2301	777	1192	1630	847	14576
9:00 AM	0	893	2021	3103	2232	892	1504	1984	958	13588
10:00 AM	0	1690	2936	4207	2389	979	1905	2764	1439	18309
11:00 AM	0	1709	3569	5068	3275	1097	2347	3477	1745	22287
12:00 PM	0	1487	2879	4109	2547	943	2045	3014	1497	18520
1:00 PM	0	1579	3041	4133	2497	868	1848	2290	921	17177
2:00 PM	0	1545	3103	4110	2459	896	1544	2103	1061	16821
3:00 PM	0	1533	3124	4119	2446	857	1554	2306	1258	17196
4:00 PM	0	1239	2799	3469	2214	754	1398	2137	1136	15147
5:00 PM	0	935	1831	2414	1463	709	1808	2432	1034	12626
6:00 PM	0	574	1310	1747	1178	577	1402	2405	1279	10473
7:00 PM	0	1022	1730	2214	1154	521	1565	2275	983	11463
8:00 PM	0	1824	2909	3830	1848	694	1744	2404	1076	16329
9:00 PM	0	1279	2543	3384	2037	644	1624	2589	1326	15425
10:00 PM	0	415	1415	1926	1508	528	1506	2378	1184	10860
11:00 PM	0	301	948	844	551	191	803	1414	714	5767
Subtotal	0	22609	46462	64248	39654	14691	28641	40418	19786	276509

Table D8

Outer Loop Automated People Mover Total Boardings/Alightings
Alternative D, 2015 - Airport Peak

TOTAL BOARDINGS (people/hr)

Time (Hour Beginning)	Station GTC T 4	GTC T1	GTC T 2	RAC	T 1	T 2	T 3	T 4	GTC T3	Subtotal
12:00 AM	0	890	699	381	57	30	165	237	0	2458
1:00 AM	0	117	344	133	6	7	166	62	0	835
2:00 AM	0	0	99	55	0	0	59	52	0	265
3:00 AM	0	0	56	222	0	0	67	4	0	348
4:00 AM	0	37	138	467	0	0	11	0	0	653
5:00 AM	0	396	506	941	0	1	75	51	0	1970
6:00 AM	0	782	1292	1476	3	23	361	421	0	4358
7:00 AM	0	1028	1244	1386	31	26	616	501	0	4833
8:00 AM	0	1335	1343	1297	99	23	804	847	0	5747
9:00 AM	0	893	1128	1125	178	61	1053	958	0	5397
10:00 AM	0	1690	1246	1335	192	83	1368	1439	0	7352
11:00 AM	0	1709	1859	1570	251	127	1787	1745	0	9050
12:00 PM	0	1487	1393	1365	228	87	1567	1497	0	7622
1:00 PM	0	1579	1463	1320	300	58	1414	921	0	7054
2:00 PM	0	1545	1558	1335	219	76	1076	1061	0	6870
3:00 PM	0	1533	1591	1358	206	90	1085	1258	0	7121
4:00 PM	0	1239	1560	1047	243	89	1038	1136	0	6352
5:00 PM	0	935	896	847	191	98	1450	1034	0	5450
6:00 PM	0	574	736	622	99	82	1160	1279	0	4553
7:00 PM	0	1022	707	613	132	95	1335	983	0	4887
8:00 PM	0	1824	1086	1020	219	121	1373	1076	0	6718
9:00 PM	0	1279	1264	977	219	97	1306	1326	0	6467
10:00 PM	0	415	1001	724	110	86	1232	1184	0	4752
11:00 PM	0	301	648	238	73	51	719	714	0	2743
Subtotal	0	22609	23853	21854	3055	1412	21287	19786	0	113855

Table D9

TOTAL ALIGHTINGS (people/hr)

Time (Hour Beginning)	Station GTC T 4	GTC T1	GTC T 2	RAC	T 1	T 2	T 3	T 4	GTC T3	Subtotal
12:00 AM	237	0	0	292	1102	541	68	57	161	2458
1:00 AM	62	0	0	207	154	193	31	26	162	835
2:00 AM	52	0	0	93	10	24	13	16	58	265
3:00 AM	4	0	0	28	38	100	54	57	65	348
4:00 AM	0	0	0	21	115	265	121	120	11	653
5:00 AM	51	0	0	78	560	638	311	258	74	1970
6:00 AM	421	0	0	128	1030	1572	468	383	355	4358
7:00 AM	501	0	0	85	1286	1544	367	447	602	4833
8:00 AM	847	0	0	157	1616	1547	389	409	783	5747
9:00 AM	958	0	0	43	1050	1401	442	478	1026	5397
10:00 AM	1439	0	0	64	2010	1492	442	580	1325	7352
11:00 AM	1745	0	0	71	2044	2305	537	615	1732	9050
12:00 PM	1497	0	0	135	1789	1691	464	528	1517	7622
1:00 PM	921	0	0	228	1936	1687	433	479	1369	7054
2:00 PM	1061	0	0	328	1870	1639	428	502	1042	6870
3:00 PM	1258	0	0	363	1879	1680	388	506	1048	7121
4:00 PM	1136	0	0	378	1498	1549	394	397	1002	6352
5:00 PM	1034	0	0	264	1142	852	350	410	1399	5450
6:00 PM	1279	0	0	185	667	683	335	277	1126	4553
7:00 PM	983	0	0	128	1192	729	291	273	1292	4887
8:00 PM	1076	0	0	100	2200	1275	323	416	1328	6718
9:00 PM	1326	0	0	135	1567	1490	325	362	1263	6467
10:00 PM	1184	0	0	214	528	1066	254	312	1194	4752
11:00 PM	714	0	0	342	366	411	107	103	701	2743
Subtotal	19786	0	0	4068	27649	26375	7337	8009	20632	113855

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Attachment E

APM Ridership

Mitigated Alternative D, Year 2015

Table E1

ITC Loop Automated People Mover Link Volumes
Alternative D Mitigated, 2015 - Airport Peak

TOTAL LINK VOLUME (people/hr)

Time (Hour Beginning)	Link: ITC IB->T 4 IB	T 4 IB->T 3 IB	T 3 IB->T 2 IB	T 2 IB->T 1 IB	T 1 IB->T 1 TB	T 1 TB->T 1 OB	T 1 OB->T 2 OB	T 2 OB->T 3 OB	T 3 OB->T 4 OB	T 4 OB->ITC OB	ITC OB->ITC TB	ITC TB->ITC IB	Subtotal
12:00 AM	1065	1073	977	685	0	0	372	724	856	1027	0	0	6779
1:00 AM	247	231	194	98	0	0	374	560	686	735	0	0	3124
2:00 AM	36	40	15	5	0	0	118	175	216	253	0	0	858
3:00 AM	52	44	37	8	0	0	5	9	50	54	0	0	259
4:00 AM	270	206	128	36	0	0	1	32	43	44	0	0	759
5:00 AM	1685	1202	634	282	0	0	35	69	164	239	0	0	4310
6:00 AM	3058	2410	1421	612	0	0	166	548	1016	1424	0	0	10655
7:00 AM	3570	2590	1749	919	0	0	414	1017	1653	2225	0	0	14137
8:00 AM	4110	3214	2193	1253	0	0	748	1237	1921	2651	0	0	17327
9:00 AM	4303	3128	1972	1007	0	0	1069	1853	2735	3555	0	0	19642
10:00 AM	5414	4054	2817	1681	0	0	1077	1934	3072	4256	0	0	24305
11:00 AM	5560	4380	3144	1720	0	0	1536	2852	4221	5657	0	0	29070
12:00 PM	4456	3661	2634	1564	0	0	1543	2686	3896	5146	0	0	25586
1:00 PM	4110	3357	2568	1488	0	0	1855	2434	3498	4326	0	0	23436
2:00 PM	4465	3509	2619	1535	0	0	1465	2424	3283	4158	0	0	23459
3:00 PM	4184	3343	2621	1549	0	0	1333	2401	3248	4266	0	0	22946
4:00 PM	3865	3207	2264	1225	0	0	1467	2552	3336	4237	0	0	22153
5:00 PM	3140	2354	1600	950	0	0	1288	2355	3433	4296	0	0	19417
6:00 PM	2859	2352	1429	755	0	0	785	1459	2350	3339	0	0	15308
7:00 PM	3073	2615	1865	1176	0	0	768	1575	2585	3280	0	0	16918
8:00 PM	4127	3354	2616	1694	0	0	1202	2231	3192	3973	0	0	22389
9:00 PM	3514	2914	2206	1216	0	0	1494	2591	3481	4484	0	0	21900
10:00 PM	2119	1699	1211	533	0	0	1016	1978	2885	3723	0	0	15144
11:00 PM	777	746	626	345	0	0	468	1036	1560	2111	0	0	7669
Subtotal	70060	55682	39540	22335	0	0	20397	36732	53342	69462	0	0	367550

Table E2

ITC Loop Automated People Mover Total Boardings/Alightings
Alternative D Mitigated, 2015 - Airport Peak

TOTAL BOARDINGS (people/hr)

Time (Hour Beginning)	Station												
	ITC IB	T 4 IB	T 3 IB	T 2 IB	T 1 IB	T 1 TB	T 1 OB	T 2 OB	T 3 OB	T 4 OB	ITC OB	ITC TB	Subtotal
12:00 AM	1065	26	9	15	0	0	372	352	132	172	0	0	2142
1:00 AM	247	7	9	4	0	0	374	186	127	49	0	0	1002
2:00 AM	36	6	3	0	0	0	118	58	41	36	0	0	298
3:00 AM	52	0	4	0	0	0	5	3	41	4	0	0	110
4:00 AM	270	0	0	0	0	0	1	31	11	1	0	0	314
5:00 AM	1685	1	2	0	0	0	35	34	94	75	0	0	1927
6:00 AM	3058	36	11	12	0	0	166	382	468	409	0	0	4541
7:00 AM	3570	44	30	14	0	0	414	604	636	572	0	0	5883
8:00 AM	4110	77	42	12	0	0	748	489	684	730	0	0	6892
9:00 AM	4303	88	56	32	0	0	1089	764	882	819	0	0	8032
10:00 AM	5414	161	88	43	0	0	1077	857	1138	1183	0	0	9961
11:00 AM	5560	190	112	66	0	0	1536	1316	1369	1436	0	0	11584
12:00 PM	4456	167	100	45	0	0	1543	1143	1210	1250	0	0	9914
1:00 PM	4110	95	91	30	0	0	1655	778	1065	828	0	0	8652
2:00 PM	4465	123	68	39	0	0	1465	959	859	875	0	0	8854
3:00 PM	4184	154	76	47	0	0	1333	1068	847	1018	0	0	8727
4:00 PM	3865	124	74	46	0	0	1467	1085	784	901	0	0	8347
5:00 PM	3140	133	104	50	0	0	1288	1067	1079	864	0	0	7726
6:00 PM	2859	148	70	42	0	0	765	694	891	989	0	0	6458
7:00 PM	3073	120	87	49	0	0	768	807	990	715	0	0	6609
8:00 PM	4127	139	91	63	0	0	1202	1030	961	781	0	0	8393
9:00 PM	3514	150	88	50	0	0	1494	1097	890	1002	0	0	8285
10:00 PM	2119	150	77	44	0	0	1016	962	886	859	0	0	6114
11:00 PM	777	72	37	26	0	0	468	568	524	551	0	0	3024
Subtotal	70060	2211	1330	727	0	0	20397	16335	16610	16120	0	0	143790

Table E3

TOTAL ALIGHTINGS (people/hr)

Time	Station												
(Hour Beginning)	ITC IB	T 4 IB	T 3 IB	T 2 IB	T 1 IB	T 1 TB	T 1 OB	T 2 OB	T 3 OB	T 4 OB	ITC OB	ITC TB	Subtotal
12:00 AM	0	18	104	308	685	0	0	0	0	0	1027	0	2142
1:00 AM	0	24	46	100	98	0	0	0	0	0	735	0	1002
2:00 AM	0	2	28	10	5	0	0	0	0	0	253	0	298
3:00 AM	0	9	11	29	8	0	0	0	0	0	54	0	110
4:00 AM	0	64	79	92	36	0	0	0	0	0	44	0	314
5:00 AM	0	484	570	352	282	0	0	0	0	0	239	0	1927
6:00 AM	0	684	999	821	612	0	0	0	0	0	1424	0	4541
7:00 AM	0	1024	871	844	919	0	0	0	0	0	2225	0	5883
8:00 AM	0	973	1064	952	1253	0	0	0	0	0	2651	0	6892
9:00 AM	0	1262	1212	996	1007	0	0	0	0	0	3555	0	8032
10:00 AM	0	1521	1325	1178	1681	0	0	0	0	0	4256	0	9961
11:00 AM	0	1369	1348	1490	1720	0	0	0	0	0	5657	0	11584
12:00 PM	0	961	1127	1115	1564	0	0	0	0	0	5146	0	9914
1:00 PM	0	848	880	1109	1488	0	0	0	0	0	4326	0	8652
2:00 PM	0	1080	957	1123	1535	0	0	0	0	0	4158	0	8854
3:00 PM	0	995	797	1119	1549	0	0	0	0	0	4266	0	8727
4:00 PM	0	783	1017	1085	1225	0	0	0	0	0	4237	0	8347
5:00 PM	0	919	859	701	950	0	0	0	0	0	4298	0	7726
6:00 PM	0	655	993	717	755	0	0	0	0	0	3339	0	6458
7:00 PM	0	577	837	738	1176	0	0	0	0	0	3280	0	6609
8:00 PM	0	912	829	985	1694	0	0	0	0	0	3973	0	8393
9:00 PM	0	750	796	1040	1216	0	0	0	0	0	4484	0	8285
10:00 PM	0	571	565	723	533	0	0	0	0	0	3723	0	6114
11:00 PM	0	104	157	307	345	0	0	0	0	0	2111	0	3024
Subtotal	0	16589	17471	17932	22335	0	0	0	0	0	69462	0	143790

Table E4

Inner Loop Automated People Mover Link Volumes
Alternative D Mitigated, 2015- Airport Peak

TOTAL LINK VOLUME (people/hr)

Time (Hour Beginning)	Link GTC T 4->GTC T 3	GTC T 3->T 4	T 4->T 3	T 3->T 2	T 2->T 1	T 1->RAC	RAC->GTC T 2	GTC T 2->GTC T 1	GTC T 1->GTC T 4	Subtotal
12:00 AM	10	108	250	278	916	1493	918	429	0	4403
1:00 AM	14	64	133	183	451	769	477	262	0	2353
2:00 AM	0	15	58	86	158	253	152	74	0	797
3:00 AM	0	4	14	36	48	57	173	3	0	335
4:00 AM	78	180	108	15	43	47	322	0	0	794
5:00 AM	669	1529	887	58	113	151	348	21	0	3776
6:00 AM	1042	2501	1567	173	688	833	829	113	0	7747
7:00 AM	1413	2574	1242	192	834	1250	1155	358	0	9019
8:00 AM	1295	2638	1554	407	961	1972	1436	828	0	11092
9:00 AM	1558	3051	1687	404	1432	3012	2287	1312	0	14744
10:00 AM	1914	3450	1841	579	1866	3456	2452	1312	0	16871
11:00 AM	1753	3405	2022	757	2815	4913	3536	1755	0	20958
12:00 PM	1267	2580	1650	697	2188	4252	3182	1722	0	17537
1:00 PM	1043	2098	1294	605	1626	4111	3085	2023	0	15887
2:00 PM	1336	2485	1468	635	1950	4004	2916	1669	0	16464
3:00 PM	1193	2051	1233	708	2265	4161	3067	1527	0	16205
4:00 PM	939	2088	1511	695	2376	4430	3083	1662	0	16783
5:00 PM	1065	2049	1273	675	2442	4218	2946	1450	0	16119
6:00 PM	742	1890	1482	629	1890	2930	1903	846	0	12313
7:00 PM	621	1530	1173	585	2082	3339	2268	1009	0	12608
8:00 PM	1063	1936	1149	611	2431	4284	3058	1514	0	16046
9:00 PM	812	1645	1166	671	2432	4473	3266	1697	0	16163
10:00 PM	663	1251	927	674	2248	3472	2445	1020	0	12701
11:00 PM	101	277	442	532	1483	2172	1254	518	0	6779
Subtotal	20591	41400	26133	10889	35740	64053	46558	23126	0	268490

Table E5

Inner Loop Automated People Mover Total Boardings/Alightings
Alternative D Mitigated, 2015 - Airport Peak
TOTAL BOARDINGS (people/hr)

Time	Station									
(Hour Beginning)	GTC T 4	GTC T 3	T 4	T 3	T 2	T 1	RAC	GTC T 2	GTC T 1	Subtotal
12:00 AM	10	98	152	127	638	577	56	0	0	1658
1:00 AM	14	50	82	101	268	317	49	0	0	882
2:00 AM	0	15	43	43	71	95	42	0	0	310
3:00 AM	0	4	10	26	12	9	169	0	0	230
4:00 AM	78	101	7	8	27	5	303	0	0	530
5:00 AM	669	860	27	31	55	39	303	0	0	1984
6:00 AM	1042	1459	108	65	514	145	317	0	0	3652
7:00 AM	1413	1161	82	110	642	416	254	0	0	4078
8:00 AM	1295	1344	210	197	554	1011	169	0	0	4780
9:00 AM	1558	1493	194	210	1028	1580	120	0	0	6183
10:00 AM	1914	1536	305	274	1287	1589	92	0	0	6997
11:00 AM	1753	1652	370	387	2058	2098	106	0	0	8425
12:00 PM	1267	1313	337	360	1491	2064	233	0	0	7064
1:00 PM	1043	1055	239	366	1021	2485	261	0	0	6470
2:00 PM	1336	1149	320	315	1315	2054	233	0	0	6722
3:00 PM	1193	857	376	332	1557	1896	346	0	0	6557
4:00 PM	939	1149	361	334	1681	2054	141	0	0	6659
5:00 PM	1065	984	289	386	1767	1775	127	0	0	6394
6:00 PM	742	1149	333	296	1261	1040	92	0	0	4912
7:00 PM	621	910	264	321	1497	1258	92	0	0	4962
8:00 PM	1063	873	276	335	1820	1853	99	0	0	6319
9:00 PM	812	833	333	338	1761	2041	162	0	0	6281
10:00 PM	663	588	339	336	1574	1224	197	0	0	4921
11:00 PM	101	176	266	266	952	689	56	0	0	2506
Subtotal	20591	20809	5324	5564	24851	28314	4020	0	0	109474

Table E6

TOTAL ALIGHTINGS (people/hr)

Time (Hour Beginning)	Station GTC T 4	GTC T 3	T 4	T 3	T 2	T 1	RAC	GTC T 2	GTC T 1	Subtotal
12:00 AM	0	0	10	98	0	0	631	489	429	1658
1:00 AM	0	0	14	50	0	0	341	215	262	882
2:00 AM	0	0	0	15	0	0	143	77	74	310
3:00 AM	0	0	0	4	0	0	53	170	3	230
4:00 AM	0	0	78	101	0	0	28	322	0	530
5:00 AM	0	0	669	860	0	0	107	326	21	1984
6:00 AM	0	0	1042	1459	0	0	322	715	113	3652
7:00 AM	0	0	1413	1161	0	0	350	796	358	4078
8:00 AM	0	0	1295	1344	0	0	706	608	828	4780
9:00 AM	0	0	1558	1493	0	0	845	975	1312	6183
10:00 AM	0	0	1914	1536	0	0	1095	1140	1312	6997
11:00 AM	0	0	1753	1652	0	0	1483	1780	1755	8425
12:00 PM	0	0	1267	1313	0	0	1303	1459	1722	7064
1:00 PM	0	0	1043	1055	0	0	1286	1062	2023	6470
2:00 PM	0	0	1336	1149	0	0	1321	1247	1669	6722
3:00 PM	0	0	1193	857	0	0	1439	1540	1527	6557
4:00 PM	0	0	939	1149	0	0	1488	1421	1662	6659
5:00 PM	0	0	1065	984	0	0	1398	1496	1450	6394
6:00 PM	0	0	742	1149	0	0	1119	1056	846	4912
7:00 PM	0	0	621	910	0	0	1163	1259	1009	4962
8:00 PM	0	0	1063	873	0	0	1325	1543	1514	6319
9:00 PM	0	0	812	833	0	0	1369	1569	1697	6281
10:00 PM	0	0	663	588	0	0	1225	1425	1020	4921
11:00 PM	0	0	101	176	0	0	975	736	518	2506
Subtotal	0	0	20591	20809	0	0	21516	23432	23126	109474

Table E7

Outer Loop Automated People Mover Link Volumes
Alternative D Mitigated, 2015 - Airport Peak

TOTAL LINK VOLUME (people/hr)

Time (Hour Beginning)	Link GTC T 4->GTC T1	GTC T1->GTC T 2	GTC T 2->RAC	RAC ->T 1	T 1->T 2	T 2->T 3	T 3->T 4	T 4->GTC T3	GTC T3->GTC T 4	Subtotal
12:00 AM	0	890	1586	1677	631	120	218	399	238	5760
1:00 AM	0	117	458	386	238	53	188	224	62	1728
2:00 AM	0	0	98	61	51	27	73	110	52	472
3:00 AM	0	0	55	247	209	109	122	69	4	815
4:00 AM	0	37	174	617	503	239	129	11	0	1710
5:00 AM	0	396	902	1761	1201	565	331	126	52	5335
6:00 AM	0	782	2073	3418	2391	843	740	783	424	11455
7:00 AM	0	1028	2271	3569	2315	798	1052	1111	506	12649
8:00 AM	0	1335	2676	3816	2299	776	1195	1639	852	14587
9:00 AM	0	893	2021	3102	2231	892	1508	1994	964	13605
10:00 AM	0	1691	2936	4206	2388	978	1911	2778	1447	18334
11:00 AM	0	1708	3565	5064	3273	1096	2353	3490	1752	22301
12:00 PM	0	1485	2876	4104	2543	941	2050	3025	1503	18528
1:00 PM	0	1578	3037	4128	2493	866	1852	2299	925	17177
2:00 PM	0	1544	3097	4105	2456	895	1547	2111	1065	16819
3:00 PM	0	1533	3120	4113	2442	854	1556	2314	1263	17195
4:00 PM	0	1239	2794	3466	2212	753	1401	2144	1140	15150
5:00 PM	0	935	1828	2412	1461	708	1813	2441	1038	12634
6:00 PM	0	574	1307	1745	1177	577	1406	2413	1283	10482
7:00 PM	0	1022	1728	2212	1153	520	1569	2282	986	11471
8:00 PM	0	1823	2907	3827	1847	694	1748	2411	1079	16336
9:00 PM	0	1279	2540	3381	2034	643	1628	2597	1330	15432
10:00 PM	0	414	1413	1923	1506	527	1509	2386	1188	10865
11:00 PM	0	301	945	843	550	191	805	1419	716	5770
Subtotal	0	22603	46407	64183	39604	14665	28704	40575	19867	276608

Table E8

Outer Loop Automated People Mover Total Boardings/Alightings
Alternative D Mitigated, 2015 - Airport Peak
TOTAL BOARDINGS (people/hr)

Time	Station									
(Hour Beginning)	GTC T 4	GTC T1	GTC T 2	RAC	T 1	T 2	T 3	T 4	GTC T3	Subtotal
12:00 AM	0	890	696	380	57	30	166	238	0	2456
1:00 AM	0	117	342	132	6	7	167	62	0	833
2:00 AM	0	0	98	54	0	0	60	52	0	264
3:00 AM	0	0	55	220	0	0	67	4	0	346
4:00 AM	0	37	137	463	0	0	11	0	0	649
5:00 AM	0	396	505	937	0	1	76	52	0	1967
6:00 AM	0	782	1291	1472	3	23	364	424	0	4358
7:00 AM	0	1028	1243	1383	31	26	620	506	0	4837
8:00 AM	0	1335	1341	1295	99	23	808	852	0	5752
9:00 AM	0	893	1128	1124	178	61	1058	964	0	5406
10:00 AM	0	1691	1245	1334	192	83	1374	1447	0	7365
11:00 AM	0	1708	1857	1569	251	127	1793	1752	0	9058
12:00 PM	0	1485	1391	1362	228	87	1572	1503	0	7627
1:00 PM	0	1578	1459	1317	300	58	1419	925	0	7055
2:00 PM	0	1544	1554	1332	219	76	1080	1065	0	6869
3:00 PM	0	1533	1587	1353	206	90	1089	1263	0	7121
4:00 PM	0	1239	1555	1046	243	89	1041	1140	0	6353
5:00 PM	0	935	893	845	191	98	1454	1038	0	5453
6:00 PM	0	574	734	621	99	82	1164	1283	0	4557
7:00 PM	0	1022	706	612	132	95	1339	986	0	4891
8:00 PM	0	1823	1084	1019	219	121	1377	1079	0	6722
9:00 PM	0	1279	1262	975	219	97	1309	1330	0	6471
10:00 PM	0	414	998	722	110	86	1236	1188	0	4754
11:00 PM	0	301	644	237	73	51	721	716	0	2743
Subtotal	0	22603	23804	21803	3055	1412	21363	19867	0	113907

Table E9

TOTAL ALIGHTINGS (people/hr)

Time	Station									
(Hour Beginning)	GTC T 4	GTC T1	GTC T 2	RAC	T 1	T 2	T 3	T 4	GTC T3	Subtotal
12:00 AM	238	0	0	289	1102	541	68	57	161	2456
1:00 AM	62	0	0	205	154	192	31	26	162	833
2:00 AM	52	0	0	92	10	24	13	15	58	264
3:00 AM	4	0	0	28	38	100	54	57	65	346
4:00 AM	0	0	0	21	114	263	121	119	11	649
5:00 AM	52	0	0	78	559	637	310	257	75	1967
6:00 AM	424	0	0	127	1030	1571	467	382	358	4358
7:00 AM	506	0	0	85	1285	1543	367	446	605	4837
8:00 AM	852	0	0	155	1616	1546	388	408	787	5752
9:00 AM	964	0	0	42	1050	1400	442	478	1031	5406
10:00 AM	1447	0	0	63	2010	1492	442	580	1331	7365
11:00 AM	1752	0	0	71	2043	2304	537	615	1738	9058
12:00 PM	1503	0	0	134	1788	1689	463	527	1523	7627
1:00 PM	925	0	0	226	1935	1685	433	478	1374	7055
2:00 PM	1065	0	0	324	1869	1637	427	501	1046	6869
3:00 PM	1263	0	0	360	1877	1678	387	505	1051	7121
4:00 PM	1140	0	0	374	1497	1548	394	396	1005	6353
5:00 PM	1038	0	0	261	1141	851	350	410	1403	5453
6:00 PM	1283	0	0	183	667	682	335	276	1129	4557
7:00 PM	986	0	0	127	1192	728	291	272	1296	4891
8:00 PM	1079	0	0	99	2199	1274	323	416	1332	6722
9:00 PM	1330	0	0	134	1566	1489	325	361	1266	6471
10:00 PM	1188	0	0	212	527	1065	253	311	1198	4754
11:00 PM	716	0	0	339	366	411	107	102	703	2743
Subtotal	19867	0	0	4027	27634	26351	7324	7996	20708	113907

Table E10

Outer Loop Automated People Mover Total Boardings/Alightings
Alternative D Mitigated, 2015 - Airport Peak
TOTAL BOARDINGS (people/hr)

Time	Station									
(Hour Beginning)	GTC T 4	GTC T1	GTC T 2	RAC	T 1	T 2	T 3	T 4	GTC T3	Subtotal
12:00 AM	0	890	696	380	57	30	166	238	0	2456
1:00 AM	0	117	342	132	6	7	167	62	0	833
2:00 AM	0	0	98	54	0	0	60	52	0	264
3:00 AM	0	0	55	220	0	0	67	4	0	346
4:00 AM	0	37	137	463	0	0	11	0	0	649
5:00 AM	0	396	505	937	0	1	76	52	0	1967
6:00 AM	0	782	1291	1472	3	23	364	424	0	4358
7:00 AM	0	1028	1243	1383	31	26	620	506	0	4837
8:00 AM	0	1335	1341	1295	99	23	808	852	0	5752
9:00 AM	0	893	1128	1124	178	61	1058	964	0	5406
10:00 AM	0	1691	1245	1334	192	83	1374	1447	0	7365
11:00 AM	0	1708	1857	1569	251	127	1793	1752	0	9058
12:00 PM	0	1485	1391	1362	228	87	1572	1503	0	7627
1:00 PM	0	1578	1459	1317	300	58	1419	925	0	7055
2:00 PM	0	1544	1554	1332	219	76	1080	1065	0	6869
3:00 PM	0	1533	1587	1353	206	90	1089	1263	0	7121
4:00 PM	0	1239	1555	1046	243	89	1041	1140	0	6353
5:00 PM	0	935	893	845	191	98	1454	1038	0	5453
6:00 PM	0	574	734	621	99	82	1164	1283	0	4557
7:00 PM	0	1022	706	612	132	95	1339	986	0	4891
8:00 PM	0	1823	1084	1019	219	121	1377	1079	0	6722
9:00 PM	0	1279	1262	975	219	97	1309	1330	0	6471
10:00 PM	0	414	998	722	110	86	1236	1188	0	4754
11:00 PM	0	301	644	237	73	51	721	716	0	2743
Subtotal	0	22603	23804	21803	3055	1412	21363	19867	0	113907

Table E11

TOTAL ALIGHTINGS (people/hr)

Time	Station									
(Hour Beginning)	GTC T 4	GTC T1	GTC T 2	RAC	T 1	T 2	T 3	T 4	GTC T3	Subtotal
12:00 AM	238	0	0	289	1102	541	68	57	161	2456
1:00 AM	62	0	0	205	154	192	31	26	162	833
2:00 AM	52	0	0	92	10	24	13	15	58	264
3:00 AM	4	0	0	28	38	100	54	57	65	346
4:00 AM	0	0	0	21	114	263	121	119	11	649
5:00 AM	52	0	0	78	559	637	310	257	75	1967
6:00 AM	424	0	0	127	1030	1571	467	382	358	4358
7:00 AM	506	0	0	85	1285	1543	367	446	605	4837
8:00 AM	852	0	0	155	1616	1546	388	408	787	5752
9:00 AM	964	0	0	42	1050	1400	442	478	1031	5406
10:00 AM	1447	0	0	63	2010	1492	442	580	1331	7365
11:00 AM	1752	0	0	71	2043	2304	537	615	1738	9058
12:00 PM	1503	0	0	134	1788	1689	463	527	1523	7627
1:00 PM	925	0	0	226	1935	1685	433	478	1374	7055
2:00 PM	1065	0	0	324	1869	1637	427	501	1046	6869
3:00 PM	1263	0	0	360	1877	1678	387	505	1051	7121
4:00 PM	1140	0	0	374	1497	1548	394	396	1005	6353
5:00 PM	1038	0	0	261	1141	851	350	410	1403	5453
6:00 PM	1283	0	0	183	667	682	335	276	1129	4557
7:00 PM	986	0	0	127	1192	728	291	272	1296	4891
8:00 PM	1079	0	0	99	2199	1274	323	416	1332	6722
9:00 PM	1330	0	0	134	1566	1489	325	361	1266	6471
10:00 PM	1188	0	0	212	527	1065	253	311	1198	4754
11:00 PM	716	0	0	339	366	411	107	102	703	2743
Subtotal	19867	0	0	4027	27634	26351	7324	7996	20708	113907

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Attachment F

Curb Front

CURBFRONT ANALYSIS

To supplement the factored curbfront analysis presented in Section 6.2.2.2 of the On-Airport Ground Transportation Report, a more detailed analysis was completed using the CURBAN curbfront simulation software. Using this simulation, each of the curbfronts were modeled to observe their operations during the airport peak hour. The volumes entered into the model are presented in **Table 1**. The additional inputs into CURBAN are similar to the previous runs and were presented previously in Section 4.1.2.2 of the On-Airport Ground Transportation Report.

The CURBAN simulation evaluated the impacts of allowing the Charter Buses to use the GTC Curbfronts. Thirty charter buses were added to both commercial vehicle curbfronts in the GTC and the impact on curbfront operation was evaluated.

The buses were added, using an average dwell time of 5 minutes. This dwell is consistent with other charter bus operations observed at other airports. Specifically, the dwell times varied linearly between 2.5 minutes and 7.5 minutes as illustrated in **Figure 1**. The Charter Bus travel class was given a nominal vehicle length of 40'. A curb length of 150' was initially provided for the Charter Buses using space previously allocated to courtesy vehicles.

Table F1

GTC Curbfront Volumes
Mitigated Alternative D, Year 2015

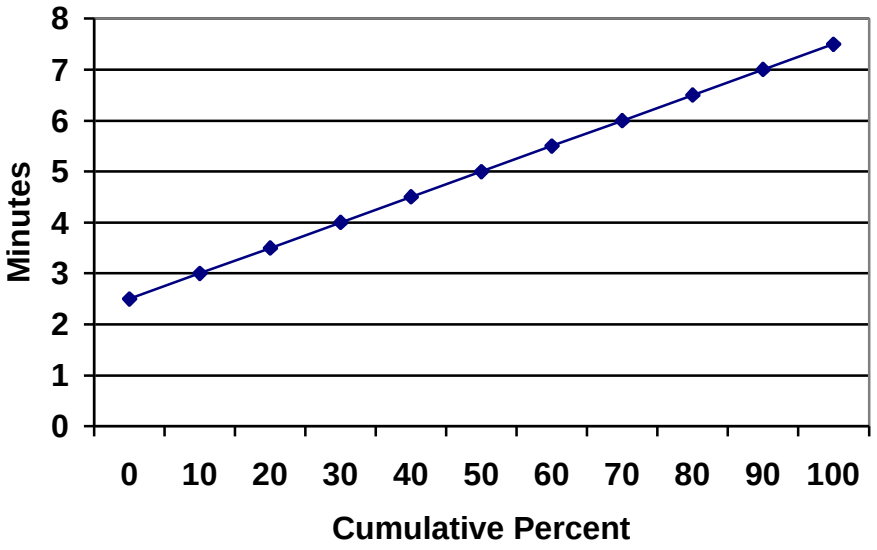
ARRIVALS

Vehicle	CURB 1		CURB 2		CURB 3		CURB 4	
Classification	Volume	%	Volume	%	Volume	%	Volume	%
CURB	437	41.0%	478	79.1%	490	44.7%	466	77.2%
LTPK	16	1.5%	19	3.1%	21	1.9%	20	3.3%
VISD	0	0.0%	0	0.0%	0	0.0%	0	0.0%
VISA	158	14.8%	107	17.7%	119	10.8%	118	19.5%
TAXI	118	11.1%		0.0%	118	10.8%		0.0%
DVAN	82	7.7%		0.0%	94	8.6%		0.0%
LTPK CVEH	90	8.4%		0.0%	90	8.2%		0.0%
HOTEL CVEH	135	12.7%		0.0%	135	12.3%		0.0%
CBUS	30	2.8%			30	2.7%		
TOTAL	**1,066**		**604**		**1,097**		**604**	

DEPARTURES

Vehicle	CURB 1		CURB 2		CURB 3		CURB 4	
Classification	Volume	%	Volume	%	Volume	%	Volume	%
CURB	365	39.8%	462	82.2%	420	42.9%	442	82.8%
LTPK	17	1.9%	22	3.9%	21	2.1%	21	3.9%
VISD	71	7.8%	78	13.9%	64	6.5%	71	13.3%
VISA	0	0.0%	0	0.0%	0	0.0%	0	0.0%
TAXI	121	13.2%		0.0%	122	12.5%		0.0%
DVAN	87	9.5%		0.0%	97	9.9%		0.0%
LTPK CVEH	90	9.8%		0.0%	90	9.2%		0.0%
HOTEL CVEH	135	14.7%		0.0%	135	13.8%		0.0%
CBUS	30	3.3%			30	3.1%		
TOTAL	**916**		**562**		**979**		**534**	

Figure F1 Charter Bus Dwell Time Distribution



The following represents observations for each case study.

North Pier, Curbfront A (Curb 1)

The existing CURBAN model for the North Pier, Curbfront A (Curb 1) Arrivals level was executed and observed with the addition of the Charter Buses. The vehicles seemed to have adequate curb length, and the other travel classes on the outer curb likewise performed adequately. A few of the vehicles desiring to dwell were unable to and thus had to recirculate.

Because of the stochastic nature of CURBAN, several model runs were observed. There were some model runs where the Charter Bus performance did degrade. This appeared to be caused randomly by the arrival of several buses at once, which overloaded the allocated bus length and required one or more bus to recirculate.

The arrivals level, private vehicle curbfront in the CURBAN model of Curb 1 had 3 lanes, of which 2 were for dwelling and 1 was used for through vehicles, as described in the Project Description Notebook Update. This laneage allocation is very inadequate, especially compared to the commercial vehicle "side" which enjoys five lanes (two stopping and three through). It is highly out of balance with the demands, where 80% of the traffic is private vehicles.

Iterations of the CURBAN model were completed, reallocating the curb area to four lanes each (two stopping and two through). With this revised laneage plan, the private vehicle curbs operated well, with little congestion and/or need to recirculate. Additional mitigating scenarios were completed as part of the Planned CURBAN Analysis, where curb cuts were also employed. The curbfronts would also be beneficial, but may degrade the commercial curb's effectiveness. The average travel speed for this case was 4.7 mph. The average speeds are averaged over the entire curbfront distance and include dwell time at the curb.

A final CURBAN model for Curb 1 was evaluated to simulate the impacts of Charter Buses on the Departures Level. The dwell distribution for Charter Buses differed from the arrivals case in that the minimum dwell time was set to 1.5 minutes, with an average of 4 minutes and a maximum of 6.5 minutes, essentially resulting in a shift of the curve shown in **Figure 1** by 1 minute.

All travel classes were assigned to use the entire curbfront. The initial number of attraction points was increased from three to four, which simulates bag check locations on the curbfront. The attraction points were equally spaced along the curbfront. The curbs were also limited to double parking, not triple. In this scenario, the curbs operate adequately, with minimal numbers of vehicles unable to find dwell locations. Average travel speed was 3.7 mph. When triple parking was allowed, severe congestion occurred; striping the curbfront for triple parking is not recommended.

North Pier, Curbfront B (Curb 2)

In this scenario, only private vehicles use the curbfront. Only the four inner lanes experience activity, and the entire second set of stopping lanes are unused. Minimal problems were observed. The average speed was 4.6 mph.

It seems reasonable to reduce the curbfront profile from 9 lanes (including the median) to four. However, the outside lanes provide an excellent opportunity to allow longer dwells. While absolute security would be enforced (no vehicles left unattended), the dwell times would not. The ability to dwell for long periods is of significant benefit to those meeting international travelers, whose arrival is unpredictable.

A departures level model was also created for Curb 2. The curbfronts operated very well, which is expected given that the same facility as Curb 1 handled only 60% of the volumes. Average travel speeds were 3.8 mph.

South Pier, Curbfront A (Curb 3)

The model operated similarly to the Curb 1 Arrivals Level case, with little congestion and recirculation observed. Average travel speed 4.5 mph, marginally slower than the similar case.

The demands on Curb 3, Departures Level are 6.9% higher than Curb 1 and are the highest of all departure curbfronts. The Curb 3 Departures case experiences the most congestion and thus formed the basis for the analysis.

The model performed very poorly, predicting severe congestion and large numbers of vehicles unable to find space near their desired entry point. Several attempts to mitigate the congestion using allocation schemes failed. It appears that the increase in demands and a subtle shift in mode split significantly degrades curbfront performance.

Average travel speed was higher in this case, at 5.6 mph. This reflects the fact that many vehicles were unable to dwell, and just traveled through the curbfront. This increased travel speed can be regarded as an indication of curbfront breakdown.

South Pier, Curbfront B (Curb 4)

The results for Curb 4 were similar to Curb 2, with speeds averaging 4.6 mph and little congestion and recirculation observed.

The curbfronts for the departure level operated very well, which was expected given the lower demands. Average vehicle speed was 3.6 mph.

Conclusions

The very poor performance of the Curb 3 Departures Level, combined with the adequate performance of the Curb 1 Departures Level, indicates that the commercial departure curbs are near saturation. The existing curbfront layout with the planned the commercial vehicle curbfront scheme cannot be recommended, especially after witnessing the very high levels of performance on the opposing private vehicle only curbs.

During advanced planning, techniques to more evenly distribute traffic loadings on the curbfronts will be studied.

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Attachment G

Construction Questions and Answer Document

ON-AIRPORT TRAFFIC MODEL FOR INTERIM YEAR CONSTRUCTION PERIOD

URS Comments made on July 31, 2002
L & B Comments made on August 1, 2002
MARRS Comments made on August 5, 2002
URS Comments made on August 14, 2002

1. Is the flight schedule that is being prepared representative of the airport design day (summer) in 2008?

   ANS: Yes (L & B comment)

   KHA - When will the Flight Schedule be available? Is the flight schedule for 2008 exactly the same for both "with" and "without" taxiway bridge configuration?

   URS Answer: The flight Schedule for 2008 will be available for both "with" and "without" crossfield taxiway. L&B thinks they can have it ready by August 26.

   URS answer: Although KHA will only need to model one year (2008), factored on-airport traffic information will need to be provided for years 2005 (without) and 2013 (with) with 2005 being the priority. AQ will need these factors to complete their interim year analysis.

2. The Construction Impacts Input Data document text and histograms start in the year 2006 for the GTC construction period and show a peak of activity during the fourth quarter of 2007 and with activity continuing but declining through 2008. However, the activity does continue to be high (same order of magnitude) through the third quarter of 2008. What is the precise period of construction activity that we should model, since the summer 2008 flight schedule may not be a direct fit with the peak construction traffic period.

   ANS: Utilize the peak construction year from the July 11, 2002 MARRS construction analysis report. (URS Statement)

   It is suggested that the peak construction year be considered from July 2007 through June 2008. (MARRS Comment)

   KHA - We will use the 2nd Quarter of 2008 for both Spring Time Commuter Day and Summer Air Passenger Peak Design Day. We assume that the construction activity and staging is identical during this time period for both "with" and "without" taxiway bridge configuration.

3. Will the model be run for a summer-time airport design day (airport peak hour analysis basis) and for a Spring-time commuter day (a.m. and p.m. commuter peak hour basis)?

   ANS: Yes, both airport peak and commuter peak need to be analyzed, therefore both summer and spring-time days need to be modeled. (L & B Comment)

   KHA - The two models will have the same Construction Activity, second quarter of 2008.

4. Should we assume that Staging Areas 1, 6, 7, and 8 are dedicated to the construction of the landside facilities and will therefore be included in the model?

   ANS: Yes- in addition, we are adding a staging area 9. The figure currently in the July 11, 2002 document will be replaced. The new figure will show staging area 9. (URS Comment) ,and is attached herewith. [Staging Area Rev 01 AUG02.pdf] (MARRS Comment)

   URS answer: In addition, we are adding the CTA as a staging area Refer to Table 1

5. Which staging area(s) is supporting the construction of the GTC?

   ANS: Staging areas 8 and 9 (URS Comment)

   Staging areas 8 and 9 will support construction of GTC. (MARRS Comment)

   URS has added area 7. Refer to Table 1

6. Which staging area(s) is supporting the construction of the APM guideway and maintenance facility?

   ANS: Staging areas 7 and 9 (URS Comment)

   Staging areas 7 and 9 will support construction of APM. (MARRS Comment)

7. Which staging area(s) is supporting the construction of the consolidated RAC?

   ANS: Staging areas 1,6 and 9 (URS Comment)

   Staging areas 1,6 and 9 will support construction of consolidated RAC. (MARRS Comment)

   URS has determined areas 1 and 6 will be utilized. Area 9 will not. Refer to Table 1

8. Will delivery/service traffic to/from each staging area have the same directional distribution as the air passengers accessing the airport?

   ANS: Model 60% coming from the east and south (URS Comment)

   (is this 30% east; 30% south; 40% north?) (L & B Comment)

   KHA - We will use 30% East, 30% South, and 40% North for construction traffic.

9. Will the construction traffic into and out of the CTA construction zone (garage demolition, terminal construction) all pass through the throat to the CTA utilizing the grade level roads?

   ANS: Yes (URS Comment)

KHA - We assume that construction traffic mixes with passenger traffic at the construction traffic entrance and exit. Refer to the attached Figure 1

10. Can it be assumed that during the construction of the new CTA terminal facilities (and associated demolition of the parking garages) that the entire CTA curbfronts will be available for operation (both upper and lower) as well as the return/recirculation bridges on the upper level roadway?

    ANS: Yes (URS Comment)

    The cross bridges will stay. (MARRS Comment)

11. Will all private auto parking be accommodated at the Intermodal Center and the Long Term surface parking lot adjacent to the Intermodal Center, or will Lot C continue to operate as well?

    ANS: Yes, after 2nd Quarter 2006 (URS Comment) *(Which one?) (L & B Comment)*

    after the completion of Intermodal Center Parking and long term parking lot adjacent to Intermodal Center in 4th Quarter of 2005. Lot C may also continue to operate till end of the second quarter of 2006. The RAC construction starts in the third quarter of 2006. (MARRS Comment)

    KHA - Therefore in the second quarter of 2008 the model will place all auto parking at the Intermodal Center and the surface long Term parking lot.

12. Since the document shows that the APM is not scheduled for completion until the end of 2008, will buses be used to transport all air passengers and their visitors who park at the Intermodal Center, as well as employees arriving by public transit, to the CTA curbfronts?

    ANS: Yes (URS Comment)

13. What route will buses take between the Intermodal Center and the CTA?

    ANS: To avoid the Sepulveda tunnel and the inbound CTA ramps from northbound Sepulveda (which currently operate at breakdown conditions during peak periods), buses will use Aviation and Century Boulevards only. (L & B Comment)

    La Cienega / Century AND Imperial / Sepulveda (MARRS Comment)

    KHA - These are conflicting answers. We will assume that buses travel only on Aviation Blvd. and Century Blvd. as illustrated in the attached Figure 2.

14. Where will construction related employees park and how will they be transported to each construction site?

    ANS: Assume construction employees will park at the appropiate staging area and either drive their construction equipment or be bused to the project site (URS Comment)

site by the construction contractor. Alternatively, Construction Contractors could be required to provide off-site parking and transport workers to the construction site. (MARRS Comment)

Please note that in the Draft EIS/EIR reference is made to Master Plan Commitment ST-11 that states: "Several employee parking areas along the east end of the airport and other similar locations would be established with shuttle busses to the actual construction sites. This procedure will aid in minimizing congestion and maintaining airport safety/security requirements. In addition, remote parking locations, such as LAWA Airports at Palmdale, Van Nuys, and Ontario will be established as part of Master Plan Commitment ST-11, and shuttle bus service will be provided to the LAX construction sites. (MARRS Comment)

KHA - We are not dealing with either the airfield, off site roadway improvements, replacement hanger, or the midfield ancillary facilities construction traffic.

KHA - Please fill in the percentages for the attached Table 1

15. How will the estimated of overall construction traffic be distributed between the different construction sites/zones?

ANS: *(URS to determine, based on the proximity of the high construction locations to each staging area during the year of peak activity) (L & B Comment)*

Please see attached 8 workforce histograms for major projects under construction during the peak construction year 2007 and 2008. (MARRS Comment)

16. Will any curb "drop-off/pick-up" activity be allowed at the Intermodal Center?

ANS: Passenger drop off/pick up will be encouraged at the Intermodal Center. Employee drop off/pick up will be allowed, but not encouraged. (L & B Comment)

Yes. (MARRS Comment)

KHA - We will assume that 5% of air passenger curb drop will use the Intermodal Center for curb drop and ride the bus to the CTA .

17. What additional road closures should be assumed during the period modeled?

ANS: *(URS to determine, based on the high construction locations during the year of peak activity)*

KHA - We cannot proceed until we know this information

URS answer: Although the GTC will be under construction during the entire peak construction year and the project related roadway improvements will not be completed until 3rd Quarter 2008, no major roads will be completely closed. There will be lane closures throughout the year on both major and secondary roadways however. This would include Century between La Cienega and Aviation between Century and Arbor Vitae and La Cienega between Arbor Vitae and Century.

18. What air passenger mode split should be assumed for the regional access/egress trips?

ANS: *(Parsons to determine) (L & B Comment)*

KHA - We will assume that the mode splits and directional distributions are the same as the 2005 No Action No Project model. The mode splits and directional distributions are as follows:

Private Auto	
Curb Drop/pick-up	**31.10**
Short Term Park	**9.10**
Long Term Park	**9.90**
Rent Car	**17.20**
Taxi Cab	**5.40**
Door to Door Van	**3.60**
Courtesy Vehicles	**6.10**
Charter/Tour Bus	**6.20**
Public Transit Bus/Rail	**2.00**
Scheduled (Flyaway) Bus	**9.40**

	North	**South**	**East**	**Green Line**
Originating Passengers	**23.6%**	**38.7%**	**33.7%**	**1.0%**
Terminating Passengers	**35.6%**	**37.0%**	**24.4%**	**1.0%**

These values have been modified slightly to reflect the values listed in the September 2000 ON-AIPORT GROUND TRANSPORTATION REPORT. The changed values are provided in the report.

19. What mode split to public transit should be assumed for construction employee regional access/egress trips?

ANS: I would suggest no more than 10%? (L & B Comment)

KHA - With reference to answer to question 14, what percent of construction employees will come by rail, by city bus and by shuttle bus from other LAWA airports? We will assume that these employees will then be shuttled to the different construction sites.

URS answer: Please use 10%

20. Is it correct to assume that the airport employee lots with mandatory security screening provisions will be operational by the time of the modeling period, and that they will be located at the West Side Employee Lot and the East Side Employee Lot (current Delta Airlines structure)?

ANS: Yes (URS Comment)

(East employee lot(s) size and locations to be determined with input from client) (L & B Comment)

KHA - We cannot proceed until we have this information.

URS answer: Answer remains "yes". Please refer to figure 7-3 in the Alt. D Project Description Notebook**.**

21. What should we assume for the time-of-day distribution of employee work trips (i.e., time distribution for travel to/from the site for the first shift, second shift and third shift)?

ANS: *(URS?) (L & B Comment)*

The Majority of construction activities are assumed to occur during daytime hours, with second and third shifts used for those work activities that cannot be accomplished on the daytime shift. A work schedule of six days per week, eight hours per day was assumed for the daytime shift.

Assume that the day time shift starts at 7:00 AM and ends at 3:30 PM, second shift starts at 3:30 and ends at 12:00, the third shift starts at midnight and ends at 7:00 AM. Assume that shuttles transporting the 2nd shift to construction sites will pickup the daytime shift back to staging areas or the alternate parking areas. (MARRS Comment)

22. What should we assume for the time-of-day distribution of truck hauling trips to/from the site?

ANS: *(URS?) (L & B Comment)*

Assume off-peak traffic hours for hauling trips to/from site, subject to local traffic ordinances. (MARRS Comment)

KHA - Please be specific in your response.

(Additional MARRS' Comments) Avoid hauling trips to/from site during the traffic peak hours. It is believed that traffic peak hours for the Airport area occur between 6:30 AM and 9:00 AM and between 3:30 PM and 7:00 PM. Additionally, avoid trips in residential areas after 11:00 PM. Construction traffic through residential areas may be restricted by City Ordinances.

23. What should we assume for the time-of-day distribution of internal circulation construction vehicle trips?

ANS: (URS?) (L & B Comment)

Traffic from Central Plants to construction sites are uniform during the construction shift. Internal circulation for vehicles driven by construction workers will peak at lunch breaks (11:30 AM for daytime shift, 8:00 PM for 2nd shift) (MARRS Comment)

24. Are the quarterly trip data to be divided by the number of calendar days in the quarter to obtain the daily activity level (assumes 7 day per week construction program) or by the normal work days in the quarter (5 or 6 day work week)?

ANS: Assume a 6-day work week. In the analyses of Alts. A, B, and C, we performed the analysis assuming both a 6-day and a 7-day work week. There will certainly be periods of 7 day weeks, but to be conservative, a 6-day week should be assumed in the analysis. (L & B Comment)

6 days work week (URS Comment)

Truck trips / week = Quarterly Trips divided by 13

Truck trips / day = Truck trips / week divided by 6. (MARRS Comment)

25. The text references on page 2 that there are no trips accounted for out-of-region suppliers to local distributors and warehouses. Although these would appear to be "off-airport" trips, are there any other construction related trips besides the off-site truck hauling trips, the on-site internal construction circulation trips, and workforce trips that need to be identified for inclusion in the "on-airport" model?

ANS: Do we know where the off-site construction employee parking lots will be? In the old analyses, we had a Commitment to provide several employee parking lots on the east end of the airport and in a few other locations, to control the employee parking activity. Where will those locations be in Alt. D? Wherever they are, we should include shuttle trips to and from the lots to the work places on airport. (L & B Comment)

NO (URS Comment)

KHA - With reference to our comment under question 14, we will not assume any offsite parking unless specific instructions on percentages of work force and parking location are given

Additional KHA Questions (August 7, 02)

26. Where will Hold Lot be located during the Construction Period for Taxis, Charter buses and other commercial vehicle?

URS answer: Park 1 (existing Hold Lot 1), until GTC is completed.

L&B - please concur or add to this answer.

27. Is the baggage system in or out and what construction site will these construction employees go?

URS answer: Baggage system is in. Refer to Table 1.

28. Will all CTA Construction employees be staged out of site area 1?

URS Answer: We have added the CTA itself as a second staging area for the CTA construction. Refer to Table 1.

29. Is the flyover ramp between the CTA Departures Level and North Sepulveda in service in 2008? Refer to attached Figure 1.

URS answer: Yes, this flyover ramp will be in service through year 2011.

30. Will the 96th Street bridge be used during the Construction Period?

URS answer: The 96th Street bridge can be utilized until phase 3 of the construction schedule begins.

Additional Questions (August 16, 2002)

1. The histograms show a work labor force for "offsite roadway improvements". In what work site are these labor forces to park and work from? Should we ignore these trips since they may be outside the immediate area of the GTC/ITC/CTA/Consolidated RAC?

Offsite roadway improvements, are assumed to stage from staging Areas 7 and 8. These areas may be used for the labor work force to park, or alternatively they may be parked in an offsite parking provided by the contractor and bussed to the staging area and construction site. Please note that the personal trips of the crew to site and from site are not included the truck trips identified in the "Truck Trips Histograms".

2. Is the data for the craft labor work force shown on the histograms the actual work force (i.e. body count) for each quarter, is it vehicle-trips, or is it person-trips? If the data is vehicle-trips or person-trips, are we correct to assume that it includes the total of both Inbound trips to the site from the surrounding region as well as Outbound trips to the region from the site when the workers are going home?

Our preliminary calculations of the daily craft labor work force (person-trips?) when calculated in accord with MARRS suggested workdays per week (reference previous question 24) are as follows

Work Site	2nd Quarter 2008 Work Force (person-trips)/day?	Craft Labor
APM	**725,000**	**9,294**
Baggage	**18,000**	**231**
CTA	**1,447,000**	**18,551**
GTC	**956,000**	**12,128**
RAC	**198,000**	**2,538**
Off-Site	**47,000**	**603**
Total	**3,391,000**	**43,845**

The Data in the Craft Labor Histograms are the actual Hours worked. These are not body counts, however the body count can be derived as shown in the example below. Once you derive the body count, and assuming a certain factor of carpooling, it would be possible to calculate the vehicle trips to site and from site when the workers are going home.

We believe that there is a computation error in Sam's Preliminary Calculations of the daily craft labor work force (person Trips). To Calculate the number of people per day working in a certain quarter, the number of Hours per quarter is divided by the number of weeks in the quarter (13). This will give the total number of hours / week. The weekly

contribution of each person per week is 50 hours i.e 8.335 hours per day for 6 days a week. The Total number of Hours per week when divided by 6 days a week will give the Hours per Day. The Total Hours per Day if divided by 8.33 (the person's daily contribution) will give you the total number of persons that worked that day:

Number of persons per day = Hours per Quarter divided by 13 weeks/quarter divided by 6 days/week divided by 8.33 hours/person. = [Hours per Quarter / (13 x 6 x 8.335)] = [hours per quarter / 650]

For Example, preliminary calculations of the daily craft labor work-force would be:

Work Site Labor Craft	2nd Quarter 2008 work force Hours	Persons per day
APM	5,000	1116
Baggage	18,000	28
CTA	1,447,000	2227
GTC	956,000	1471
RAC	198,000	305
Off-Site	47,000	72
Total	3,391,000	5,217

Assuming a factor for carpooling of the workers (example 60% of the crew car pool. Each carpool may have 2 to 3 people, will render a carpooling factor of 0.65) then the total number of round trips per day for the crew to come to site and go back home would be calculated as Craft Labor person per day multiplied by the carpooling factor (in our example 5,217 x 0.65= 3,391 person trip). It is encouraged that JKH/KHA determine the carpooling factor.

Additional Questions (August 26, 2002)

1 Where are the Central Plants located?

Central Plants will most likely be located in Staging Areas 4 and 5.

2. What will the path be for these truck movements?

The path for the On-site truck movements from the project site to the Central Plants and vice versa will most likely follow the shortest route along the existing service roads, for example:

- South Airfield, ITC, APM Maintenance, APM (partial), GTC, OFF-Site roadways will utilize the southerly service road, with a controlled and protected crossing at Aviation Blvd.
- North Airfield Projects will utilize westerly and northerly service roads.
- Satellite Concourse, Replacement Hangers, TBIT, North Concourse, CTA, and APM and Tunnels in the CTA area, will utilize the midfield service roads.
- The RAC will utilize the westerly service road and Westchester Parkway, with a controlled gate at Westchester Parkway.

3. Does this include all "onsite truck trips"?

Yes, On-site Truck trips are all the trips from the Central Plants Area to the Project Sites and from the Project Sites to the Central Plants Area.

Additional Questions (August 27, 2002)

1. We have no documentation of where access to Staging Area 8 occurs. In particular we need to clarify how construction traffic south of Century accesses the GTC site, such as from Staging Areas 7. Based on previous conversations, Sam and I were under the assumption that all construction traffic would use the new GTC access and egress roads during construction of the GTC and that all access road would be completed by 2008, our modeling year. This would allow all traffic from south of Century to use those roads to pass over Century instead of the arterials in the area. Is there any documentation of this?

Access to Staging Area 8, prior to the completion of Bridge over Century is assumed to be along Arbor Vitae from I405 in the east, or along Arbor Vitae through Westchester Parkway from the west, at which time access between Staging Areas 7 and 8 is not desired nor encouraged.

The IMC to GTC Roads which include the Bridge over Century Blvd. is scheduled to be completed as early as 12/31/06 but not later than the 1st quarter of 2007 (Refer to the Proposed Conceptual Construction Schedule, Activity A5BF00A253). At that time, construction traffic between Staging Areas 7 and 8 will use the Bridge. Interconnection between staging areas 7 and 8 is only desired at the commencement of the construction activities in the GTC which is scheduled to start 1/1/07.

A basic assumption has been made by URS, and implemented through all construction planning, that the offsite roadways and the IMC to GTC roadways will be completed in time for use by construction traffic for the GTC area. The completion of IMC to GTC is scheduled as early as 12/31/06 and the completion of the rest of the offsite roadways are scheduled to be completed by 11/02/08.

The only documentation known to us of the above is Alternative D manual, and the conceptual construction schedule.

2. Is there a drawing available that documents the location of the service roads mentioned in last night's email regarding on-site circulation truck paths? Where is the access from the CTA construction site to the mid-field service road?

The Drawing showing existing Airport Conditions show all the existing service roads on the Airport. Additionally, Figure 13.1 "2015 Phasing Plan" contained in Alternative D Manual show existing service roads.

Existing service roadways does not directly connect to the CTA Area. A Temporary connection will be built for construction traffic from the CTA area to the Midfield Service Road located north of Runway 25R. This temporary connection will connect to the midfield service road at a point adjacent to where the service road crosses over Sepulveda. The temporary connection will run east of existing Terminal 8 and parallel to Sepulveda on the west side. This temporary construction service road will be used for the construction activities in proposed terminals 1 through 4 (existing parking structures).

North Concourse and TBIT Expansion construction will use the existing (east/west) Midfield Service road north of Runway 25R and the (North/South)service road just west of TBIT.

We hope the above and yesterdays communication offer a fair description of assumed routes of on-site construction traffic.

3. We are completing the on-airport and construction traffic in our model, but what about the regional background traffic and cargo trips for the arterial roadway system? Will the regional and cargo traffic be handled in PTG's model or should we obtain data from PTG to put into our model?

No written response has been provided.

Additional Questions (August 29, 2002)

1. Will all on-site truck traffic be within the batch plant sites and the project work sites? Once the batch plants are full, will all the material that has been recycled be utilized at the project sites or will some be taken out to the region? Elias Bordcosh of MARRS commented in the email to both of us on Monday August 20, 2002, that all on-site truck traffic would be internal to the model, (from project sites to the batch plant sites). Can this be clarified?

Trips to haul the demolished material generated at the project site and considered suitable for re-cycling to the central plants. The material suitable for re-use is assumed to be the material generated by demolishing, excavation, and general grading activities in various percentages as shown in Table 3 included in MARRS' memo dated 8/27/02.

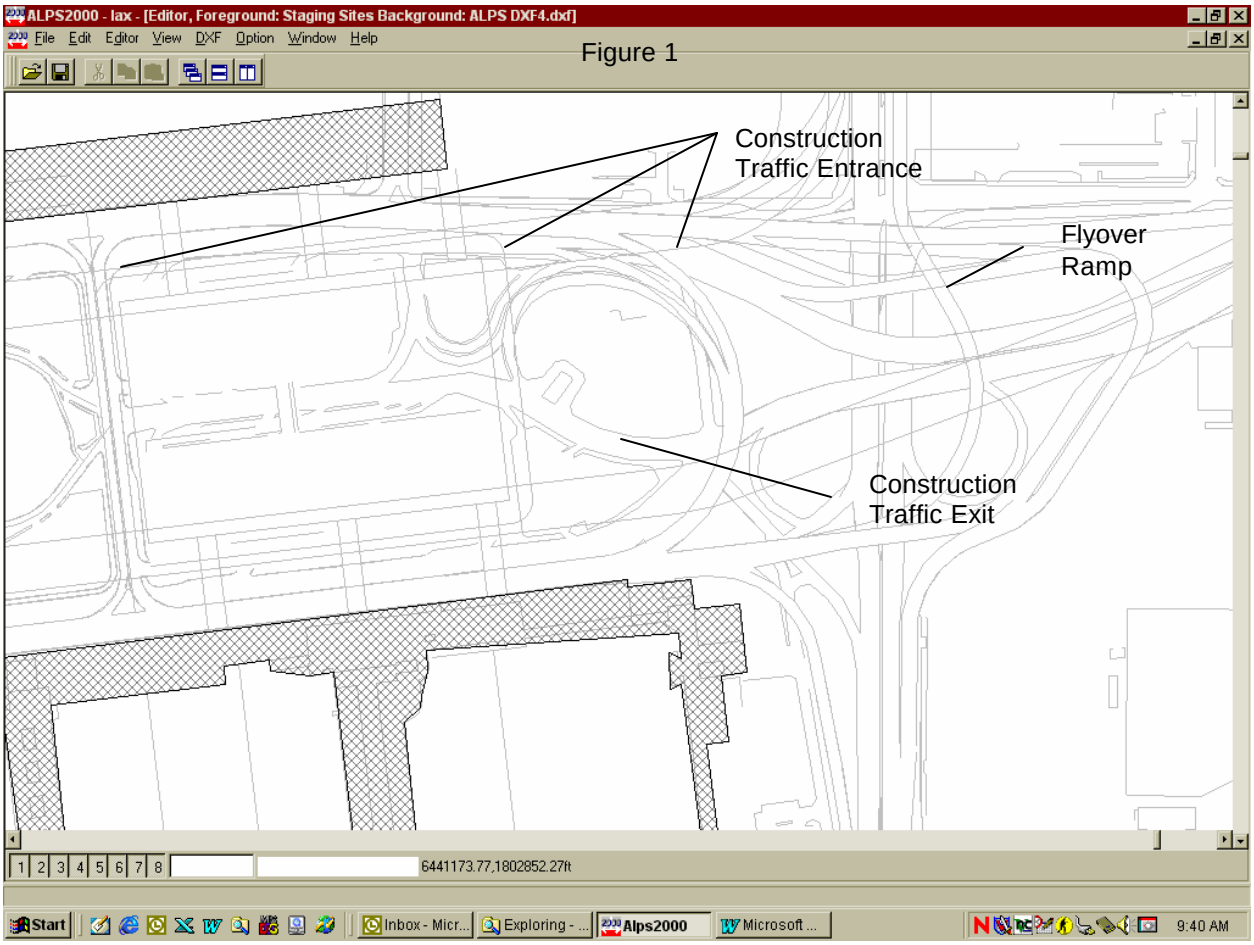
2. We have been told by L & B that the APM maintenance facility is being moved to the basement of the ITC. Can you verify this for us? If so do we assign the APM maintenance facility construction traffic to the ITC site?

MARRS concur with URS response that since the APM Maintenance Building has been moved to ITC Basement, then all APM Maintenance Facility construction traffic should be assigned to the ITC Site.

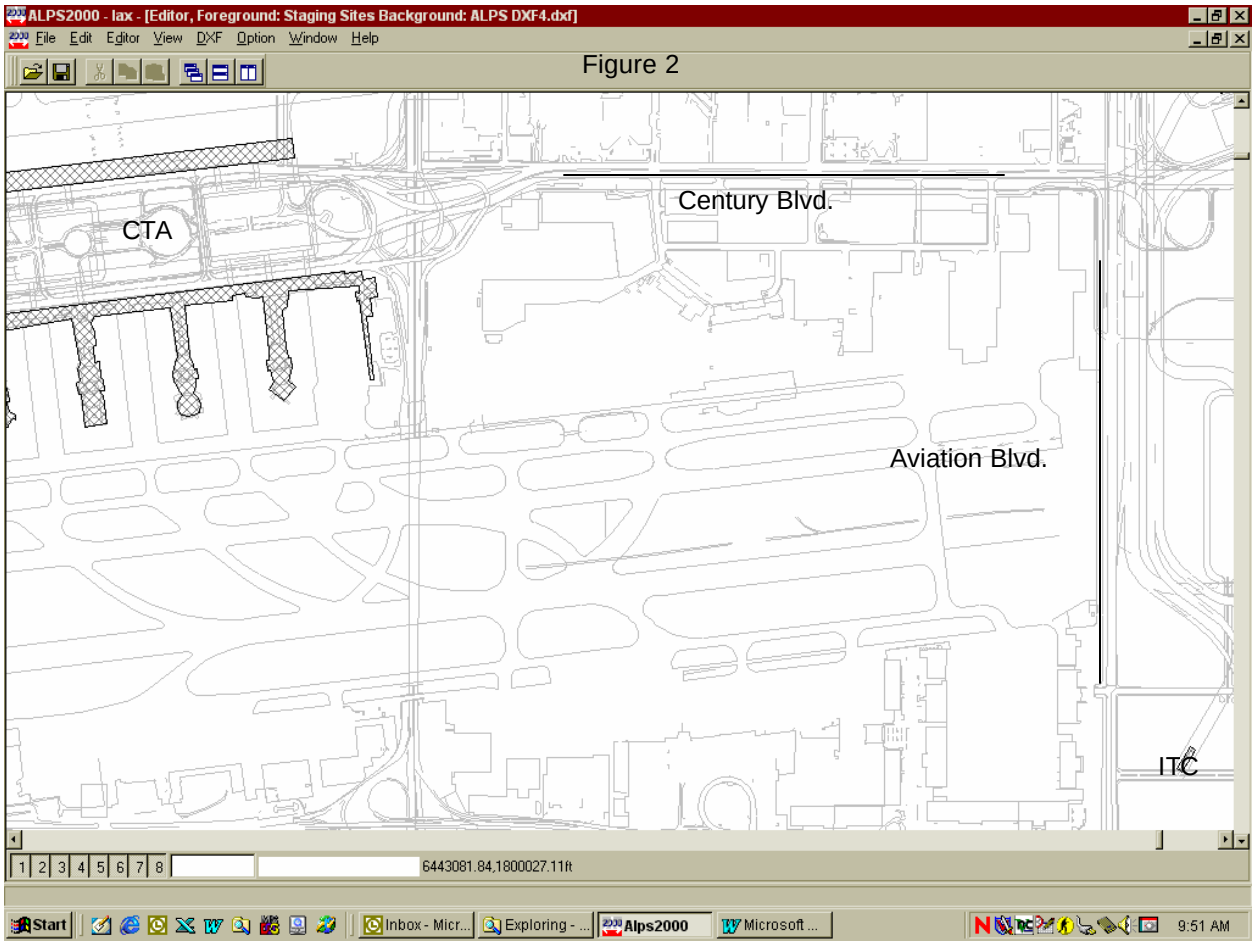
Table 1: Construction Employees Parking Distribution

Construction Area	Parking Area	
APM	_70_% park at Area 7;	_30_% park at Area 9
Baggage System	_60_% park at Area 8;	_40_% park at Area 9
CTA Terminals	_80_% park at Area 1;	_20_% park at area CTA
GTC	_ 20_% Park at area 7;	_60_% park at Area 8;
	_20_% park at Area 9	
RAC	_50_% park at Area 6;	_50_% park at Area 1

Figure 1



LAX Master Plan Supplement to the Draft EIS/EIR	Figure 1	Figure G1



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Figure 2**	**Figure** **G2**

Attachment H

Construction Trip Route Volumes
Alternative D, Year 2008

Route Results
For Demand (v)

Route	Time 12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
TRUK NO SEP->NO SEP 1	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	2	0	0	0
TRUK NO SEP->NO SEP 2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	1	0	0	0
TRUK NO SEP->NO SEP 3	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	1	0	0	0
TRUK NO SEP->NO SEP 4	0	0	0	0	0	0	0	0	0	0	0	5	5	5	5	3	0	0	0
TRUK NO SEP->NO SEP 5	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	2	0	0	0
TRUK NO SEP->NO SEP 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK NO SEP->NO SEP 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK NO SEP->NO SEP 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK NO SEP->NO SEP 9	2	2	2	2	2	2	1	0	0	0	0	33	33	33	33	17	0	0	0
TRUK NO SEP->NO SEP 10	1	1	1	1	1	1	1	0	0	0	0	22	22	22	22	11	0	0	0
TRUK NO SEP->NO SEP 11	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	2	0	0	0
TRUK NO SEP->NO SEP 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK NO SEP->NO SEP 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK NO SEP->NO SEP 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK NO SEP->NO SEP 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK SO Node->SO Node 1	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	1	0	0	0
TRUK SO Node->SO Node 2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0
TRUK SO Node->SO Node 3	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0
TRUK SO Node->SO Node 4	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	2	0	0	0
TRUK SO Node->SO Node 5	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	1	0	0	0
TRUK SO Node->SO Node 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK SO Node->SO Node 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK SO Node->SO Node 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK SO Node->SO Node 9	1	1	1	1	1	1	1	0	0	0	0	25	25	25	25	13	0	0	0
TRUK SO Node->SO Node 10	1	1	1	1	1	1	0	0	0	0	0	16	16	16	16	8	0	0	0
TRUK SO Node->SO Node 11	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	1	0	0	0
TRUK SO Node->SO Node 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK SO Node->SO Node 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK SO Node->SO Node 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK SO Node->SO Node 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK E CENT->E CENT 1	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	1	0	0	0
TRUK E CENT->E CENT 2	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0
TRUK E CENT->E CENT 3	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0
TRUK E CENT->E CENT 4	0	0	0	0	0	0	0	0	0	0	0	4	4	4	4	2	0	0	0
TRUK E CENT->E CENT 5	0	0	0	0	0	0	0	0	0	0	0	3	3	3	3	1	0	0	0
TRUK E CENT->E CENT 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK E CENT->E CENT 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK E CENT->E CENT 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK E CENT->E CENT 9	1	1	1	1	1	1	1	0	0	0	0	25	25	25	25	13	0	0	0
TRUK E CENT->E CENT 10	1	1	1	1	1	1	0	0	0	0	0	16	16	16	16	8	0	0	0
TRUK E CENT->E CENT 11	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	1	0	0	0
TRUK E CENT->E CENT 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK E CENT->E CENT 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK E CENT->E CENT 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUK E CENT->E CENT 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Route Results
For Demand (v)
Route

	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	Subtotal
TRUK NO SEP->NO SEP 1	0	0	0	0	0	17
TRUK NO SEP->NO SEP 2	0	0	0	0	0	9
TRUK NO SEP->NO SEP 3	0	0	0	0	0	9
TRUK NO SEP->NO SEP 4	1	1	1	1	1	30
TRUK NO SEP->NO SEP 5	0	0	0	0	0	21
TRUK NO SEP->NO SEP 6	0	0	0	0	0	0
TRUK NO SEP->NO SEP 7	0	0	0	0	0	0
TRUK NO SEP->NO SEP 8	0	0	0	0	0	0
TRUK NO SEP->NO SEP 9	4	4	4	4	4	183
TRUK NO SEP->NO SEP 10	3	3	3	3	3	119
TRUK NO SEP->NO SEP 11	0	0	0	0	0	17
TRUK NO SEP->NO SEP 12	0	0	0	0	0	0
TRUK NO SEP->NO SEP 13	0	0	0	0	0	0
TRUK NO SEP->NO SEP 14	0	0	0	0	0	0
TRUK NO SEP->NO SEP 15	0	0	0	0	0	0
TRUK SO Node->SO Node 1	0	0	0	0	0	13
TRUK SO Node->SO Node 2	0	0	0	0	0	6
TRUK SO Node->SO Node 3	0	0	0	0	0	6
TRUK SO Node->SO Node 4	1	1	1	1	1	22
TRUK SO Node->SO Node 5	0	0	0	0	0	16
TRUK SO Node->SO Node 6	0	0	0	0	0	0
TRUK SO Node->SO Node 7	0	0	0	0	0	0
TRUK SO Node->SO Node 8	0	0	0	0	0	0
TRUK SO Node->SO Node 9	3	3	3	3	3	137
TRUK SO Node->SO Node 10	2	2	2	2	2	89
TRUK SO Node->SO Node 11	0	0	0	0	0	13
TRUK SO Node->SO Node 12	0	0	0	0	0	0
TRUK SO Node->SO Node 13	0	0	0	0	0	0
TRUK SO Node->SO Node 14	0	0	0	0	0	0
TRUK SO Node->SO Node 15	0	0	0	0	0	0
TRUK E CENT->E CENT 1	0	0	0	0	0	13
TRUK E CENT->E CENT 2	0	0	0	0	0	6
TRUK E CENT->E CENT 3	0	0	0	0	0	6
TRUK E CENT->E CENT 4	1	1	1	1	1	22
TRUK E CENT->E CENT 5	0	0	0	0	0	16
TRUK E CENT->E CENT 6	0	0	0	0	0	0
TRUK E CENT->E CENT 7	0	0	0	0	0	0
TRUK E CENT->E CENT 8	0	0	0	0	0	0
TRUK E CENT->E CENT 9	3	3	3	3	3	137
TRUK E CENT->E CENT 10	2	2	2	2	2	89
TRUK E CENT->E CENT 11	0	0	0	0	0	13
TRUK E CENT->E CENT 12	0	0	0	0	0	0
TRUK E CENT->E CENT 13	0	0	0	0	0	0
TRUK E CENT->E CENT 14	0	0	0	0	0	0
TRUK E CENT->E CENT 15	0	0	0	0	0	0

Route Results
For Demand (v)

Route	Time 12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
TRUCK NO SEP->NO SEP 1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0
TRUCK NO SEP->NO SEP 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 4	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0
TRUCK NO SEP->NO SEP 5	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0
TRUCK NO SEP->NO SEP 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 9	1	1	1	1	1	1	1	8	8	8	8	8	8	8	8	4	1	1	1
TRUCK NO SEP->NO SEP 10	0	0	0	0	0	0	0	5	5	5	5	5	5	5	5	3	1	1	1
TRUCK NO SEP->NO SEP 11	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
TRUCK NO SEP->NO SEP 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
TRUCK SO Node->SO Node 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 4	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0
TRUCK SO Node->SO Node 5	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
TRUCK SO Node->SO Node 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 9	1	1	1	1	1	1	1	6	6	6	6	6	6	6	6	3	1	1	1
TRUCK SO Node->SO Node 10	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	2	1	1	1
TRUCK SO Node->SO Node 11	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
TRUCK SO Node->SO Node 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK SO Node->SO Node 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
TRUCK E CENT->E CENT 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 4	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	0	0	0
TRUCK E CENT->E CENT 5	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
TRUCK E CENT->E CENT 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 9	1	1	1	1	1	1	1	6	6	6	6	6	6	6	6	3	1	1	1
TRUCK E CENT->E CENT 10	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	2	1	1	1
TRUCK E CENT->E CENT 11	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	0	0	0	0
TRUCK E CENT->E CENT 12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TRUCK E CENT->E CENT 15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note: The routes are the same from each of the boundary nodes (NO SEP, SO Node and E CENT) as shown in the on-site truck trips. Route 1/15 is the same for each of the three boundary nodes.

Route Results
For Demand (v)
Route

	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	Subtotal
TRUCK NO SEP->NO SEP 1	0	0	0	0	0	7
TRUCK NO SEP->NO SEP 2	0	0	0	0	0	4
TRUCK NO SEP->NO SEP 3	0	0	0	0	0	4
TRUCK NO SEP->NO SEP 4	0	0	0	0	0	13
TRUCK NO SEP->NO SEP 5	0	0	0	0	0	9
TRUCK NO SEP->NO SEP 6	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 7	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 8	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 9	1	1	1	1	1	79
TRUCK NO SEP->NO SEP 10	1	1	1	1	1	52
TRUCK NO SEP->NO SEP 11	0	0	0	0	0	7
TRUCK NO SEP->NO SEP 12	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 13	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 14	0	0	0	0	0	0
TRUCK NO SEP->NO SEP 15	0	0	0	0	0	0
TRUCK SO Node->SO Node 1	0	0	0	0	0	6
TRUCK SO Node->SO Node 2	0	0	0	0	0	3
TRUCK SO Node->SO Node 3	0	0	0	0	0	3
TRUCK SO Node->SO Node 4	0	0	0	0	0	10
TRUCK SO Node->SO Node 5	0	0	0	0	0	7
TRUCK SO Node->SO Node 6	0	0	0	0	0	0
TRUCK SO Node->SO Node 7	0	0	0	0	0	0
TRUCK SO Node->SO Node 8	0	0	0	0	0	0
TRUCK SO Node->SO Node 9	1	1	1	1	1	60
TRUCK SO Node->SO Node 10	1	1	1	1	1	39
TRUCK SO Node->SO Node 11	0	0	0	0	0	6
TRUCK SO Node->SO Node 12	0	0	0	0	0	0
TRUCK SO Node->SO Node 13	0	0	0	0	0	0
TRUCK SO Node->SO Node 14	0	0	0	0	0	0
TRUCK SO Node->SO Node 15	0	0	0	0	0	0
TRUCK E CENT->E CENT 1	0	0	0	0	0	6
TRUCK E CENT->E CENT 2	0	0	0	0	0	3
TRUCK E CENT->E CENT 3	0	0	0	0	0	3
TRUCK E CENT->E CENT 4	0	0	0	0	0	10
TRUCK E CENT->E CENT 5	0	0	0	0	0	7
TRUCK E CENT->E CENT 6	0	0	0	0	0	0
TRUCK E CENT->E CENT 7	0	0	0	0	0	0
TRUCK E CENT->E CENT 8	0	0	0	0	0	0
TRUCK E CENT->E CENT 9	1	1	1	1	1	60
TRUCK E CENT->E CENT 10	1	1	1	1	1	39
TRUCK E CENT->E CENT 11	0	0	0	0	0	6
TRUCK E CENT->E CENT 12	0	0	0	0	0	0
TRUCK E CENT->E CENT 13	0	0	0	0	0	0
TRUCK E CENT->E CENT 14	0	0	0	0	0	0
TRUCK E CENT->E CENT 15	0	0	0	0	0	0

Note: The routes are the same fr

Route Results
For Demand (v)

Route	Time 12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
LABOR NO SEP->NO SEP 1	0	0	0	0	0	0	61	0	0	0	0	0	0	0	4	4	0	0	0
LABOR NO SEP->NO SEP 2	0	0	0	0	0	0	46	0	0	0	0	0	0	0	3	3	0	0	0
LABOR NO SEP->NO SEP 3	0	0	0	0	0	0	106	0	0	0	0	0	0	0	7	7	0	0	0
LABOR NO SEP->NO SEP 4	0	0	0	0	0	0	15	0	0	0	0	0	0	0	1	1	0	0	0
LABOR NO SEP->NO SEP 5	0	0	0	0	0	0	76	0	0	0	0	0	0	0	5	5	0	0	0
LABOR NO SEP->NO SEP 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 9	0	0	0	0	0	0	319	0	0	0	0	0	0	0	22	22	0	0	0
LABOR NO SEP->NO SEP 10	0	0	0	0	0	0	197	0	0	0	0	0	0	0	14	14	0	0	0
LABOR NO SEP->NO SEP 11	0	0	0	0	0	0	121	0	0	0	0	0	0	0	8	8	0	0	0
LABOR NO SEP->NO SEP 12	0	0	0	0	0	0	258	0	0	0	0	0	0	0	18	18	0	0	0
LABOR NO SEP->NO SEP 13	0	0	0	0	0	0	76	0	0	0	0	0	0	0	5	5	0	0	0
LABOR NO SEP->NO SEP 14	0	0	0	0	0	0	76	0	0	0	0	0	0	0	5	5	0	0	0
LABOR NO SEP->NO SEP 15	0	0	0	0	0	0	30	0	0	0	0	0	0	0	2	2	0	0	0
LABOR NO SEP->NO SEP 16	0	0	0	0	0	0	30	0	0	0	0	0	0	0	2	2	0	0	0
LABOR NO SEP->NO SEP 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 1	0	0	0	0	0	0	46	0	0	0	0	0	0	0	3	3	0	0	0
LABOR SO Node->SO Node 2	0	0	0	0	0	0	34	0	0	0	0	0	0	0	2	2	0	0	0
LABOR SO Node->SO Node 3	0	0	0	0	0	0	80	0	0	0	0	0	0	0	6	6	0	0	0
LABOR SO Node->SO Node 4	0	0	0	0	0	0	11	0	0	0	0	0	0	0	1	1	0	0	0
LABOR SO Node->SO Node 5	0	0	0	0	0	0	57	0	0	0	0	0	0	0	4	4	0	0	0
LABOR SO Node->SO Node 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 9	0	0	0	0	0	0	239	0	0	0	0	0	0	0	17	17	0	0	0
LABOR SO Node->SO Node 10	0	0	0	0	0	0	148	0	0	0	0	0	0	0	10	10	0	0	0
LABOR SO Node->SO Node 11	0	0	0	0	0	0	91	0	0	0	0	0	0	0	6	6	0	0	0
LABOR SO Node->SO Node 12	0	0	0	0	0	0	194	0	0	0	0	0	0	0	14	14	0	0	0
LABOR SO Node->SO Node 13	0	0	0	0	0	0	57	0	0	0	0	0	0	0	4	4	0	0	0
LABOR SO Node->SO Node 14	0	0	0	0	0	0	57	0	0	0	0	0	0	0	4	4	0	0	0
LABOR SO Node->SO Node 15	0	0	0	0	0	0	23	0	0	0	0	0	0	0	2	2	0	0	0
LABOR SO Node->SO Node 16	0	0	0	0	0	0	23	0	0	0	0	0	0	0	2	2	0	0	0
LABOR SO Node->SO Node 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 1	0	0	0	0	0	0	46	0	0	0	0	0	0	0	3	3	0	0	0
LABOR E CENT->E CENT 2	0	0	0	0	0	0	34	0	0	0	0	0	0	0	2	2	0	0	0
LABOR E CENT->E CENT 3	0	0	0	0	0	0	80	0	0	0	0	0	0	0	6	6	0	0	0
LABOR E CENT->E CENT 4	0	0	0	0	0	0	11	0	0	0	0	0	0	0	1	1	0	0	0
LABOR E CENT->E CENT 5	0	0	0	0	0	0	57	0	0	0	0	0	0	0	4	4	0	0	0
LABOR E CENT->E CENT 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 9	0	0	0	0	0	0	239	0	0	0	0	0	0	0	17	17	0	0	0
LABOR E CENT->E CENT 10	0	0	0	0	0	0	148	0	0	0	0	0	0	0	10	10	0	0	0
LABOR E CENT->E CENT 11	0	0	0	0	0	0	91	0	0	0	0	0	0	0	6	6	0	0	0
LABOR E CENT->E CENT 12	0	0	0	0	0	0	194	0	0	0	0	0	0	0	14	14	0	0	0

Route Results
For Demand (v)

Route / Time	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
LABOR E CENT->E CENT 13	0	0	0	0	0	0	57	0	0	0	0	0	0	0	4	4	0	0	0
LABOR E CENT->E CENT 14	0	0	0	0	0	0	57	0	0	0	0	0	0	0	4	4	0	0	0
LABOR E CENT->E CENT 15	0	0	0	0	0	0	23	0	0	0	0	0	0	0	2	2	0	0	0
LABOR E CENT->E CENT 16	0	0	0	0	0	0	23	0	0	0	0	0	0	0	2	2	0	0	0
LABOR E CENT->E CENT 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 1	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 2	0	0	0	0	0	0	13	0	0	0	0	0	0	0	1	1	0	0	0
LABOR GREEN->GREEN 3	0	0	0	0	0	0	13	0	0	0	0	0	0	0	1	1	0	0	0
LABOR GREEN->GREEN 4	0	0	0	0	0	0	30	0	0	0	0	0	0	0	2	2	0	0	0
LABOR GREEN->GREEN 5	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 6	0	0	0	0	0	0	21	0	0	0	0	0	0	0	1	1	0	0	0
LABOR GREEN->GREEN 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 10	0	0	0	0	0	0	89	0	0	0	0	0	0	0	6	6	0	0	0
LABOR GREEN->GREEN 11	0	0	0	0	0	0	55	0	0	0	0	0	0	0	4	4	0	0	0
LABOR GREEN->GREEN 12	0	0	0	0	0	0	34	0	0	0	0	0	0	0	2	2	0	0	0
LABOR GREEN->GREEN 13	0	0	0	0	0	0	72	0	0	0	0	0	0	0	5	5	0	0	0
LABOR GREEN->GREEN 14	0	0	0	0	0	0	21	0	0	0	0	0	0	0	1	1	0	0	0
LABOR GREEN->GREEN 15	0	0	0	0	0	0	21	0	0	0	0	0	0	0	1	1	0	0	0
LABOR GREEN->GREEN 16	0	0	0	0	0	0	8	0	0	0	0	0	0	0	1	1	0	0	0
LABOR GREEN->GREEN 17	0	0	0	0	0	0	8	0	0	0	0	0	0	0	1	1	0	0	0
LABOR GREEN->GREEN 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 1	8	0	0	0	0	0	0	5	0	0	0	0	0	0	0	30	30	0	0
LABOR NO SEP->NO SEP 2	6	0	0	0	0	0	0	3	0	0	0	0	0	0	0	23	23	0	0
LABOR NO SEP->NO SEP 3	15	0	0	0	0	0	0	8	0	0	0	0	0	0	0	53	53	0	0
LABOR NO SEP->NO SEP 4	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	8	8	0	0
LABOR NO SEP->NO SEP 5	11	0	0	0	0	0	0	6	0	0	0	0	0	0	0	38	38	0	0
LABOR NO SEP->NO SEP 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 9	45	0	0	0	0	0	0	24	0	0	0	0	0	0	0	159	159	0	0
LABOR NO SEP->NO SEP 10	28	0	0	0	0	0	0	15	0	0	0	0	0	0	0	99	99	0	0
LABOR NO SEP->NO SEP 11	17	0	0	0	0	0	0	9	0	0	0	0	0	0	0	61	61	0	0
LABOR NO SEP->NO SEP 12	36	0	0	0	0	0	0	20	0	0	0	0	0	0	0	129	129	0	0
LABOR NO SEP->NO SEP 13	11	0	0	0	0	0	0	6	0	0	0	0	0	0	0	38	38	0	0
LABOR NO SEP->NO SEP 14	11	0	0	0	0	0	0	6	0	0	0	0	0	0	0	38	38	0	0
LABOR NO SEP->NO SEP 15	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	15	15	0	0
LABOR NO SEP->NO SEP 16	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	15	15	0	0
LABOR NO SEP->NO SEP 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR NO SEP->NO SEP 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 1	6	0	0	0	0	0	0	3	0	0	0	0	0	0	0	23	23	0	0
LABOR SO Node->SO Node 2	5	0	0	0	0	0	0	3	0	0	0	0	0	0	0	17	17	0	0
LABOR SO Node->SO Node 3	11	0	0	0	0	0	0	6	0	0	0	0	0	0	0	40	40	0	0
LABOR SO Node->SO Node 4	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	6	0	0
LABOR SO Node->SO Node 5	8	0	0	0	0	0	0	4	0	0	0	0	0	0	0	28	28	0	0

Route Results
For Demand (v)

Route / Time	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
LABOR SO Node->SO Node 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 9	33	0	0	0	0	0	0	18	0	0	0	0	0	0	0	120	120	0	0
LABOR SO Node->SO Node 10	21	0	0	0	0	0	0	11	0	0	0	0	0	0	0	74	74	0	0
LABOR SO Node->SO Node 11	13	0	0	0	0	0	0	7	0	0	0	0	0	0	0	46	46	0	0
LABOR SO Node->SO Node 12	27	0	0	0	0	0	0	15	0	0	0	0	0	0	0	97	97	0	0
LABOR SO Node->SO Node 13	8	0	0	0	0	0	0	4	0	0	0	0	0	0	0	28	28	0	0
LABOR SO Node->SO Node 14	8	0	0	0	0	0	0	4	0	0	0	0	0	0	0	28	28	0	0
LABOR SO Node->SO Node 15	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	11	0	0
LABOR SO Node->SO Node 16	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	11	0	0
LABOR SO Node->SO Node 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR SO Node->SO Node 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 1	6	0	0	0	0	0	0	3	0	0	0	0	0	0	0	23	23	0	0
LABOR E CENT->E CENT 2	5	0	0	0	0	0	0	3	0	0	0	0	0	0	0	17	17	0	0
LABOR E CENT->E CENT 3	11	0	0	0	0	0	0	6	0	0	0	0	0	0	0	40	40	0	0
LABOR E CENT->E CENT 4	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	6	0	0
LABOR E CENT->E CENT 5	8	0	0	0	0	0	0	4	0	0	0	0	0	0	0	28	28	0	0
LABOR E CENT->E CENT 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 9	33	0	0	0	0	0	0	18	0	0	0	0	0	0	0	120	120	0	0
LABOR E CENT->E CENT 10	21	0	0	0	0	0	0	11	0	0	0	0	0	0	0	74	74	0	0
LABOR E CENT->E CENT 11	13	0	0	0	0	0	0	7	0	0	0	0	0	0	0	46	46	0	0
LABOR E CENT->E CENT 12	27	0	0	0	0	0	0	15	0	0	0	0	0	0	0	97	97	0	0
LABOR E CENT->E CENT 13	8	0	0	0	0	0	0	4	0	0	0	0	0	0	0	28	28	0	0
LABOR E CENT->E CENT 14	8	0	0	0	0	0	0	4	0	0	0	0	0	0	0	28	28	0	0
LABOR E CENT->E CENT 15	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	11	0	0
LABOR E CENT->E CENT 16	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	11	0	0
LABOR E CENT->E CENT 17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR E CENT->E CENT 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
LABOR GREEN->GREEN 2	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	6	0	0
LABOR GREEN->GREEN 3	2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	6	6	0	0
LABOR GREEN->GREEN 4	4	0	0	0	0	0	0	2	0	0	0	0	0	0	0	15	15	0	0
LABOR GREEN->GREEN 5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
LABOR GREEN->GREEN 6	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	11	0	0
LABOR GREEN->GREEN 7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 10	12	0	0	0	0	0	0	7	0	0	0	0	0	0	0	44	44	0	0
LABOR GREEN->GREEN 11	8	0	0	0	0	0	0	4	0	0	0	0	0	0	0	27	27	0	0
LABOR GREEN->GREEN 12	5	0	0	0	0	0	0	3	0	0	0	0	0	0	0	17	17	0	0
LABOR GREEN->GREEN 13	10	0	0	0	0	0	0	5	0	0	0	0	0	0	0	36	36	0	0
LABOR GREEN->GREEN 14	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	11	0	0
LABOR GREEN->GREEN 15	3	0	0	0	0	0	0	2	0	0	0	0	0	0	0	11	11	0	0
LABOR GREEN->GREEN 16	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	4	0	0
LABOR GREEN->GREEN 17	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	4	0	0

Route Results
For Demand (v)

Route	Time																	
	12:00 AM	1:00 AM	2:00 AM	3:00 AM	4:00 AM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
LABOR GREEN->GREEN 18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LABOR GREEN->GREEN 19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Route Results
For Demand (v)
Route

	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	Subtotal
LABOR NO SEP->NO SEP 1	0	0	0	0	5	74
LABOR NO SEP->NO SEP 2	0	0	0	0	3	55
LABOR NO SEP->NO SEP 3	0	0	0	0	8	129
LABOR NO SEP->NO SEP 4	0	0	0	0	1	18
LABOR NO SEP->NO SEP 5	0	0	0	0	6	92
LABOR NO SEP->NO SEP 6	0	0	0	0	0	0
LABOR NO SEP->NO SEP 7	0	0	0	0	0	0
LABOR NO SEP->NO SEP 8	0	0	0	0	0	0
LABOR NO SEP->NO SEP 9	0	0	0	0	24	387
LABOR NO SEP->NO SEP 10	0	0	0	0	15	240
LABOR NO SEP->NO SEP 11	0	0	0	0	9	148
LABOR NO SEP->NO SEP 12	0	0	0	0	20	314
LABOR NO SEP->NO SEP 13	0	0	0	0	6	92
LABOR NO SEP->NO SEP 14	0	0	0	0	6	92
LABOR NO SEP->NO SEP 15	0	0	0	0	2	37
LABOR NO SEP->NO SEP 16	0	0	0	0	2	37
LABOR NO SEP->NO SEP 17	0	0	0	0	0	0
LABOR NO SEP->NO SEP 18	0	0	0	0	0	0
LABOR SO Node->SO Node 1	0	0	0	0	3	55
LABOR SO Node->SO Node 2	0	0	0	0	3	42
LABOR SO Node->SO Node 3	0	0	0	0	6	97
LABOR SO Node->SO Node 4	0	0	0	0	1	14
LABOR SO Node->SO Node 5	0	0	0	0	4	69
LABOR SO Node->SO Node 6	0	0	0	0	0	0
LABOR SO Node->SO Node 7	0	0	0	0	0	0
LABOR SO Node->SO Node 8	0	0	0	0	0	0
LABOR SO Node->SO Node 9	0	0	0	0	18	291
LABOR SO Node->SO Node 10	0	0	0	0	11	180
LABOR SO Node->SO Node 11	0	0	0	0	7	111
LABOR SO Node->SO Node 12	0	0	0	0	15	235
LABOR SO Node->SO Node 13	0	0	0	0	4	69
LABOR SO Node->SO Node 14	0	0	0	0	4	69
LABOR SO Node->SO Node 15	0	0	0	0	2	28
LABOR SO Node->SO Node 16	0	0	0	0	2	28
LABOR SO Node->SO Node 17	0	0	0	0	0	0
LABOR SO Node->SO Node 18	0	0	0	0	0	0
LABOR E CENT->E CENT 1	0	0	0	0	3	55
LABOR E CENT->E CENT 2	0	0	0	0	3	42
LABOR E CENT->E CENT 3	0	0	0	0	6	97
LABOR E CENT->E CENT 4	0	0	0	0	1	14
LABOR E CENT->E CENT 5	0	0	0	0	4	69
LABOR E CENT->E CENT 6	0	0	0	0	0	0
LABOR E CENT->E CENT 7	0	0	0	0	0	0
LABOR E CENT->E CENT 8	0	0	0	0	0	0
LABOR E CENT->E CENT 9	0	0	0	0	18	291
LABOR E CENT->E CENT 10	0	0	0	0	11	180
LABOR E CENT->E CENT 11	0	0	0	0	7	111
LABOR E CENT->E CENT 12	0	0	0	0	15	235

Route Results
For Demand (v)
Route

	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	Subtotal
LABOR E CENT->E CENT 13	0	0	0	0	4	69
LABOR E CENT->E CENT 14	0	0	0	0	4	69
LABOR E CENT->E CENT 15	0	0	0	0	2	28
LABOR E CENT->E CENT 16	0	0	0	0	2	28
LABOR E CENT->E CENT 17	0	0	0	0	0	0
LABOR E CENT->E CENT 18	0	0	0	0	0	0
LABOR GREEN->GREEN 1	0	0	0	0	0	5
LABOR GREEN->GREEN 2	0	0	0	0	1	15
LABOR GREEN->GREEN 3	0	0	0	0	1	15
LABOR GREEN->GREEN 4	0	0	0	0	2	36
LABOR GREEN->GREEN 5	0	0	0	0	0	5
LABOR GREEN->GREEN 6	0	0	0	0	2	26
LABOR GREEN->GREEN 7	0	0	0	0	0	0
LABOR GREEN->GREEN 8	0	0	0	0	0	0
LABOR GREEN->GREEN 9	0	0	0	0	0	0
LABOR GREEN->GREEN 10	0	0	0	0	7	108
LABOR GREEN->GREEN 11	0	0	0	0	4	67
LABOR GREEN->GREEN 12	0	0	0	0	3	41
LABOR GREEN->GREEN 13	0	0	0	0	5	87
LABOR GREEN->GREEN 14	0	0	0	0	2	26
LABOR GREEN->GREEN 15	0	0	0	0	2	26
LABOR GREEN->GREEN 16	0	0	0	0	1	10
LABOR GREEN->GREEN 17	0	0	0	0	1	10
LABOR GREEN->GREEN 18	0	0	0	0	0	0
LABOR GREEN->GREEN 19	0	0	0	0	0	0
LABOR NO SEP->NO SEP 1	0	0	0	0	0	74
LABOR NO SEP->NO SEP 2	0	0	0	0	0	55
LABOR NO SEP->NO SEP 3	0	0	0	0	0	129
LABOR NO SEP->NO SEP 4	0	0	0	0	0	18
LABOR NO SEP->NO SEP 5	0	0	0	0	0	92
LABOR NO SEP->NO SEP 6	0	0	0	0	0	0
LABOR NO SEP->NO SEP 7	0	0	0	0	0	0
LABOR NO SEP->NO SEP 8	0	0	0	0	0	0
LABOR NO SEP->NO SEP 9	0	0	0	0	0	387
LABOR NO SEP->NO SEP 10	0	0	0	0	0	240
LABOR NO SEP->NO SEP 11	0	0	0	0	0	148
LABOR NO SEP->NO SEP 12	0	0	0	0	0	314
LABOR NO SEP->NO SEP 13	0	0	0	0	0	92
LABOR NO SEP->NO SEP 14	0	0	0	0	0	92
LABOR NO SEP->NO SEP 15	0	0	0	0	0	37
LABOR NO SEP->NO SEP 16	0	0	0	0	0	37
LABOR NO SEP->NO SEP 17	0	0	0	0	0	0
LABOR NO SEP->NO SEP 18	0	0	0	0	0	0
LABOR SO Node->SO Node 1	0	0	0	0	0	55
LABOR SO Node->SO Node 2	0	0	0	0	0	42
LABOR SO Node->SO Node 3	0	0	0	0	0	97
LABOR SO Node->SO Node 4	0	0	0	0	0	14
LABOR SO Node->SO Node 5	0	0	0	0	0	69

Route Results
For Demand (v)
Route

	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	Subtotal
LABOR SO Node->SO Node 6	0	0	0	0	0	0
LABOR SO Node->SO Node 7	0	0	0	0	0	0
LABOR SO Node->SO Node 8	0	0	0	0	0	0
LABOR SO Node->SO Node 9	0	0	0	0	0	291
LABOR SO Node->SO Node 10	0	0	0	0	0	180
LABOR SO Node->SO Node 11	0	0	0	0	0	111
LABOR SO Node->SO Node 12	0	0	0	0	0	235
LABOR SO Node->SO Node 13	0	0	0	0	0	69
LABOR SO Node->SO Node 14	0	0	0	0	0	69
LABOR SO Node->SO Node 15	0	0	0	0	0	28
LABOR SO Node->SO Node 16	0	0	0	0	0	28
LABOR SO Node->SO Node 17	0	0	0	0	0	0
LABOR SO Node->SO Node 18	0	0	0	0	0	0
LABOR E CENT->E CENT 1	0	0	0	0	0	55
LABOR E CENT->E CENT 2	0	0	0	0	0	42
LABOR E CENT->E CENT 3	0	0	0	0	0	97
LABOR E CENT->E CENT 4	0	0	0	0	0	14
LABOR E CENT->E CENT 5	0	0	0	0	0	69
LABOR E CENT->E CENT 6	0	0	0	0	0	0
LABOR E CENT->E CENT 7	0	0	0	0	0	0
LABOR E CENT->E CENT 8	0	0	0	0	0	0
LABOR E CENT->E CENT 9	0	0	0	0	0	291
LABOR E CENT->E CENT 10	0	0	0	0	0	180
LABOR E CENT->E CENT 11	0	0	0	0	0	111
LABOR E CENT->E CENT 12	0	0	0	0	0	235
LABOR E CENT->E CENT 13	0	0	0	0	0	69
LABOR E CENT->E CENT 14	0	0	0	0	0	69
LABOR E CENT->E CENT 15	0	0	0	0	0	28
LABOR E CENT->E CENT 16	0	0	0	0	0	28
LABOR E CENT->E CENT 17	0	0	0	0	0	0
LABOR E CENT->E CENT 18	0	0	0	0	0	0
LABOR GREEN->GREEN 1	0	0	0	0	0	5
LABOR GREEN->GREEN 2	0	0	0	0	0	15
LABOR GREEN->GREEN 3	0	0	0	0	0	15
LABOR GREEN->GREEN 4	0	0	0	0	0	36
LABOR GREEN->GREEN 5	0	0	0	0	0	5
LABOR GREEN->GREEN 6	0	0	0	0	0	26
LABOR GREEN->GREEN 7	0	0	0	0	0	0
LABOR GREEN->GREEN 8	0	0	0	0	0	0
LABOR GREEN->GREEN 9	0	0	0	0	0	0
LABOR GREEN->GREEN 10	0	0	0	0	0	108
LABOR GREEN->GREEN 11	0	0	0	0	0	67
LABOR GREEN->GREEN 12	0	0	0	0	0	41
LABOR GREEN->GREEN 13	0	0	0	0	0	87
LABOR GREEN->GREEN 14	0	0	0	0	0	26
LABOR GREEN->GREEN 15	0	0	0	0	0	26
LABOR GREEN->GREEN 16	0	0	0	0	0	10
LABOR GREEN->GREEN 17	0	0	0	0	0	10

Route Results
For Demand (v)
Route

	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	Subtotal
LABOR GREEN->GREEN 18	0	0	0	0	0	0
LABOR GREEN->GREEN 19	0	0	0	0	0	0

Staging Area 8 (GTC Work Area)

Exiting

Mitigatged Construction Segment counts by travel class

For Forward and So. P A Exit

Time	Travel Class						
Vehicle Cou	LABOR	TRUK	TRUCK	AREA 9 Lir	AREA 7B C	Green Line I	Subtotal
12:00 AM	90	3	1	3	2	3	102
1:00 AM	0	3	1	0	0	0	5
2:00 AM	0	3	1	0	0	0	5
3:00 AM	0	3	1	0	0	0	5
4:00 AM	0	3	1	0	0	0	5
5:00 AM	0	3	1	0	0	0	5
6:00 AM	0	2	1	22	11	20	56
7:00 AM	49	0	15	2	1	2	68
8:00 AM	0	0	15	0	0	0	15
9:00 AM	0	0	15	0	0	0	15
10:00 AM	0	0	15	0	0	0	15
11:00 AM	0	64	15	0	0	0	79
12:00 PM	0	64	15	0	0	0	79
1:00 PM	0	64	15	0	0	0	79
2:00 PM	0	64	15	2	1	1	83
3:00 PM	323	32	8	11	5	10	390
4:00 PM	323	0	2	11	5	10	351
5:00 PM	0	0	2	0	0	0	2
6:00 PM	0	0	2	0	0	0	2
7:00 PM	0	8	2	0	0	0	10
8:00 PM	0	8	2	0	0	0	10
9:00 PM	0	8	2	0	0	0	10
10:00 PM	0	8	2	0	0	0	10
11:00 PM	0	8	2	2	1	2	14
Subtotal	784	351	152	51	26	48	1413

CTA Staging Area

Entering

Mitigatged Construction Segment counts by travel class

For Forward and PKP2AENT (Entrance)

Time	Travel Class				
Vehicle Cou	AREA 7A C	AREA 1A C	AREA 1B C	Green Line	Subtotal
12:00 AM	2	6	4	3	15
1:00 AM	0	0	0	0	0
2:00 AM	0	0	0	0	0
3:00 AM	0	0	0	0	0
4:00 AM	0	0	0	0	0
5:00 AM	0	0	0	0	0
6:00 AM	15	46	28	20	110
7:00 AM	1	3	2	2	8
8:00 AM	0	0	0	0	0
9:00 AM	0	0	0	0	0
10:00 AM	0	0	0	0	0
11:00 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0
2:00 PM	1	3	2	1	8
3:00 PM	8	23	14	10	55
4:00 PM	8	23	14	10	55
5:00 PM	0	0	0	0	0
6:00 PM	0	0	0	0	0
7:00 PM	0	0	0	0	0
8:00 PM	0	0	0	0	0
9:00 PM	0	0	0	0	0
10:00 PM	0	0	0	0	0
11:00 PM	1	3	2	2	8
Subtotal	36	108	67	48	259

Entering

Mitigatged Construction Segment counts by travel class

For Forward and Internal Construction Roadway (Entrance2)

Time	Travel Class			
Vehicle Cou	LABOR	TRUK	TRUCK	Subtotal
12:00 AM	0	5	2	7
1:00 AM	0	5	2	7
2:00 AM	0	5	2	7
3:00 AM	0	5	2	7
4:00 AM	0	5	2	7
5:00 AM	0	5	2	7
6:00 AM	304	3	2	308
7:00 AM	0	0	22	22
8:00 AM	0	0	22	22
9:00 AM	0	0	22	22
10:00 AM	0	0	22	22
11:00 AM	0	97	22	120
12:00 PM	0	97	22	120
1:00 PM	0	97	22	120
2:00 PM	21	97	22	141
3:00 PM	21	49	13	83
4:00 PM	0	0	3	3
5:00 PM	0	0	3	3
6:00 PM	0	0	3	3
7:00 PM	0	12	3	15
8:00 PM	0	12	3	15
9:00 PM	0	12	3	15
10:00 PM	0	12	3	15
11:00 PM	23	12	3	38
Subtotal	369	532	231	1132

CTA Staging Area
Exiting
Mitigatged Construction Segment counts by travel class
For Reverse and PKP2AENT (Exit)

Time	Travel Class				
Vehicle Cou	AREA 7A C	AREA 1A C	AREA 1B C	Green Line	Subtotal
12:00 AM	2	6	4	3	15
1:00 AM	0	0	0	0	0
2:00 AM	0	0	0	0	0
3:00 AM	0	0	0	0	0
4:00 AM	0	0	0	0	0
5:00 AM	0	0	0	0	0
6:00 AM	15	46	28	20	110
7:00 AM	1	3	2	2	8
8:00 AM	0	0	0	0	0
9:00 AM	0	0	0	0	0
10:00 AM	0	0	0	0	0
11:00 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0
2:00 PM	1	3	2	1	8
3:00 PM	8	23	14	10	55
4:00 PM	8	23	14	10	55
5:00 PM	0	0	0	0	0
6:00 PM	0	0	0	0	0
7:00 PM	0	0	0	0	0
8:00 PM	0	0	0	0	0
9:00 PM	0	0	0	0	0
10:00 PM	0	0	0	0	0
11:00 PM	1	3	2	2	8
Subtotal	36	108	67	48	259

Exiting
Mitigatged Construction Segment counts by travel class
For Forward and

Time	Travel Class			
Vehicle Co	LABOR	TRUK	TRUCK	Subtotal
12:00 AM	0	5	2	7
1:00 AM	0	5	2	7
2:00 AM	0	5	2	7
3:00 AM	0	5	2	7
4:00 AM	0	5	2	7
5:00 AM	0	5	2	7
6:00 AM	304	3	2	308
7:00 AM	0	0	22	22
8:00 AM	0	0	22	22
9:00 AM	0	0	22	22
10:00 AM	0	0	22	22
11:00 AM	0	97	22	120
12:00 PM	0	97	22	120
1:00 PM	0	97	22	120
2:00 PM	21	97	22	141
3:00 PM	21	49	13	83
4:00 PM	0	0	3	3
5:00 PM	0	0	3	3
6:00 PM	0	0	3	3
7:00 PM	0	12	3	15
8:00 PM	0	12	3	15
9:00 PM	0	12	3	15
10:00 PM	0	12	3	15
11:00 PM	23	12	3	38
Subtotal	369	532	231	1132

Staging Area 6

Entering

Mitigatged Construction Segment counts by trav
For Forward and Lot 6 Entrance

Time	Travel Class		
Vehicle Cou	AREA 6	R/	Subtotal
12:00 AM	1		1
1:00 AM	0		0
2:00 AM	0		0
3:00 AM	0		0
4:00 AM	0		0
5:00 AM	0		0
6:00 AM	4		4
7:00 AM	0		0
8:00 AM	0		0
9:00 AM	0		0
10:00 AM	0		0
11:00 AM	0		0
12:00 PM	0		0
1:00 PM	0		0
2:00 PM	0		0
3:00 PM	2		2
4:00 PM	2		2
5:00 PM	0		0
6:00 PM	0		0
7:00 PM	0		0
8:00 PM	0		0
9:00 PM	0		0
10:00 PM	0		0
11:00 PM	0		0
Subtotal	10		10

Entering

Mitigatged Construction Segment counts by travel class
For Forward and Lot 6 Entrance 2

Time	Travel Class		
Vehicle Co	LABOR	Green Line I	Subtotal
12:00 AM	0	3	3
1:00 AM	0	0	0
2:00 AM	0	0	0
3:00 AM	0	0	0
4:00 AM	0	0	0
5:00 AM	0	0	0
6:00 AM	76	20	96
7:00 AM	0	2	2
8:00 AM	0	0	0
9:00 AM	0	0	0
10:00 AM	0	0	0
11:00 AM	0	0	0
12:00 PM	0	0	0
1:00 PM	0	0	0
2:00 PM	5	1	7
3:00 PM	5	10	15
4:00 PM	0	10	10
5:00 PM	0	0	0
6:00 PM	0	0	0
7:00 PM	0	0	0
8:00 PM	0	0	0
9:00 PM	0	0	0
10:00 PM	0	0	0
11:00 PM	6	2	7
Subtotal	92	48	140

Exiting

Mitigatged Construction Segment counts by travel class
For Forward and Lot 6 Exit

Time	Travel Class			
Vehicle Co	LABOR	AREA 6	R/	Green Line	Subtotal
12:00 AM	11	1		3	14
1:00 AM	0	0		0	0
2:00 AM	0	0		0	0
3:00 AM	0	0		0	0
4:00 AM	0	0		0	0
5:00 AM	0	0		0	0
6:00 AM	0	4		20	25
7:00 AM	6	0		2	8
8:00 AM	0	0		0	0
9:00 AM	0	0		0	0
10:00 AM	0	0		0	0
11:00 AM	0	0		0	0
12:00 PM	0	0		0	0
1:00 PM	0	0		0	0
2:00 PM	0	0		1	2
3:00 PM	38	2		10	50
4:00 PM	38	2		10	50
5:00 PM	0	0		0	0
6:00 PM	0	0		0	0
7:00 PM	0	0		0	0
8:00 PM	0	0		0	0
9:00 PM	0	0		0	0
10:00 PM	0	0		0	0
11:00 PM	0	0		2	2
Subtotal	92	10		48	150

Staging Area 7A

Entering

Mitigatged Construction Segment counts by travel class
For Forward and Lot 7A Entrance

Time	Travel Class					
Vehicle Cou	LABOR	AREA 7A I	AREA 7A S	AREA 7A C	Green Line	Subtotal
12:00 AM	0	1	0	2	3	6
1:00 AM	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0
6:00 AM	531	8	1	15	20	576
7:00 AM	0	1	0	1	2	3
8:00 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
2:00 PM	37	1	0	1	1	40
3:00 PM	37	4	0	8	10	59
4:00 PM	0	4	0	8	10	22
5:00 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0
11:00 PM	40	1	0	1	2	44
Subtotal	646	19	2	36	48	750

Entering

Mitigatged Construction Segment counts by tra
For Reverse and Lot 7A Exit (Entrance)

Time	Travel Class	
Vehicle Cou	AREA 7A A	Subtotal
12:00 AM	1	1
1:00 AM	0	0
2:00 AM	0	0
3:00 AM	0	0
4:00 AM	0	0
5:00 AM	0	0
6:00 AM	7	7
7:00 AM	0	0
8:00 AM	0	0
9:00 AM	0	0
10:00 AM	0	0
11:00 AM	0	0
12:00 PM	0	0
1:00 PM	0	0
2:00 PM	0	0
3:00 PM	3	3
4:00 PM	3	3
5:00 PM	0	0
6:00 PM	0	0
7:00 PM	0	0
8:00 PM	0	0
9:00 PM	0	0
10:00 PM	0	0
11:00 PM	0	0
Subtotal	15	15

Staging Area 7A

Exiting

Mitigatged Construction Segment counts by travel class

For Forward and Lot 7A Exit

Time	Travel Class					
Vehicle Co	LABOR	AREA 7A I	AREA 7A A	AREA 7A C	Green Line	Subtotal
12:00 AM	74	1	1	2	3	81
1:00 AM	0	0	0	0	0	0
2:00 AM	0	0	0	0	0	0
3:00 AM	0	0	0	0	0	0
4:00 AM	0	0	0	0	0	0
5:00 AM	0	0	0	0	0	0
6:00 AM	0	8	7	15	20	50
7:00 AM	40	1	0	1	2	44
8:00 AM	0	0	0	0	0	0
9:00 AM	0	0	0	0	0	0
10:00 AM	0	0	0	0	0	0
11:00 AM	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	0
1:00 PM	0	0	0	0	0	0
2:00 PM	0	1	0	1	1	3
3:00 PM	266	4	3	8	10	291
4:00 PM	266	4	3	8	10	291
5:00 PM	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0
8:00 PM	0	0	0	0	0	0
9:00 PM	0	0	0	0	0	0
10:00 PM	0	0	0	0	0	0
11:00 PM	0	1	0	1	2	4
Subtotal	646	19	15	36	48	764

Exiting

Mitigatged Construction Segment counts by travel class

For Reverse and Lot 7A Entrance

Time	Travel Class	
Vehicle Co	AREA 7A S	Subtotal
12:00 AM	0	0
1:00 AM	0	0
2:00 AM	0	0
3:00 AM	0	0
4:00 AM	0	0
5:00 AM	0	0
6:00 AM	1	1
7:00 AM	0	0
8:00 AM	0	0
9:00 AM	0	0
10:00 AM	0	0
11:00 AM	0	0
12:00 PM	0	0
1:00 PM	0	0
2:00 PM	0	0
3:00 PM	0	0
4:00 PM	0	0
5:00 PM	0	0
6:00 PM	0	0
7:00 PM	0	0
8:00 PM	0	0
9:00 PM	0	0
10:00 PM	0	0
11:00 PM	0	0
Subtotal	2	2

Staging Area 7B

Entering

Mitigatged Construction Segment counts by travel class
For Forward and Lot 7B Entrance

Time	Travel Class			
Vehicle Cou	LABOR	AREA 7B C	Green Line	Subtotal
12:00 AM	0	2	3	4
1:00 AM	0	0	0	0
2:00 AM	0	0	0	0
3:00 AM	0	0	0	0
4:00 AM	0	0	0	0
5:00 AM	0	0	0	0
6:00 AM	190	11	20	221
7:00 AM	0	1	2	2
8:00 AM	0	0	0	0
9:00 AM	0	0	0	0
10:00 AM	0	0	0	0
11:00 AM	0	0	0	0
12:00 PM	0	0	0	0
1:00 PM	0	0	0	0
2:00 PM	13	1	1	15
3:00 PM	13	5	10	29
4:00 PM	0	5	10	16
5:00 PM	0	0	0	0
6:00 PM	0	0	0	0
7:00 PM	0	0	0	0
8:00 PM	0	0	0	0
9:00 PM	0	0	0	0
10:00 PM	0	0	0	0
11:00 PM	14	1	2	17
Subtotal	231	26	48	304

Exiting

Mitigatged Construction Segment counts by travel class
For Forward and Lot 7B Exit

Time	Travel Class			
Vehicle Cou	LABOR	AREA 7B C	Green Line	Subtotal
12:00 AM	27	2	3	31
1:00 AM	0	0	0	0
2:00 AM	0	0	0	0
3:00 AM	0	0	0	0
4:00 AM	0	0	0	0
5:00 AM	0	0	0	0
6:00 AM	0	11	20	31
7:00 AM	14	1	2	17
8:00 AM	0	0	0	0
9:00 AM	0	0	0	0
10:00 AM	0	0	0	0
11:00 AM	0	0	0	0
12:00 PM	0	0	0	0
1:00 PM	0	0	0	0
2:00 PM	0	1	1	2
3:00 PM	95	5	10	110
4:00 PM	95	5	10	110
5:00 PM	0	0	0	0
6:00 PM	0	0	0	0
7:00 PM	0	0	0	0
8:00 PM	0	0	0	0
9:00 PM	0	0	0	0
10:00 PM	0	0	0	0
11:00 PM	0	1	2	2
Subtotal	231	26	48	304

Staging Area 8 (GTC Work Area)

Entering

Mitigatged Construction Segment counts by travel class
For Forward and So. P A Arrv. Ent

Time	Travel Class		
Vehicle Cou	AREA 9 Lir	AREA 7B C	Green Line Labor Bus
12:00 AM	3	2	3
1:00 AM	0	0	0
2:00 AM	0	0	0
3:00 AM	0	0	0
4:00 AM	0	0	0
5:00 AM	0	0	0
6:00 AM	22	11	20
7:00 AM	2	1	2
8:00 AM	0	0	0
9:00 AM	0	0	0
10:00 AM	0	0	0
11:00 AM	0	0	0
12:00 PM	0	0	0
1:00 PM	0	0	0
2:00 PM	2	1	1
3:00 PM	11	5	10
4:00 PM	11	5	10
5:00 PM	0	0	0
6:00 PM	0	0	0
7:00 PM	0	0	0
8:00 PM	0	0	0
9:00 PM	0	0	0
10:00 PM	0	0	0
11:00 PM	2	1	2
Subtotal	51	26	48

Entering

Mitigatged Construction Segment counts by travel class
For Forward and Curb Enter/Exit GTC

Time	Travel Class			
Vehicle Cou	LABOR	TRUK	TRUCK	Subtotal
12:00 AM	0	3	1	4
1:00 AM	0	3	1	5
2:00 AM	0	3	1	5
3:00 AM	0	3	1	5
4:00 AM	0	3	1	5
5:00 AM	0	3	1	5
6:00 AM	645	2	1	648
7:00 AM	0	0	15	15
8:00 AM	0	0	15	15
9:00 AM	0	0	15	15
10:00 AM	0	0	15	15
11:00 AM	0	64	15	79
12:00 PM	0	64	15	79
1:00 PM	0	64	15	79
2:00 PM	45	64	15	124
3:00 PM	45	32	8	86
4:00 PM	0	0	2	2
5:00 PM	0	0	2	2
6:00 PM	0	0	2	2
7:00 PM	0	8	2	10
8:00 PM	0	8	2	10
9:00 PM	0	8	2	10
10:00 PM	0	8	2	10
11:00 PM	49	8	2	59
Subtotal	784	351	152	1288

Staging Area 9

Entering

Mitigatged Construction Segment counts by travel class
For Forward and Lot 9 Entrance

Time	Travel Class				
Vehicle Cou	LABOR	AREA 9 Lir	AREA 9 RA	Green Line	Subtotal
12:00 AM	0	6	0	3	9
1:00 AM	0	0	0	0	0
2:00 AM	0	0	0	0	0
3:00 AM	0	0	0	0	0
4:00 AM	0	0	0	0	0
5:00 AM	0	0	0	0	0
6:00 AM	417	44	2	20	483
7:00 AM	0	3	0	2	5
8:00 AM	0	0	0	0	0
9:00 AM	0	0	0	0	0
10:00 AM	0	0	0	0	0
11:00 AM	0	0	0	0	0
12:00 PM	0	0	0	0	0
1:00 PM	0	0	0	0	0
2:00 PM	29	3	0	1	34
3:00 PM	29	22	1	10	62
4:00 PM	0	22	1	10	33
5:00 PM	0	0	0	0	0
6:00 PM	0	0	0	0	0
7:00 PM	0	0	0	0	0
8:00 PM	0	0	0	0	0
9:00 PM	0	0	0	0	0
10:00 PM	0	0	0	0	0
11:00 PM	32	3	0	2	37
Subtotal	507	103	5	48	663

Exiting

Mitigatged Construction Segment counts by travel class
For Reverse and Lot 9 Entrance (Exit)

Time	Travel Class			
Vehicle Cou	AREA 9 RA	Green Line	Subtotal	
12:00 AM	0	3	3	
1:00 AM	0	0	0	
2:00 AM	0	0	0	
3:00 AM	0	0	0	
4:00 AM	0	0	0	
5:00 AM	0	0	0	
6:00 AM	2	20	22	
7:00 AM	0	2	2	
8:00 AM	0	0	0	
9:00 AM	0	0	0	
10:00 AM	0	0	0	
11:00 AM	0	0	0	
12:00 PM	0	0	0	
1:00 PM	0	0	0	
2:00 PM	0	1	2	
3:00 PM	1	10	11	
4:00 PM	1	10	11	
5:00 PM	0	0	0	
6:00 PM	0	0	0	
7:00 PM	0	0	0	
8:00 PM	0	0	0	
9:00 PM	0	0	0	
10:00 PM	0	0	0	
11:00 PM	0	2	2	
Subtotal	5	48	53	

Exiting

Mitigatged Construction Segment counts by travel class
For Forward and Lot 9 Exit

Time	Travel Class		
Vehicle Co	LABOR	AREA 9 Lir	Subtotal
12:00 AM	58	6	64
1:00 AM	0	0	0
2:00 AM	0	0	0
3:00 AM	0	0	0
4:00 AM	0	0	0
5:00 AM	0	0	0
6:00 AM	0	44	44
7:00 AM	32	3	35
8:00 AM	0	0	0
9:00 AM	0	0	0
10:00 AM	0	0	0
11:00 AM	0	0	0
12:00 PM	0	0	0
1:00 PM	0	0	0
2:00 PM	0	3	3
3:00 PM	209	22	231
4:00 PM	209	22	231
5:00 PM	0	0	0
6:00 PM	0	0	0
7:00 PM	0	0	0
8:00 PM	0	0	0
9:00 PM	0	0	0
10:00 PM	0	0	0
11:00 PM	0	3	3
Subtotal	507	103	610

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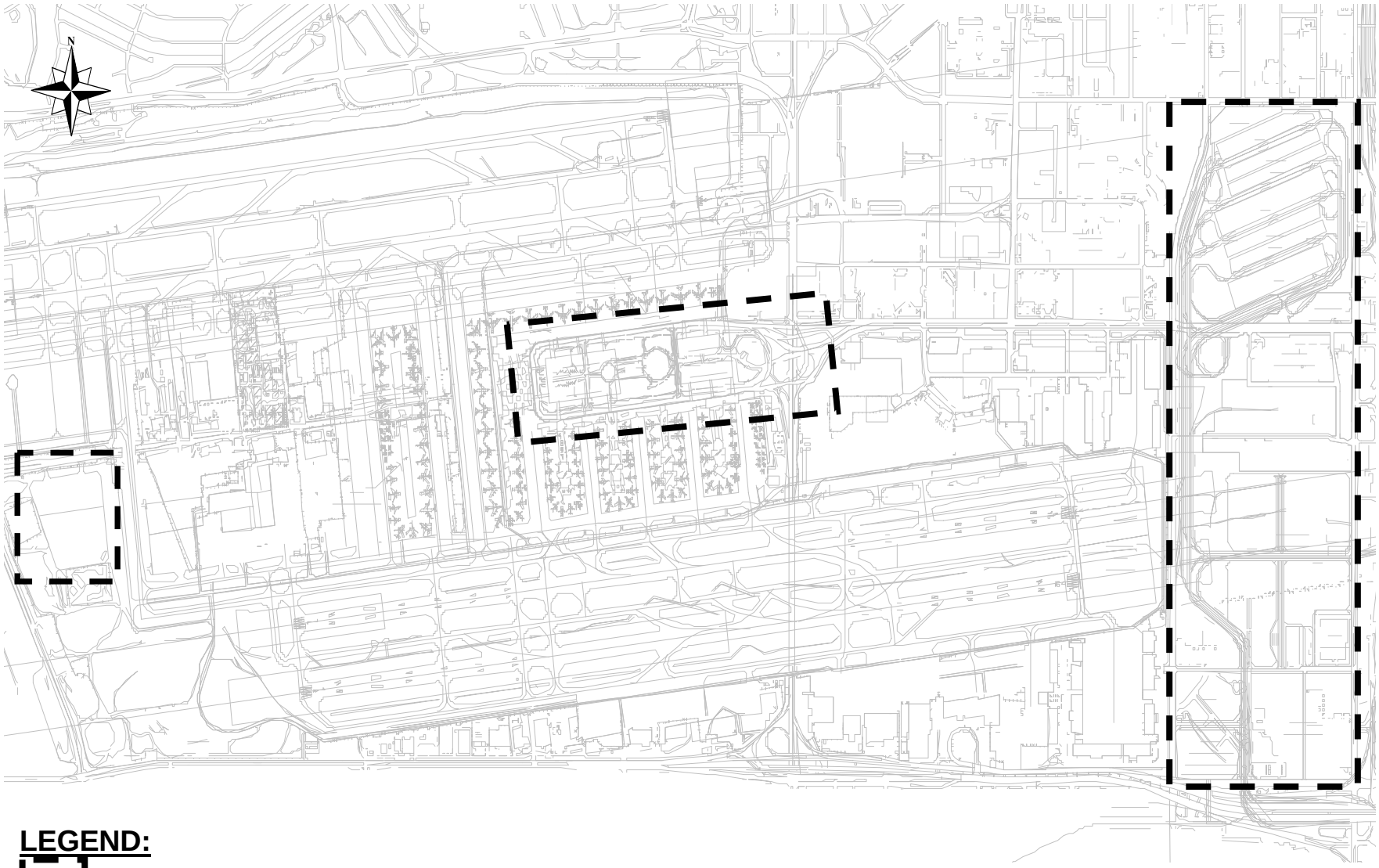


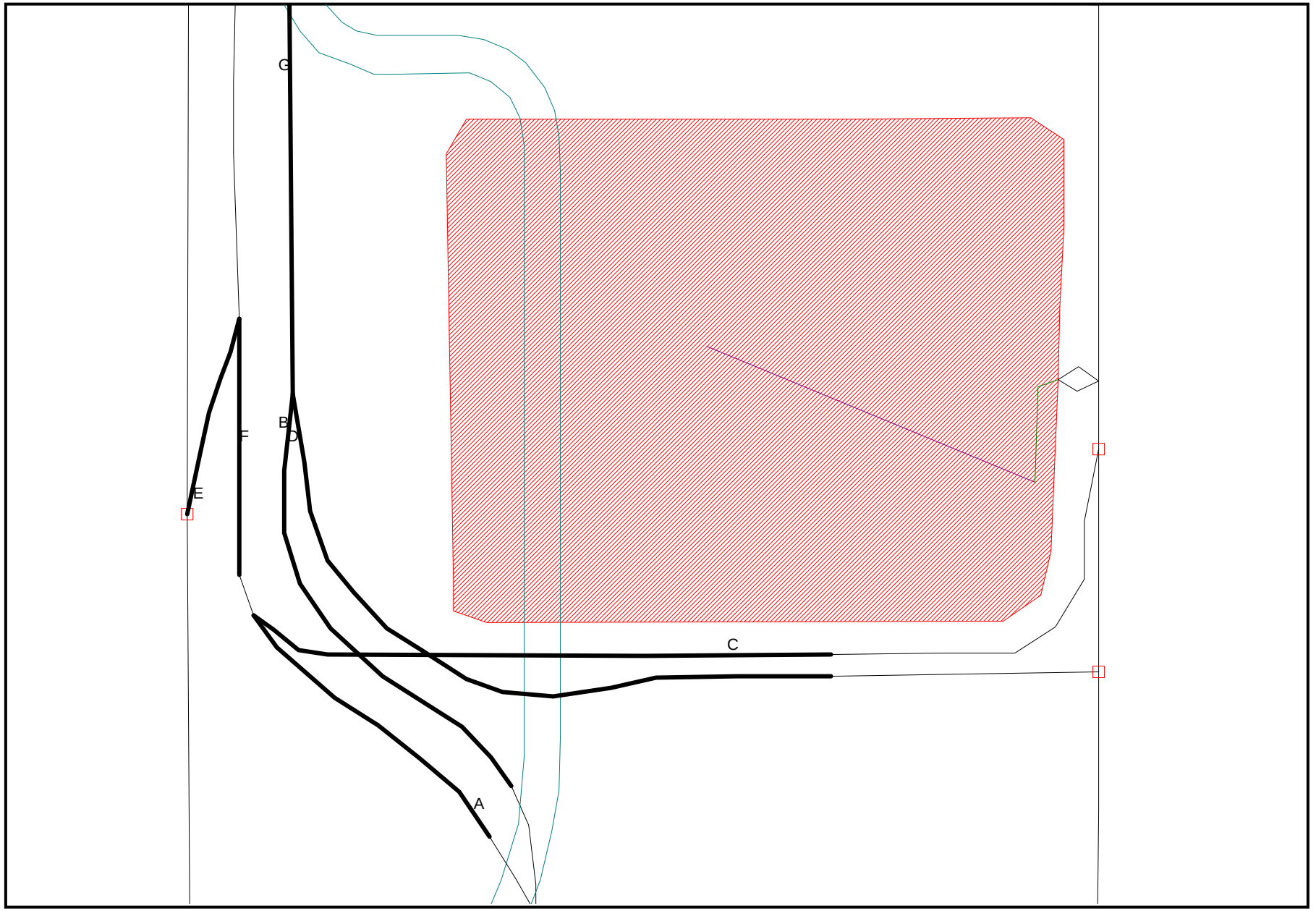
LAX Master Plan **Supplement to the Draft EIS/EIR**	**On-Airport Roadway Analysis Area**	**Figure** **H1**

ALTERNATIVE D, YEAR 2015, PLANNED

Segment Reference List

A	NB Imperial7
B	SB Imperial1
C	"WB La Cienega, Entrance2"
D	"EB La Cienega, Exit1"
E	AVIAEN (Aviation Entrance)
F	GTC Entrance2
G	GTC Exit
H	EB Century to W. GTC Entrance2
I	GTC Entrance6
J	EB Century to S. GTC Entrance
K	W. GTC Exit6
L	S. GTC Exit5
M	"CENTEBIN (EB Century, Entrance)"
N	"CENTEBEX (EB Century, Exit)"
O	S. GTC Exit4
P	W. GTC Entrance1
Q	S. GTC Entrance1
R	S. GTC Entrance2
S	W. GTC Entrance2
T	"S. GTC Recirculate, South"
U	"S. GTC Recirculate, North"
V	S. GTC Recirculate to W. GTC
W	W. GTC Recirculate to S. GTC
X	W. GTC Recirculate2
Y	Century Exit Loop1
Z	S. GTC Entrance3
AA	"CENTWBEX (WB Century, Exit2)"
AB	Century Exit Loop2
AC	WB Century Exit1
AD	S. Exit3
AE	S. GTC Entrance4
AF	S. GTC Exit2
AG	South Recirculator2
AH	S. GTC Entrance6
AI	S. GTC Exit1
AJ	"Pier 3 Parking, South Exit WB"
AK	"Pier 3 Parking, South Exit EB"
AL	S. GTC Entrance7
AM	E. GTC Exit2
AN	"Pier 3 Parking, E. Entrance"
AO	E. GTC Entrance1
AP	W. GTC Entrance3
AQ	W. GTC Exit5
AR	"Pier 3 Parking, West Entrance"
AS	"South Pier, Curbfront B, Entrance"
AT	E. GTC Entrance2
AU	"CVHA Stage Lot, W. Entrance"
AV	W. GTC Entrance4
AW	"North Pier, Curbfront A, Entrance1"
AX	W. GTC Exit4
AY	"South Pier, Curbfront B, Exit"

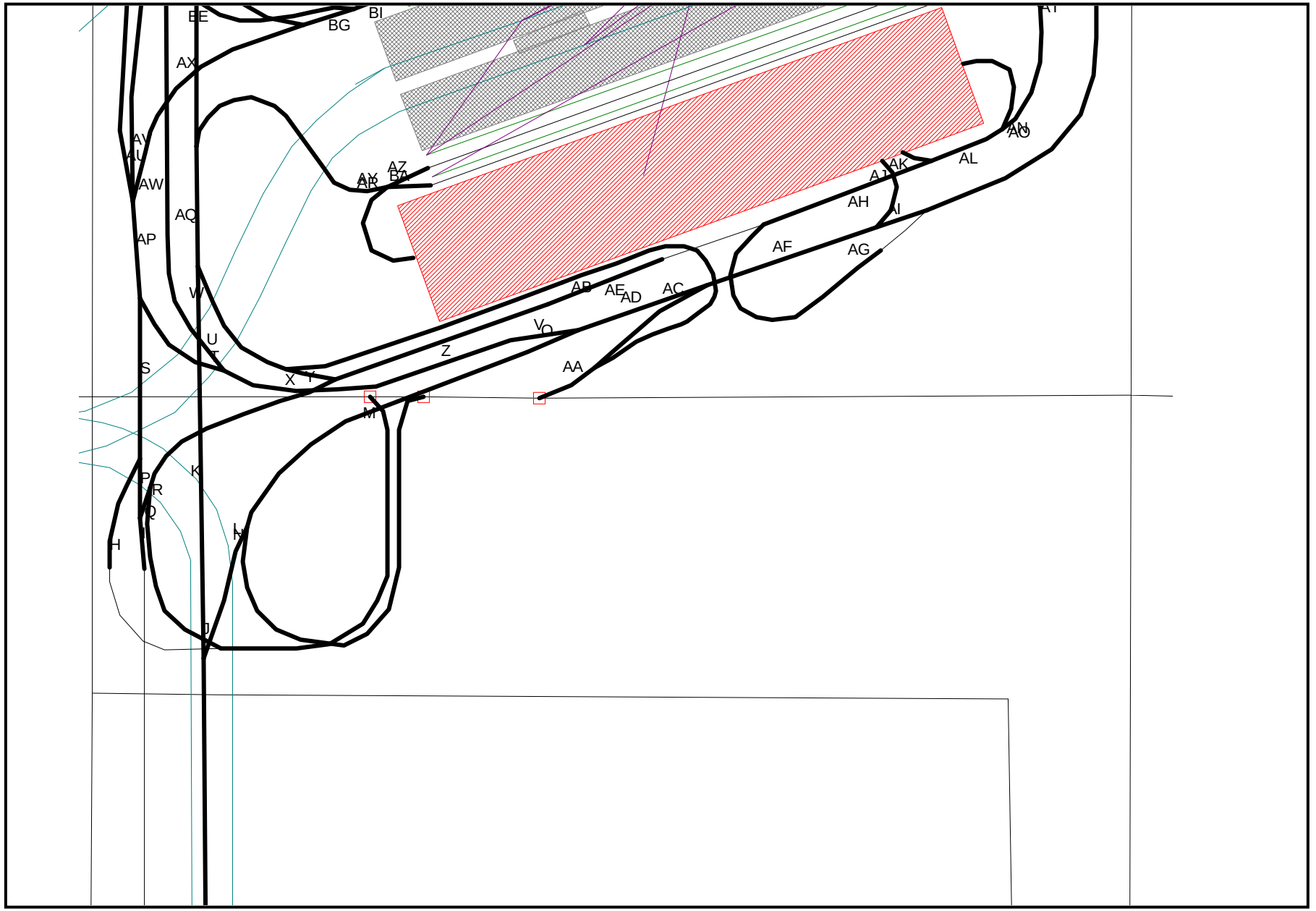
AZ "South Pier, Curbfront B, Departures Exit"
BA "South Pier, Curbfront B, Arrivals Exit"
BB "South Pier, Curbfront B, Departures Entrance"
BC "South Pier, Curbfront B, Arrivals Entrance"
BD W. GTC Exit3
BE "CVHA Ramp to South Pier, Curbfront A"
BF Pier 2 Parking Recirculator
BG "South Pier, Curbfront A, Entrance2"
BH "South Pier, Curbfront A, Arrivals Entrance2"
BI "South Pier, Curbfront A, Departures Entrance"
BJ "South Pier, Curbfront A, Arrivals Exit"
BK "South Pier, Curbfront A, Departures Exit2"
BL "Pier 2 Parking, East Recirculate Entrance"
BM "South Pier, Curbfront A, Exit"
BN "South Pier, Curbfront A, Recirculate to E. GTC Entry"
BO E. GTC Entrance3
BP E. GTC Exit1
BQ W. GTC Exit2
BR P2 Exit
BS "North Pier, Curbfront B, Exit"
BT "Pier 2 Parking, West Exit"
BU "Pier 2 Parking, West Entrance"
BV "North Pier, Curbfront B, Arrivals Exit"
BW "North Pier, Curbfront B, Departures Exit"
BX "Pier 2 Parking, East Entrance"
BY "North Pier, Curbfront B, Arrivals Entrance"
BZ "North Pier, Curbfront B, Departures Entrance"
CA "North Pier, Curbfront B, Entrance"
CB E. GTC Entrance4
CC E. GTC Entrance5
CD "North Pier, Curbfront A, Entrance2"
CE Pier 1 Recirculation 2
CF W. GTC Exit1
CG "Pier 1 Parking, West Entrance"
CH "North Pier, Curbfront A, Arrivals Entrance"
CI "North Pier, Curbfront B, Departures Entrance"
CJ "North Pier, Curbfront A, Arrivals Exit"
CK "North Pier, Curbfront A, Departures Exit"
CL "North Pier, Curbfront A, Exit to Park1"
CM "North Pier, Curbfront A, Exit"
CN CVEH Entry
CO East Return Loop
CP "Pier 1 & CVHA, Exit Road"
CQ "CVHA Stage Lot, South Exit"
CR "Pier 1 Parking, Exit"
CS "CVHA Stage Lot, East Entrance"
CT "Peir 1 Parking, East Entrance"
CU "North Pier, Curbfront A, Exit to Park 2"
CV "CVHA Stage Lot, Aviation Entrance"
CW "CVHA Stage Lot, Aviation Exit"



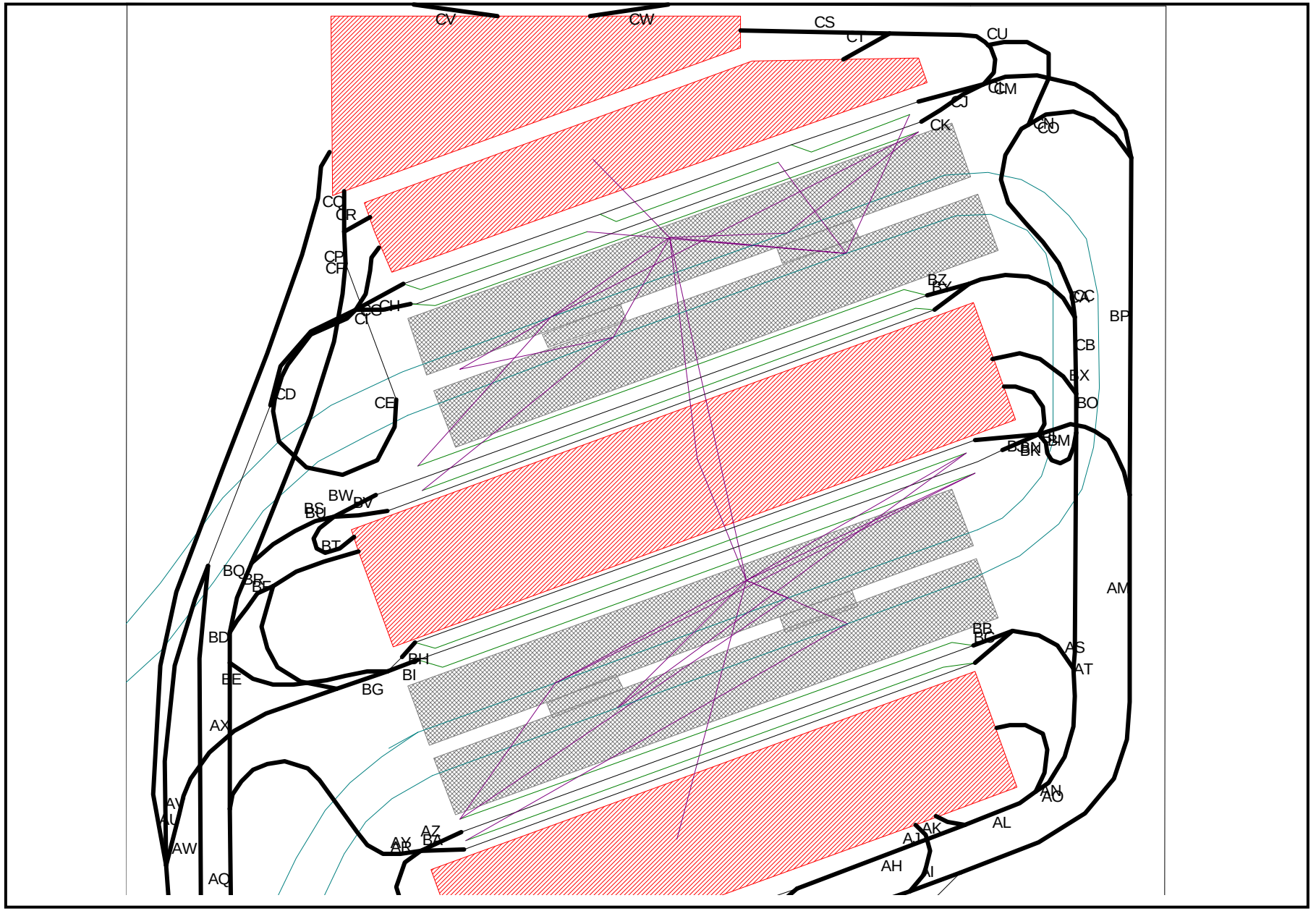
LAX Master Plan
Supplement to the Draft EIS/EIR

Segment Labels 1

Figure
H2



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Segment Labels 2**	Figure **H3**



LAX Master Plan **Supplement to the Draft EIS/EIR**	**Segment Labels 3**	Figure **H4**

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Planned

Hour of Day	North Pier, Curbfront A				North Pier, Curbfront B		South Pier, Curbfront A				South Pier, Curbfront B		Remote Long Term Park Curb
	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals	
0-1:00	0.91%	2.13%	1.69%	3.31%	2.25%	2.18%	0.66%	1.09%	0.85%	0.36%	0.00%	1.30%	0.70%
2:00	0.26%	0.43%	0.20%	0.52%	0.82%	0.52%	0.29%	0.65%	0.79%	0.19%	0.00%	0.40%	0.23%
3:00	0.12%	0.00%	0.00%	0.04%	0.03%	0.01%	0.20%	0.36%	0.36%	0.04%	0.00%	0.30%	0.00%
4:00	0.09%	0.00%	0.00%	0.06%	0.17%	0.00%	0.14%	0.22%	0.34%	0.05%	0.00%	0.03%	0.00%
5:00	0.14%	0.00%	0.00%	0.27%	0.73%	0.00%	0.14%	0.00%	0.04%	0.47%	0.49%	0.00%	0.23%
6:00	0.53%	0.00%	0.05%	1.88%	2.36%	0.25%	0.54%	0.07%	0.20%	3.63%	3.65%	0.21%	1.40%
7:00	4.62%	0.85%	0.25%	5.01%	7.02%	1.72%	4.59%	1.09%	0.70%	7.31%	6.14%	1.57%	5.81%
8:00	4.72%	1.28%	1.38%	5.36%	6.95%	1.76%	4.73%	1.67%	2.10%	6.21%	7.62%	1.64%	5.81%
9:00	4.97%	2.55%	3.84%	6.02%	6.69%	1.76%	5.25%	3.70%	3.60%	6.56%	6.90%	4.00%	5.81%
10:00	5.55%	5.18%	6.15%	4.28%	5.57%	4.35%	5.45%	4.50%	4.72%	6.99%	7.68%	4.85%	5.81%
11:00	5.74%	5.89%	6.37%	6.66%	5.36%	5.95%	5.90%	6.53%	6.23%	6.95%	9.26%	7.28%	5.81%
12:00	7.13%	8.37%	7.72%	7.34%	9.35%	8.76%	7.21%	8.56%	8.31%	7.68%	8.37%	8.51%	5.81%
13:00	6.67%	6.52%	7.48%	6.14%	6.40%	5.38%	6.92%	7.33%	7.29%	6.27%	6.27%	6.97%	5.81%
14:00	6.69%	6.81%	9.17%	6.82%	6.09%	3.61%	6.49%	5.52%	6.64%	5.44%	4.81%	4.26%	5.81%
15:00	6.55%	6.03%	7.37%	6.43%	5.85%	4.77%	6.40%	5.15%	4.97%	5.88%	6.16%	5.50%	5.81%
16:00	6.64%	6.31%	6.77%	6.41%	5.94%	5.82%	6.51%	5.81%	5.19%	4.69%	5.38%	6.45%	5.81%
17:00	6.18%	6.95%	6.98%	5.72%	5.84%	6.60%	5.86%	5.52%	5.28%	5.35%	4.54%	5.86%	5.81%
18:00	6.25%	6.81%	5.89%	4.82%	3.14%	7.36%	6.01%	6.17%	6.96%	5.15%	5.11%	5.32%	5.81%
19:00	5.74%	4.54%	3.78%	3.10%	2.03%	6.01%	6.04%	6.17%	5.66%	5.41%	3.51%	6.72%	5.81%
20:00	6.11%	6.03%	5.43%	4.26%	2.21%	7.24%	6.04%	6.02%	6.56%	4.48%	2.85%	5.54%	5.81%
21:00	5.04%	8.01%	7.13%	6.94%	4.57%	8.52%	4.75%	6.60%	7.04%	3.96%	4.89%	6.14%	5.81%
22:00	4.97%	7.45%	6.81%	5.40%	5.31%	7.61%	4.88%	6.97%	6.77%	3.59%	3.20%	7.13%	5.81%
23:00	2.56%	4.96%	3.43%	1.88%	3.93%	6.37%	2.92%	6.39%	5.98%	2.32%	2.90%	6.39%	2.56%
24:00	1.84%	2.91%	2.13%	1.34%	1.40%	3.45%	2.10%	3.77%	3.37%	0.99%	0.34%	3.58%	1.40%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Planned

Hour of Day	Intermodal Center		Rental Car Lot		Private Long Term Park Curb	East Employee Lot Curb	Central Terminal Area					GTC/ITC Parking		Staging	
	North Curb	South Curb	RAC Curb	Off-RAC Curb			Terminal 1	Terminal 2	TBIT	Terminal 3	Terminal 4	Park In	Park Out	Inflow	Outflow
0-1:00	1.13%	2.86%	1.84%	0.34%	0.51%	4.36%	2.28%	2.28%	0.21%	2.28%	2.28%	1.38%	1.36%	1.68%	1.65%
2:00	1.05%	1.82%	0.66%	0.17%	0.18%	3.19%	2.28%	2.28%	0.21%	2.28%	2.28%	0.32%	1.15%	0.62%	0.69%
3:00	1.05%	0.78%	0.19%	0.00%	0.15%	1.67%	2.28%	2.28%	0.21%	2.28%	2.28%	0.05%	0.39%	0.31%	0.39%
4:00	1.05%	1.43%	0.30%	0.00%	0.12%	2.49%	2.28%	2.28%	0.21%	2.28%	2.28%	0.02%	0.06%	0.29%	0.33%
5:00	1.21%	2.60%	0.63%	0.17%	0.18%	4.11%	2.28%	2.28%	0.95%	2.28%	2.28%	0.26%	0.07%	0.47%	0.24%
6:00	2.43%	3.39%	1.86%	0.68%	0.66%	4.78%	2.28%	2.28%	4.20%	2.28%	2.28%	2.13%	0.40%	1.75%	0.29%
7:00	6.03%	5.86%	4.16%	5.95%	5.74%	5.54%	5.70%	5.70%	8.27%	5.70%	5.70%	3.84%	2.35%	4.15%	1.75%
8:00	7.03%	5.34%	4.25%	5.95%	5.74%	4.24%	5.70%	5.70%	9.33%	5.70%	5.70%	4.82%	3.70%	4.34%	2.16%
9:00	7.33%	4.69%	4.82%	5.95%	5.74%	3.99%	5.70%	5.70%	10.64%	5.70%	5.70%	5.76%	4.02%	5.03%	3.55%
10:00	7.49%	4.30%	5.18%	5.95%	5.74%	2.03%	5.70%	5.70%	11.45%	5.70%	5.70%	6.29%	5.25%	5.47%	5.02%
11:00	6.53%	4.04%	6.26%	5.95%	5.74%	1.91%	4.56%	4.56%	7.10%	4.56%	4.56%	7.92%	6.17%	6.66%	6.18%
12:00	5.02%	4.17%	7.63%	5.10%	6.80%	2.18%	4.56%	4.56%	0.42%	4.56%	4.56%	7.82%	8.13%	8.24%	8.16%
13:00	5.02%	5.21%	6.28%	5.10%	6.80%	4.55%	4.56%	4.56%	0.44%	4.56%	4.56%	6.33%	7.59%	6.60%	6.81%
14:00	5.02%	5.34%	5.81%	5.10%	6.80%	5.99%	4.56%	4.56%	0.42%	4.56%	4.56%	5.80%	6.23%	6.04%	6.12%
15:00	5.02%	5.86%	5.79%	5.10%	6.80%	6.88%	5.70%	5.70%	0.55%	5.70%	5.70%	6.42%	6.05%	5.98%	5.65%
16:00	5.02%	6.25%	5.73%	5.10%	6.80%	8.67%	5.70%	5.70%	0.55%	5.70%	5.70%	6.03%	6.11%	5.81%	6.04%
17:00	6.40%	6.38%	5.75%	5.44%	6.01%	6.43%	5.70%	5.70%	6.77%	5.70%	5.70%	5.61%	5.98%	5.77%	6.20%
18:00	7.49%	5.34%	5.28%	5.44%	6.01%	4.82%	5.70%	5.70%	11.75%	5.70%	5.70%	4.62%	6.10%	5.44%	6.47%
19:00	7.03%	4.82%	4.29%	5.44%	6.01%	3.42%	5.70%	5.70%	9.63%	5.70%	5.70%	4.44%	4.68%	4.50%	5.53%
20:00	4.31%	4.30%	4.48%	5.44%	6.01%	2.70%	5.70%	5.70%	9.75%	5.70%	5.70%	4.81%	4.40%	4.09%	5.49%
21:00	3.43%	4.04%	5.88%	5.44%	4.14%	2.43%	3.23%	3.23%	6.17%	3.23%	3.23%	6.04%	5.33%	5.63%	6.53%
22:00	1.59%	4.56%	5.66%	5.44%	4.14%	3.65%	3.04%	3.04%	0.28%	3.04%	3.04%	5.11%	6.30%	5.30%	6.53%
23:00	1.26%	3.26%	4.44%	5.44%	1.66%	5.03%	2.47%	2.47%	0.23%	2.47%	2.47%	3.04%	5.30%	3.82%	5.20%
24:00	1.05%	3.65%	2.87%	5.44%	1.51%	4.97%	2.28%	2.28%	0.21%	2.28%	2.28%	1.13%	2.89%	1.97%	3.00%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100.00%	100.00%	100.00%	100.00%

Air Quality Segments – Alternative D Mitigated Model, Year 2015

Reference Segment List

A	NB Imperial3
B	SB Imperial6
C	NB Imperial4
D	SB Imperial5
E	NB Imperial6
F	SB Imperial2
G	SB Ramp into ITC STPK
H	NB Ramp into ITC STPK
I	NB Ramp out of ITC
J	SB Exit Ramp from ITC Curbfront
K	NB ITC Street Access
L	SB ITC Street Access3
M	WB ITC Road3
N	EB ITC Road3
O	NB ITC Street Access3
P	SB ITC Street Access
Q	111th Enter GTC
R	111th Exit GTC
S	NB Imperial7
T	SB Imperial1
U	ITC to La Cienega
V	"NB Imperial7, Entrance"
W	La Cienega to ITC
X	"SB Imperial1, Exit"
Y	"WB La Cienega, Entrance2"
Z	"EB La Cienega, Exit1"
AA	"EB La Cienega, Exit1"
AB	"WB La Cienega, Entrance2"
AC	AVIAEN (Aviation Entrance)
AD	GTC Entrance2
AE	GTC Exit
AF	GTC Entrance6
AG	"South Pier, Curbfront B, Entrance"
AH	"South Pier, Curbfront B, Departures Entrance"
AI	"South Pier, Curbfront B, Arrivals Entrance"
AJ	"South Pier, Curbfront B, Departures Exit"
AK	"South Pier, Curbfront B, Arrivals Exit"
AL	"South Pier, Curbfront B, Exit"
AM	"Pier 3 Parking, West Entrance"
AN	"South Pier, Curbfront A, Entrance2"
AO	"South Pier, Curbfront A, Arrivals Entrance1"
AP	"South Pier, Curbfront A, Departures Entrance"
AQ	"South Pier, Curbfront A, Departures Exit2"
AR	"South Pier, Curbfront A, Arrivals Exit"
AS	"Pier 2 Parking, East Recirculate Entrance"
AT	"South Pier, Curbfront A, Exit"
AU	"South Pier, Curbfront A, Recirculate to E. GTC Entry"
AV	"North Pier, Curbfront B, Entrance"
AW	"North Pier, Curbfront B, Departures Entrance"
AX	"North Pier, Curbfront B, Arrivals Entrance"
AY	"North Pier, Curbfront B, Departures Exit"

AZ	"North Pier, Curbfront B, Arrivals Exit"
BA	"North Pier, Curbfront B, Exit"
BB	"Pier 2 Parking, West Entrance"
BC	"North Pier, Curbfront A, Entrance2"
BD	"Pier 1 Parking, West Entrance"
BE	"North Pier, Curbfront A, Arrivals Entrance"
BF	"North Pier, Curbfront B, Departures Entrance"
BG	"North Pier, Curbfront A, Arrivals Exit"
BH	"North Pier, Curbfront A, Departures Exit"
BI	"North Pier, Curbfront A, Exit to Park1"
BJ	"North Pier, Curbfront A, Exit"
BK	"CENTEBIN (EB Century, Entrance)"
BL	"CENTEBEX (EB Century, Exit)"
BM	EB Century to W. GTC Entrance2
BN	W. GTC Entrance1
BO	S. GTC Entrance1
BP	EB Century to S. GTC Entrance
BQ	S. GTC Entrance2
BR	W. GTC Exit6
BS	S. GTC Exit5
BT	S. GTC Exit4
BU	S. GTC Recirculate to W. GTC
BV	W. GTC Entrance2
BW	"S. GTC Recirculate, South"
BX	"S. GTC Recirculate, North"
BY	W. GTC Recirculate to S. GTC
BZ	W. GTC Recirculate2
CA	Century Exit Loop1
CB	W. GTC Entrance3
CC	W. GTC Exit5
CD	W. GTC Entrance4
CE	"South Pier, Curbfront A, Entrance1"
CF	W. GTC Exit4
CG	"CVHA Stage Lot, W. Entrance"
CH	W. GTC Entrance4
CI	"CVHA Ramp to South Pier, Curbfront A"
CJ	W. GTC Exit3
CK	W. GTC Exit2
CL	P2 Exit
CM	"South Pier, Curbfront A, Entrance2"
CN	Pier 2 Parking Recirculator
CO	"Pier 2 Parking, West Exit"
CP	"North Pier, Curbfront A, Entrance1"
CQ	W. GTC Exit0
CR	Pier 1 Recirculation 2
CS	"Pier 1 Parking, Exit"
CT	W. GTC Exit1
CU	"Pier 1 & CVHA, Exit Road"
CV	"CVHA Stage Lot, South Exit"
CW	"CVHA Stage Lot, Aviation Entrance"
CX	"CVHA Stage Lot, Aviation Exit"
CY	"CVHA Stage Lot, East Entrance"
CZ	"Peir 1 Parking, East Entrance"
DA	"North Pier, Curbfront A, Exit to Park 2"
DB	CVEH Entry
DC	E. GTC Entrance5
DD	East Return Loop

DE	E. GTC Exit1
DF	"Pier 2 Parking, East Entrance"
DG	E. GTC Entrance4
DH	E. GTC Entrance3
DI	E. GTC Entrance2
DJ	E. GTC Exit2
DK	E. GTC Entrance1
DL	"Pier 3 Parking, E. Entrance"
DM	S. GTC Entrance7
DN	"Pier 3 Parking, South Exit EB"
DO	S. GTC Entrance6
DP	"Pier 3 Parking, South Exit WB"
DQ	S. GTC Exit1
DR	South Recirculator2
DS	S. GTC Exit2
DT	Century Exit Loop2
DU	S. GTC Entrance4
DV	S. Exit3
DW	WB Century Exit1
DX	"CENTWBEX (WB Century, Exit2)"
DY	West Exit ITC
DZ	"Pier 1 Parking, Exit"
EA	P1 Exit to Curb
EB	"Pier 1, Recirculation 1"

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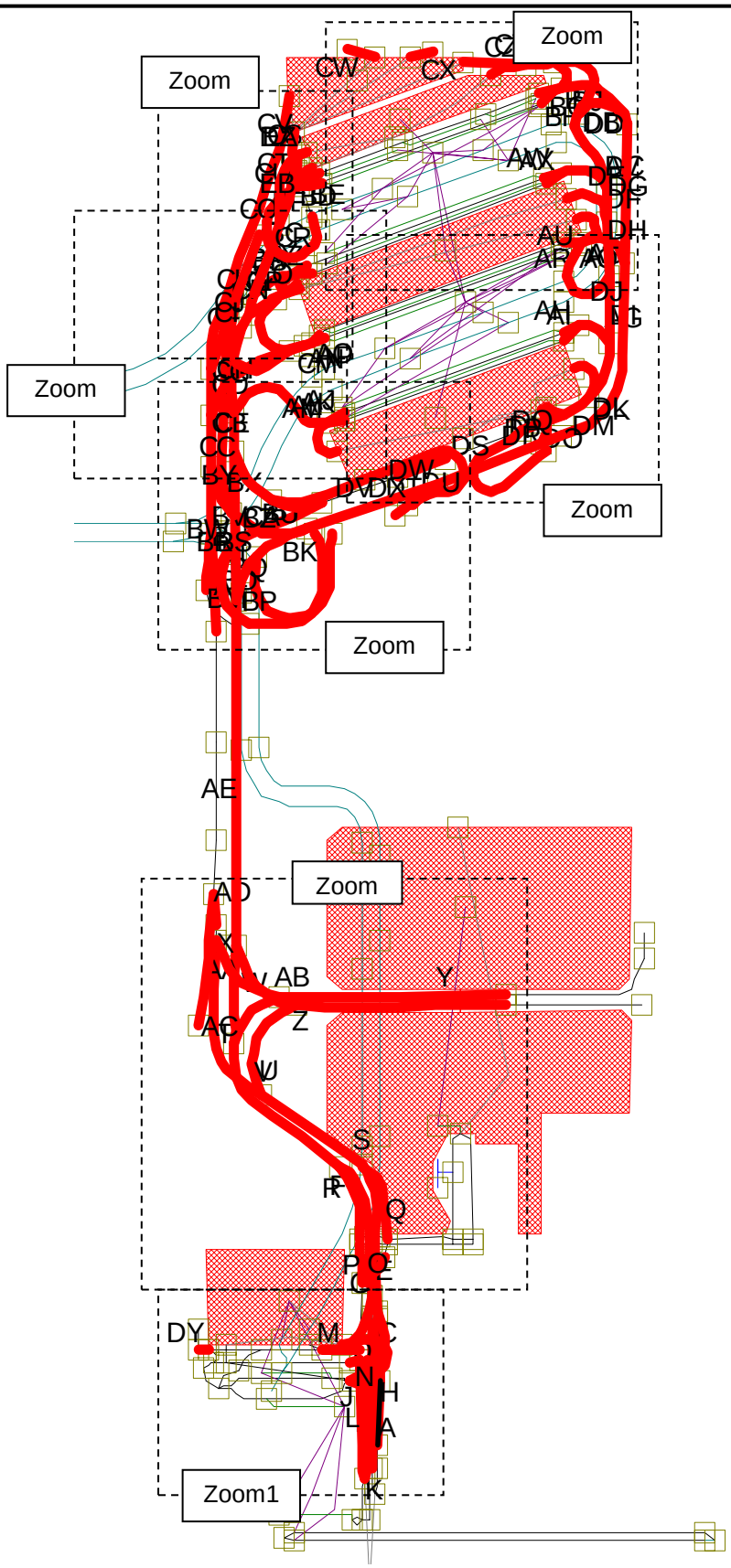
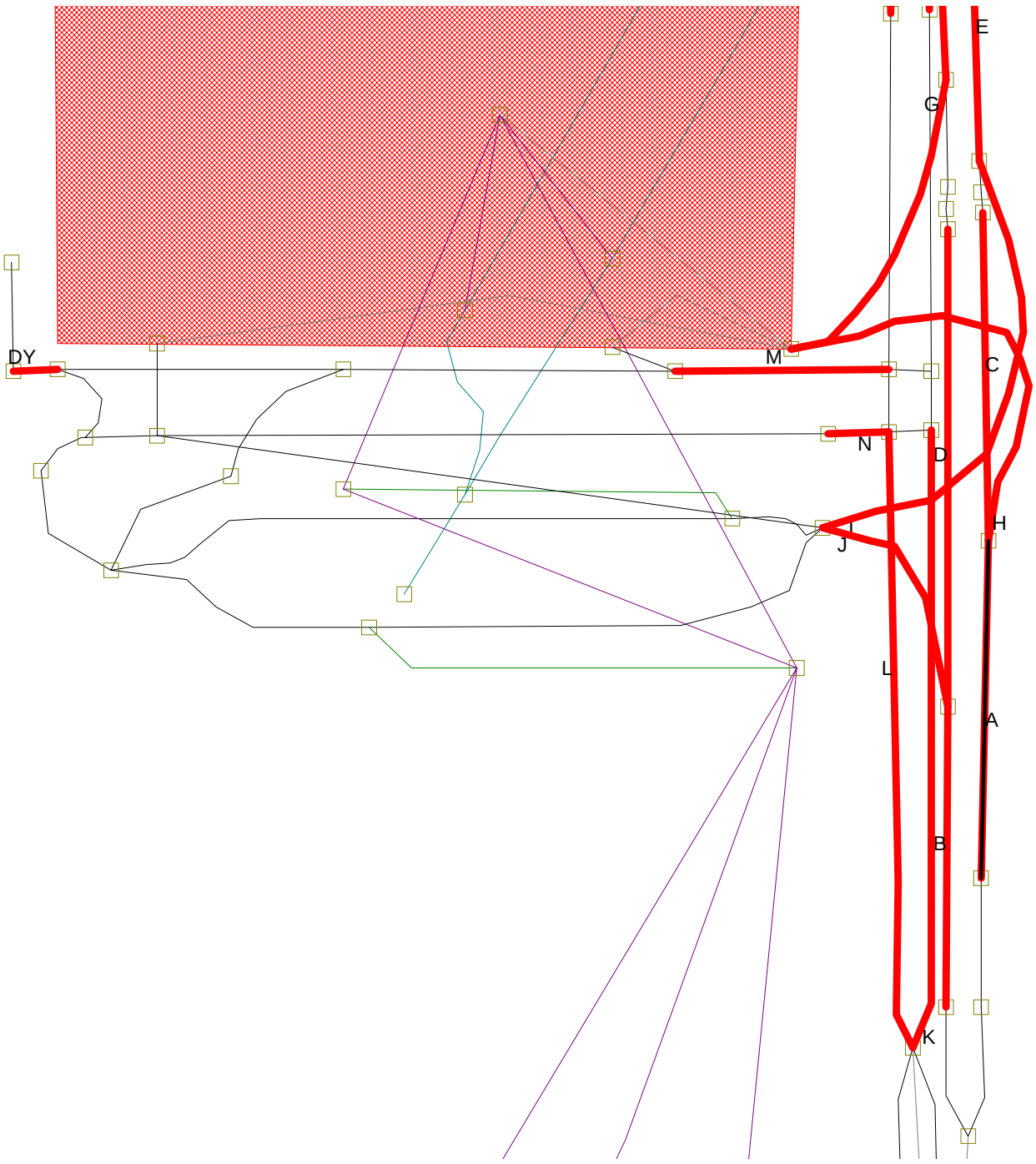
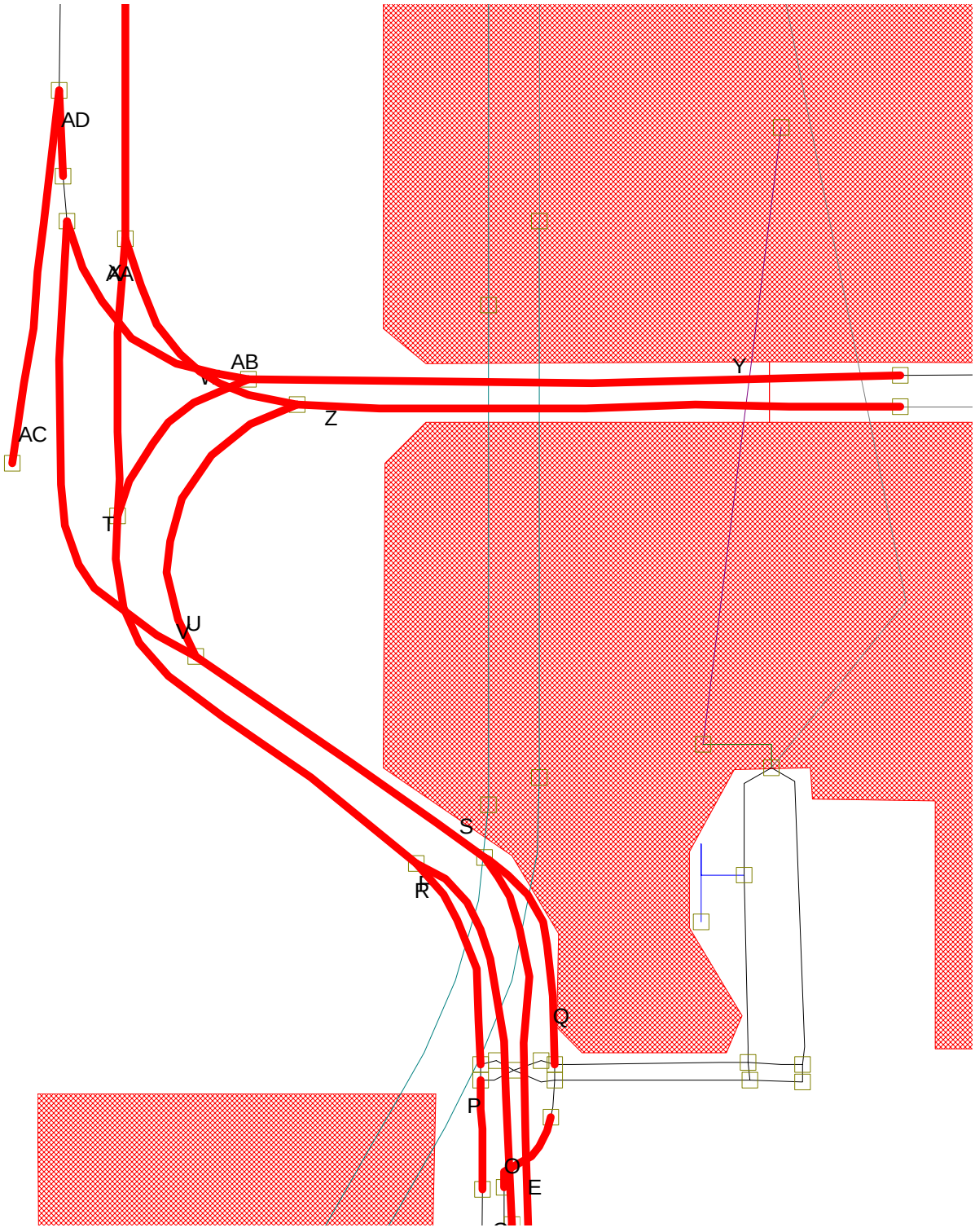


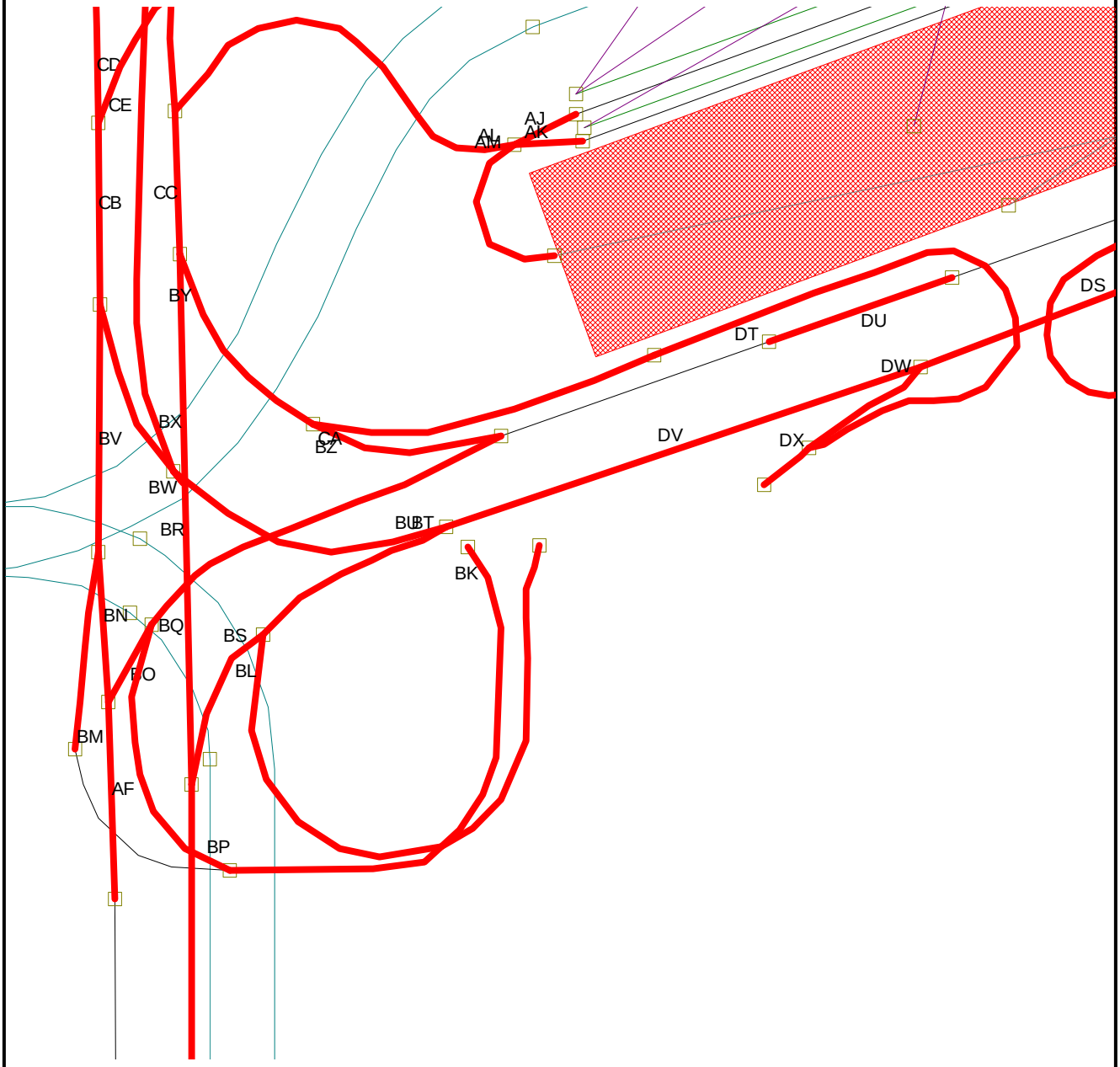
LAX Master Plan **Supplement to the Draft EIS/EIR**	**Segment Labels**	**Figure** **H5**



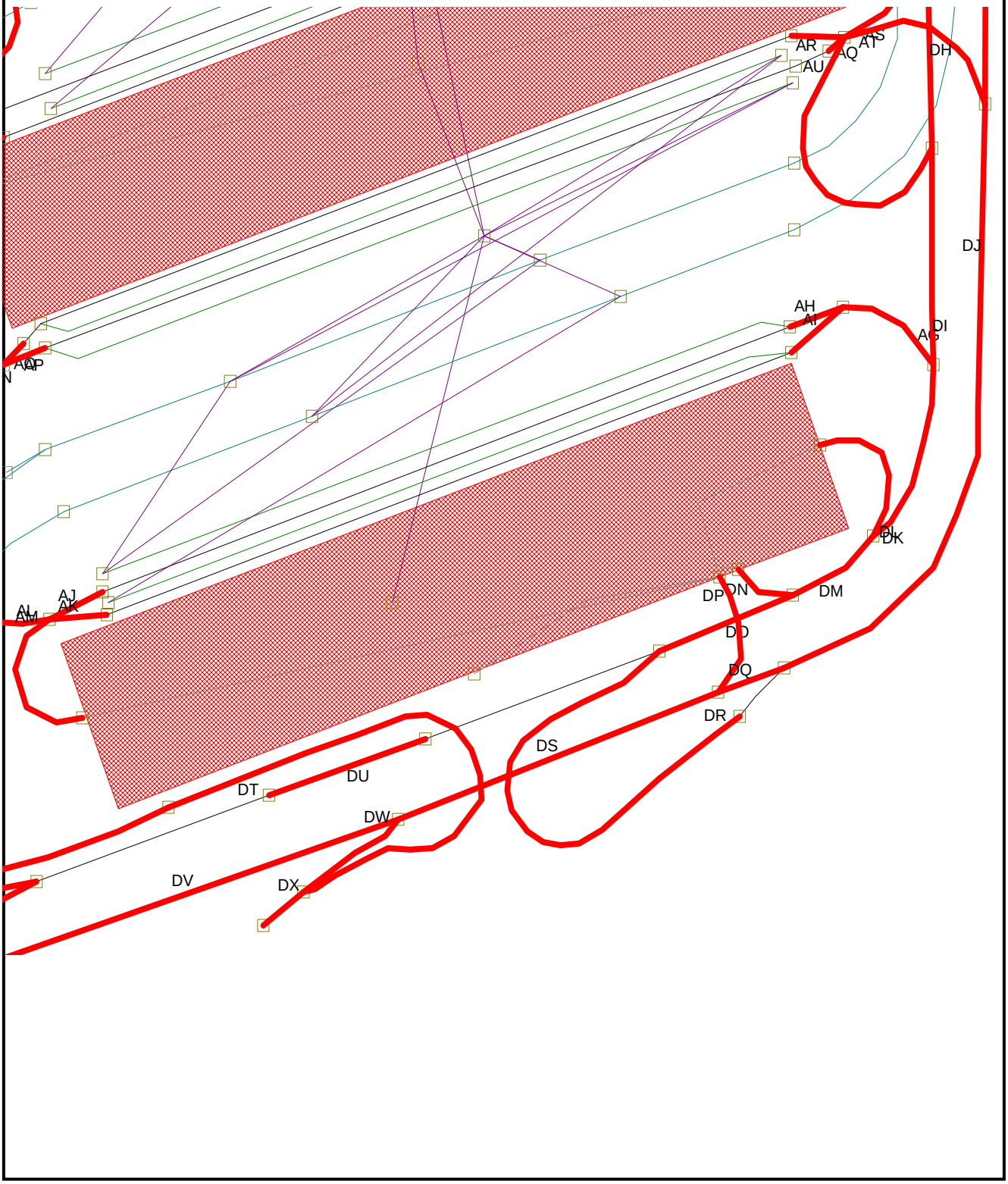
LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 1, ITC	Figure H6



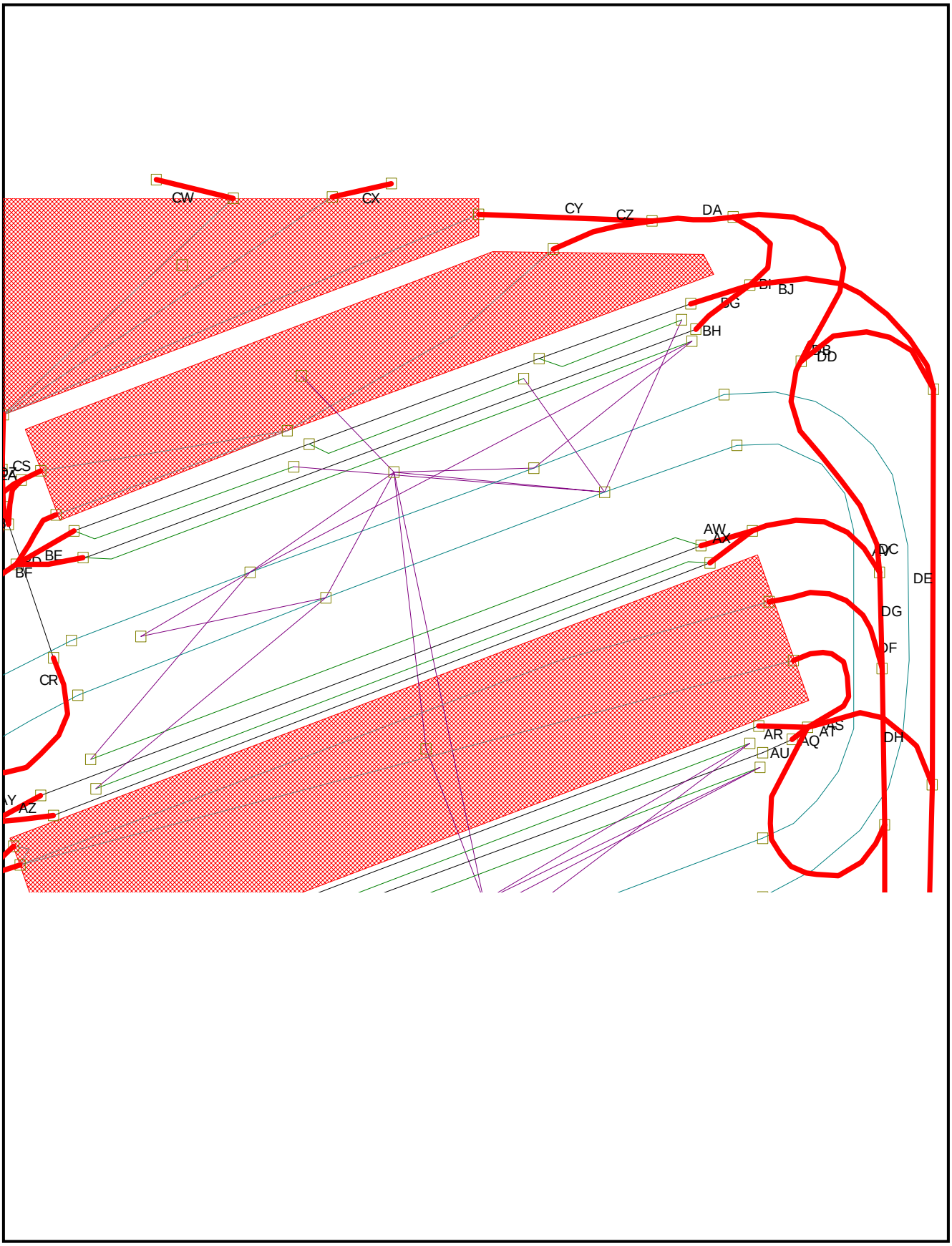
LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 2	Figure H7



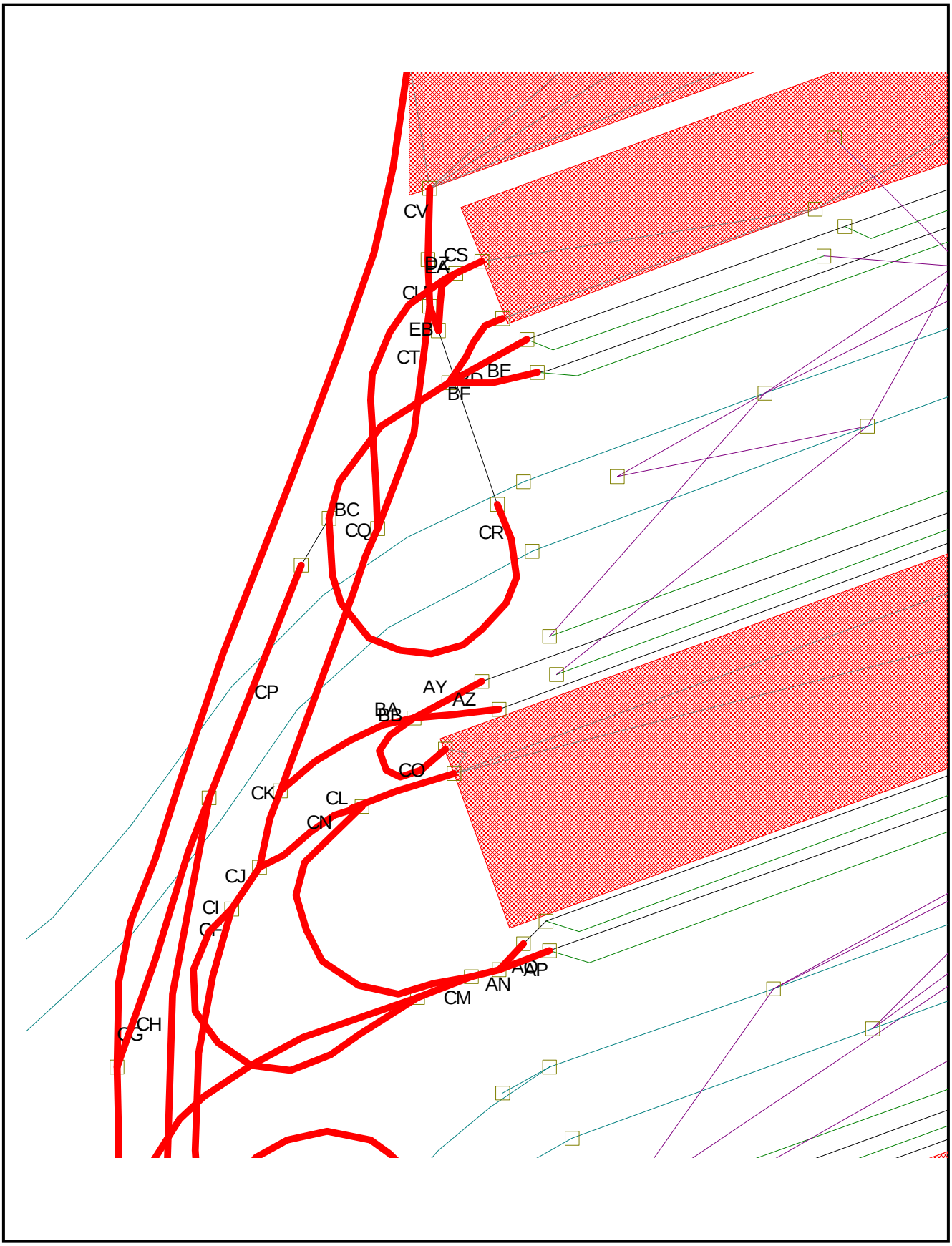
LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 3	Figure H8



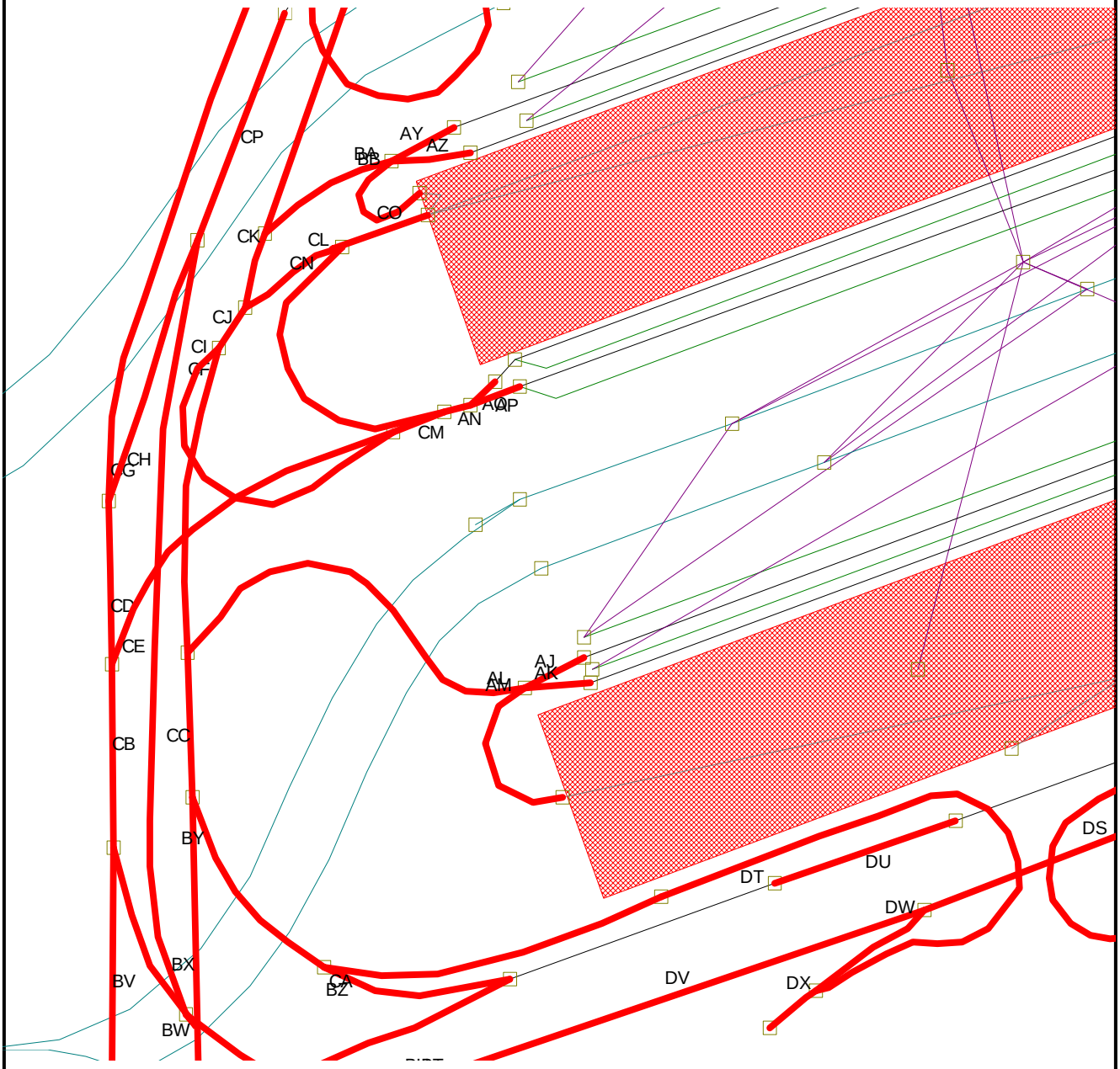
LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 4	Figure H9



LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 5	Figure H10



LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 6	Figure H11



LAX Master Plan Supplement to the Draft EIS/EIR	Zoom 7	Figure H12

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Mitigated

Hour of Day	North Pier, Curbfront A				North Pier, Curbfront B		South Pier, Curbfront A				South Pier, Curbfront B	
	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals	Commercial Arrivals	Taxi Arrivals	Private Auto Arrivals	Departures	Departures	Arrivals
0-1:00	0.91%	2.13%	1.69%	3.31%	2.25%	2.18%	0.66%	1.09%	0.85%	0.36%	0.00%	1.30%
2:00	0.26%	0.43%	0.20%	0.52%	0.82%	0.52%	0.29%	0.65%	0.81%	0.19%	0.00%	0.40%
3:00	0.12%	0.00%	0.00%	0.04%	0.03%	0.01%	0.20%	0.36%	0.36%	0.04%	0.00%	0.30%
4:00	0.09%	0.00%	0.00%	0.06%	0.17%	0.00%	0.14%	0.22%	0.34%	0.05%	0.00%	0.03%
5:00	0.14%	0.00%	0.00%	0.27%	0.73%	0.00%	0.14%	0.00%	0.04%	0.47%	0.49%	0.00%
6:00	0.53%	0.00%	0.05%	1.88%	2.36%	0.25%	0.54%	0.07%	0.21%	3.64%	3.65%	0.21%
7:00	4.62%	0.85%	0.25%	5.01%	7.02%	1.71%	4.59%	1.09%	0.70%	7.31%	6.14%	1.57%
8:00	4.72%	1.28%	1.38%	5.36%	6.95%	1.76%	4.73%	1.67%	2.10%	6.21%	7.62%	1.64%
9:00	4.97%	2.55%	3.83%	6.02%	6.69%	1.76%	5.25%	3.70%	3.59%	6.57%	6.90%	4.01%
10:00	5.55%	5.18%	6.16%	4.28%	5.57%	4.34%	5.45%	4.50%	4.72%	6.99%	7.68%	4.85%
11:00	5.74%	5.89%	6.37%	6.66%	5.36%	5.96%	5.90%	6.53%	6.24%	6.95%	9.26%	7.28%
12:00	7.13%	8.37%	7.72%	7.34%	9.35%	8.76%	7.21%	8.56%	8.31%	7.68%	8.37%	8.52%
13:00	6.67%	6.52%	7.47%	6.14%	6.40%	5.39%	6.92%	7.33%	7.29%	6.27%	6.27%	6.98%
14:00	6.69%	6.81%	9.17%	6.82%	6.07%	3.60%	6.49%	5.52%	6.65%	5.44%	4.81%	4.25%
15:00	6.55%	6.03%	7.36%	6.43%	5.84%	4.77%	6.40%	5.15%	4.98%	5.88%	6.16%	5.51%
16:00	6.64%	6.31%	6.77%	6.41%	5.94%	5.81%	6.51%	5.81%	5.18%	4.70%	5.38%	6.46%
17:00	6.18%	6.95%	6.98%	5.72%	5.84%	6.60%	5.86%	5.52%	5.27%	5.35%	4.55%	5.86%
18:00	6.25%	6.81%	5.89%	4.82%	3.14%	7.37%	6.01%	6.17%	6.96%	5.15%	5.11%	5.33%
19:00	5.74%	4.54%	3.78%	3.10%	2.03%	6.00%	6.04%	6.17%	5.67%	5.41%	3.50%	6.73%
20:00	6.11%	6.03%	5.42%	4.26%	2.21%	7.25%	6.04%	6.02%	6.55%	4.48%	2.85%	5.54%
21:00	5.04%	8.01%	7.12%	6.94%	4.57%	8.53%	4.75%	6.60%	7.06%	3.96%	4.89%	6.13%
22:00	4.97%	7.45%	6.81%	5.40%	5.31%	7.60%	4.88%	6.97%	6.76%	3.59%	3.20%	7.14%
23:00	2.56%	4.96%	3.43%	1.88%	3.93%	6.36%	2.92%	6.39%	5.98%	2.32%	2.90%	6.40%
24:00	1.84%	2.91%	2.13%	1.34%	1.40%	3.44%	2.10%	3.77%	3.37%	0.99%	0.34%	3.58%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Mitigated

Hour of Day	Remote Long Term Park Curb	Intermodal Center		Rental Car Lot		Private Long Term Park Curb	East Employee Lot Curb	Central Terminal Area				
		North Curb	South Curb	RAC Curb	Off-RAC Curb			Terminal 1	Terminal 2	TBIT	Terminal 3	Terminal 4
0-1:00	0.70%	0.00%	2.05%	1.82%	0.34%	0.51%	4.34%	2.28%	2.28%	0.21%	2.28%	2.28%
2:00	0.23%	0.00%	1.73%	0.66%	0.17%	0.18%	3.19%	2.28%	2.28%	0.21%	2.28%	2.28%
3:00	0.00%	0.00%	1.37%	0.19%	0.00%	0.15%	1.67%	2.28%	2.28%	0.21%	2.28%	2.28%
4:00	0.00%	0.00%	1.60%	0.30%	0.00%	0.12%	2.49%	2.28%	2.28%	0.21%	2.28%	2.28%
5:00	0.23%	0.82%	2.01%	0.61%	0.17%	0.18%	4.11%	2.28%	2.28%	0.96%	2.28%	2.28%
6:00	1.40%	4.54%	2.23%	1.86%	0.68%	0.66%	4.78%	2.28%	2.28%	4.21%	2.28%	2.28%
7:00	5.81%	8.66%	6.16%	4.15%	5.95%	5.74%	5.54%	5.70%	5.70%	8.28%	5.70%	5.70%
8:00	5.81%	9.90%	5.97%	4.25%	5.95%	5.74%	4.23%	5.70%	5.70%	9.32%	5.70%	5.70%
9:00	5.81%	11.34%	5.75%	4.82%	5.95%	5.74%	3.99%	5.70%	5.70%	10.65%	5.70%	5.70%
10:00	5.81%	12.16%	5.56%	5.18%	5.95%	5.74%	2.03%	5.70%	5.70%	11.46%	5.70%	5.70%
11:00	5.81%	7.42%	5.52%	6.26%	5.95%	5.74%	1.92%	4.56%	4.56%	7.11%	4.56%	4.56%
12:00	5.81%	0.00%	5.56%	7.64%	5.10%	6.80%	2.18%	4.56%	4.56%	0.42%	4.56%	4.56%
13:00	5.81%	0.00%	5.93%	6.28%	5.10%	6.80%	4.55%	4.56%	4.56%	0.42%	4.56%	4.56%
14:00	5.81%	0.00%	5.97%	5.80%	5.10%	6.80%	6.00%	4.56%	4.56%	0.42%	4.56%	4.56%
15:00	5.81%	0.00%	6.16%	5.80%	5.10%	6.80%	6.89%	5.70%	5.70%	0.53%	5.70%	5.70%
16:00	5.81%	0.00%	6.25%	5.73%	5.10%	6.80%	8.66%	5.70%	5.70%	0.53%	5.70%	5.70%
17:00	5.81%	6.80%	6.29%	5.75%	5.44%	6.01%	6.42%	5.70%	5.70%	6.77%	5.70%	5.70%
18:00	5.81%	12.16%	5.97%	5.29%	5.44%	6.01%	4.83%	5.70%	5.70%	11.76%	5.70%	5.70%
19:00	5.81%	9.90%	5.75%	4.29%	5.44%	6.01%	3.42%	5.70%	5.70%	9.64%	5.70%	5.70%
20:00	5.81%	10.10%	2.60%	4.48%	5.44%	6.01%	2.71%	5.70%	5.70%	9.76%	5.70%	5.70%
21:00	5.81%	6.39%	2.74%	5.88%	5.44%	4.14%	2.43%	3.23%	3.23%	6.17%	3.23%	3.23%
22:00	5.81%	0.00%	2.87%	5.67%	5.44%	4.14%	3.66%	3.04%	3.04%	0.28%	3.04%	3.04%
23:00	2.56%	0.00%	2.05%	4.42%	5.44%	1.66%	5.03%	2.47%	2.47%	0.23%	2.47%	2.47%
24:00	1.40%	0.00%	1.82%	2.86%	5.44%	1.51%	4.97%	2.28%	2.28%	0.21%	2.28%	2.28%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

LAX Master Plan
Air Quality Data: Temporal Distribution
Alternative: 2015 Alternative D, Mitigated

Hour of Day	GTC/ITC Parking		Staging	
	Park In	Park Out	Inflow	Outflow
0-1:00	1.38%	1.36%	1.67%	1.65%
2:00	0.32%	1.15%	0.62%	0.69%
3:00	0.05%	0.39%	0.31%	0.39%
4:00	0.02%	0.06%	0.29%	0.33%
5:00	0.26%	0.07%	0.47%	0.24%
6:00	2.13%	0.40%	1.75%	0.29%
7:00	3.84%	2.34%	4.15%	1.75%
8:00	4.82%	3.70%	4.34%	2.16%
9:00	5.76%	4.02%	5.02%	3.55%
10:00	6.29%	5.25%	5.47%	5.02%
11:00	7.92%	6.17%	6.66%	6.18%
12:00	7.81%	8.13%	8.24%	8.16%
13:00	6.33%	7.59%	6.60%	6.81%
14:00	5.79%	6.23%	6.04%	6.12%
15:00	6.42%	6.05%	5.98%	5.65%
16:00	6.03%	6.11%	5.80%	6.04%
17:00	5.61%	5.98%	5.76%	6.20%
18:00	4.62%	6.10%	5.43%	6.47%
19:00	4.44%	4.68%	4.50%	5.53%
20:00	4.81%	4.40%	4.09%	5.49%
21:00	6.04%	5.32%	5.65%	6.55%
22:00	5.12%	6.30%	5.32%	6.55%
23:00	3.04%	5.30%	3.86%	5.24%
24:00	1.14%	2.89%	1.97%	3.00%
Total	100.00%	100.00%	100.00%	100.00%

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