
APPENDIX A – TRAFFIC AND TRANSIT ANALYSIS

This appendix presents results of the traffic analysis conducted to evaluate development alternatives under Destination Lindbergh as well as transit ridership forecasts. The traffic analysis is described in Sections A.1 through A.4, and the transit ridership forecast is addressed in Sections A.5 and A.6.

A.1 Background

The potential effects of the development alternatives on local street traffic surrounding San Diego International Airport (the Airport) were assessed during the alternatives evaluation process, and the results were considered in developing the recommended development plan. To compare the four finalist alternatives, planning activity level 2 (PAL2) traffic volumes for key roadways were quantified for each alternative and compared to existing levels and the 2030 baseline. The 2030 baseline is consistent with the projected traffic volumes used in the May 2008 Environmental Impact Report (EIR). The following key assumptions were used in the analysis:

- Airport-generated vehicular traffic was assumed to increase in direct proportion to growth in passenger, cargo, and general aviation activity, as estimated in the aviation demand forecast
- Non-airport vehicular traffic growth was based on the SANDAG regional transportation forecast model
- Airport-generated vehicular traffic was distributed to the roadways analyzed based on the location of the passenger terminal, parking, rental car, cargo, and general aviation facilities in each alternative
- The regional distribution of traffic and use of main access points (e.g., northbound Interstate 5, southbound Interstate 5, local streets to the south, local streets to the east, etc.) was assumed to remain consistent with current and forecast traffic patterns according to the SANDAG regional transportation forecast model

In addition, SANDAG's airport transit ridership forecast was used in analyzing future traffic conditions which is summarized below:

- Alternatives A2 and B1: PAL2 transit ridership would be approximately 19 percent (including shared-ride vans)
- Alternatives A3 and A8: PAL2 transit ridership would be approximately 11 percent (including shared-ride vans)

The transit ridership forecast assumes that SANDAG would implement improvements outlined in the *2030 Regional Transportation Plan*.

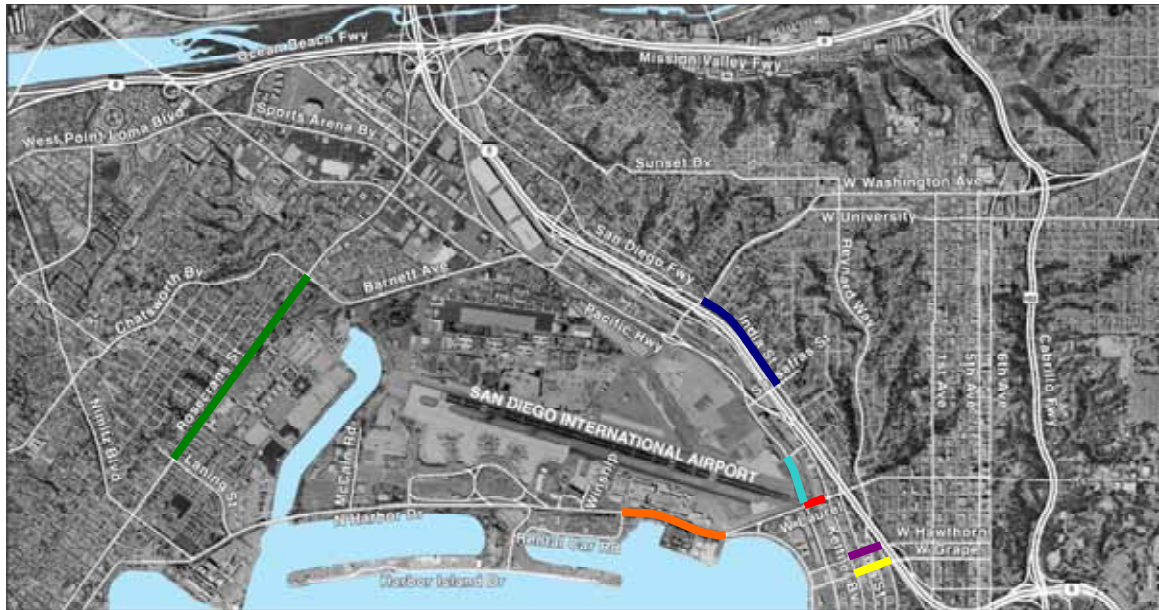
For each roadway analyzed, the traffic volumes were estimated based on the aforementioned assumptions to calculate the associated LOS. The roadway segments analyzed were: North Harbor Drive, Grape Street, Hawthorn Street, Pacific Highway, India Street, Laurel Street and Rosecrans Street. The segments analyzed are depicted on **Figure A-1** on the following page.

A.2 Methodology

Traffic volumes were divided into two groups: airport traffic and non-airport traffic. Airport traffic associated with passenger, cargo and general aviation activity was allocated to the roadway network according to the location of each facility in each alternative. Airport traffic was assumed to grow relative to forecasts of passenger, cargo and general aviation operations. Non-airport traffic is by definition all traffic not associated with the Airport. The volume and distribution of non-airport traffic was based on SANDAG's regional transportation forecast model.

The traffic analysis for Destination Lindbergh assumed the same regional distribution of traffic as in the EIR. According to the EIR, 66 percent of traffic accesses the Airport from the interstate highways: 34 percent from Interstate 5 south; 17 percent from Interstate 5 north; and 15 percent from Interstate 8 east of the Airport. The remaining 34 percent accesses the Airport from local streets.

Figure A-1. Key Roadway Segments Evaluated within Traffic Analysis.



Roadway	Segment
North Harbor Drive	Rental Car Road to Laurel Street
Grape Street	Kettner Boulevard to I-5
Hawthorn Street	Kettner Boulevard to I-5
Pacific Highway	Palm Street to Laurel Street
India Street	Sassafras Street to Washington Street
Laurel Street	Pacific Highway to Kettner Boulevard
Rosecrans Street	Quimby Street to Barnett Avenue

Source: Jacobs Consultancy Team, 2009.

To determine the airport traffic volume for each roadway, the traffic volume associated with each airport facility was calculated based on the most direct path between the regional trip origin/termination and the location of each airport facility in each alternative. In Alternatives A2, A3, and B1, direct freeway ramps serving the terminal and rental car facilities were assumed to remove freeway traffic from local streets. For the passenger terminal facilities, airport passenger vehicle trip volumes incorporated the airport passenger transit ridership forecast assumed for each alternative. The calculated airport traffic volumes for each roadway segment were then added to the non-airport traffic volumes to determine the total traffic volume for each roadway segment analyzed.

The estimated total daily traffic volumes for each street were then compared to daily LOS capacities established by the City of

San Diego which are presented in **Table A-1**. Although the LOS capacities are based on daily traffic volumes, they also account for peak hour characteristics. For instance, a roadway operating at LOS F was assumed to be operating at this unacceptable LOS during peak periods and not throughout the entire day. For this analysis, an acceptable LOS was defined as LOS C or better.

Table A-1
CITY OF SAN DIEGO STREET SEGMENT LEVEL OF SERVICE CRITERIA
 San Diego International Airport

Classification	LOS A	LOS B	LOS C	LOS D	LOS E
8-Lane Prime Arterial (North Harbor Drive) (a)	30,000	40,000	60,000	65,000	70,000
7-Lane Prime Arterial (North Harbor Drive) (a)	27,500	37,500	55,000	60,000	65,000
6-Lane Prime Arterial (North Harbor Drive)	25,000	35,000	50,000	55,000	60,000
6-Lane Major Arterial (Pacific Highway)	20,000	28,000	40,000	45,000	50,000
4-Lane Major Arterial (Laurel Street)	15,000	21,000	30,000	35,000	40,000
3-Lane Major Arterial 1-Way (Grape/Hawthorn/Kettner)	10,000	14,000	20,000	22,500	25,000
4-Lane Collector (Laurel/Washington)	10,000	14,000	20,000	25,000	30,000
3-Lane Collector (Sassafras Street)	3,800	5,300	7,500	9,800	12,000
2-Lane Collector (Palm Street)	2,500	3,500	5,000	6,500	8,000

(a) Roadway capacity for 8- and 7-lane Prime Arterials extrapolated from 6-lane Prime Arterial capacity based on discussions with the City of San Diego, July 18, 2007.

Source: SANTEC / ITE, *Guidelines for Traffic Impact Studies in the San Diego Region*, March 2, 2000.
 Prepared by: HNTB Corporation.

A.3 Short-Listed Alternatives Traffic Analysis

The four short-listed alternatives A2, A3, A8 and B1 were each analyzed for the PAL2 condition expected to occur around 2030. The results of this analysis were used to determine the ranking of the alternatives relative to each other with respect to reducing traffic congestion around the airport. The findings for each roadway segment are described in detail in the following sections.

North Harbor Drive

PAL2 traffic volumes for North Harbor Drive between Rental Car Access Road and Laurel Street for each alternative are depicted on **Figure A-2**. Currently the roadway segment operates over its capacity of 60,000 average daily traffic (ADT) at LOS F with demand at approximately 80,000 ADT.

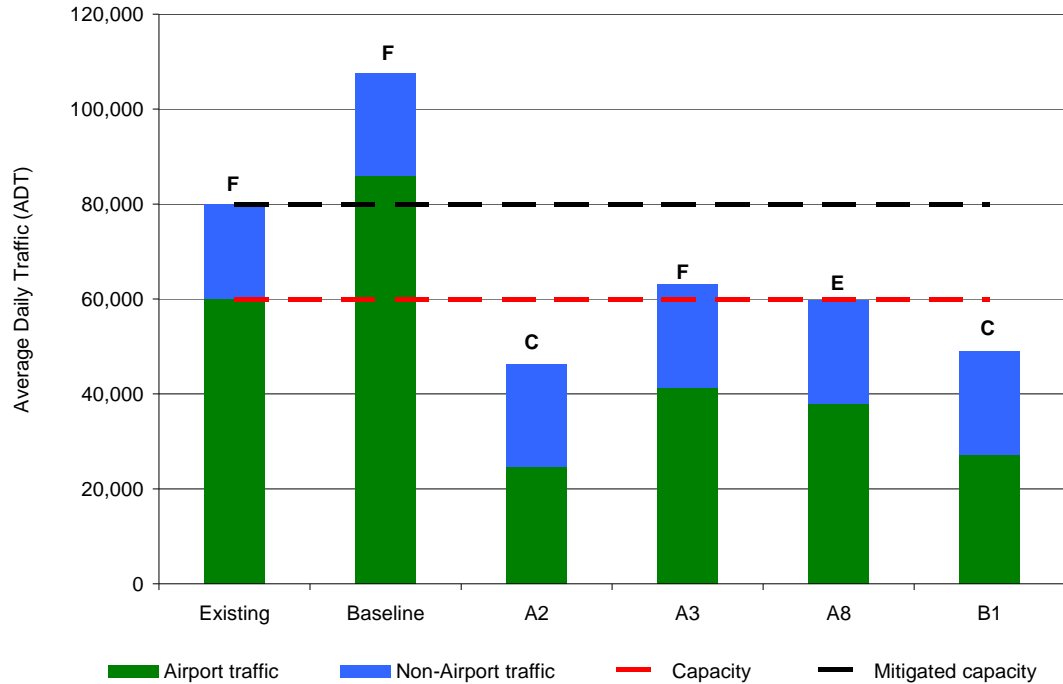
Alternatives A2 and B1 would result in the best LOS and the lowest volume of traffic due to the relocation of the passenger terminal and rental car facilities to the north side of the Airport. Alternatives A2 and B1 would eliminate all passenger access points on the south, and all passengers would access the Airport through the north terminal. With the reduction of volume, Alternatives A2 and B1 would result in North Harbor Drive operating at an acceptable LOS C. However, Alternative B1 would result in a slightly higher volume of traffic than Alternative A2, due to the relocation of cargo and other support facilities to the south side of the Airport.

Alternative A8 would maintain the passenger terminal in the south, however, all terminal traffic coming from Interstate 5 and Interstate 8 (approximately 66 percent of total terminal traffic) would utilize an internal airport access roadway, which removes much of the airport traffic from North Harbor Drive. The remaining 34 percent of terminal traffic was assumed to continue to utilize North Harbor Drive to access the terminal, resulting in a LOS E. Although LOS E is considered unacceptable, the resulting 60,000 ADT is significantly lower than the existing 80,000 ADT and 107,000 ADT of the baseline.

Alternative A3 would yield the highest traffic volume along North Harbor Drive and the lowest level of service of all alternatives. This is primarily because approximately 30 percent of passengers would continue to access Terminal 2 West via North Harbor Drive. The remaining 70 percent of passengers would use the north terminal. Although North Harbor Drive would operate at LOS F, Alternative A3 would yield a significant decrease in traffic relative to the 2030 baseline and existing conditions. Alternative A3 would result in approximately 63,000 ADT versus the existing 80,000 ADT and 107,000 ADT of the baseline.

Notably, each of the alternatives would lower the share of airport related traffic relative to the existing condition.

**Figure A-2. North Harbor Drive
Rental Car Road to Laurel Street
PAL2 Traffic**



Source: HNTB, 2008.

Grape and Hawthorn Streets

Figures A-3 and A-4 depict PAL2 traffic volumes for Grape and Hawthorn Streets, respectively, between Kettner Boulevard and Interstate 5, for each alternative. Currently both roadway segments operate at LOS F, and for each alternative the non-airport traffic is estimated to be equivalent to the capacity of the roadways, approximately 25,000 ADT. As a result, these segments would operate at LOS F for each alternative.

Alternatives A2 and A8 would result in the lowest traffic volumes on Grape and Hawthorn due to the redirection of all terminal traffic from Interstate 5 and Interstate 8 to new freeway ramps providing direct access to the north terminal. Airport traffic on local roadways from the south would still utilize Grape and Hawthorn for access to the north terminal.

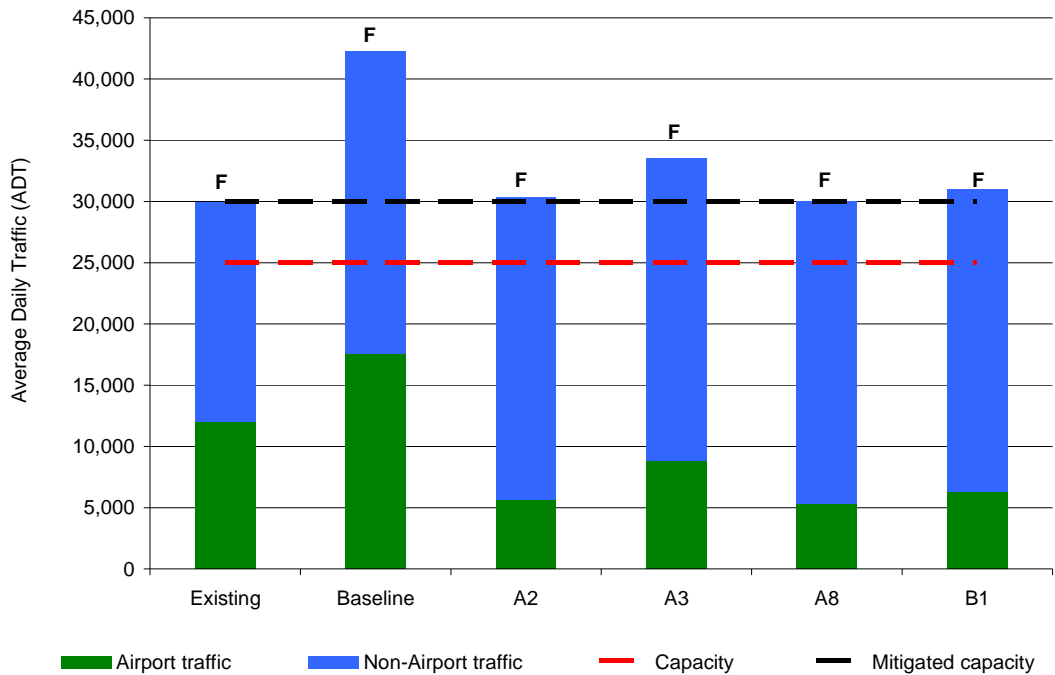
Alternative B1 would also redirect all terminal traffic from Interstate 5 and Interstate 8 to new freeway ramps but would redirect traffic from cargo and general aviation facilities to the

south resulting in slightly higher traffic volumes than Alternatives A2 and A8.

For Alternative A3, approximately 30 percent of terminal traffic coming from Interstate 5 south would continue to use Grape and Hawthorn Street to access Terminal 2 West via North Harbor Drive. Alternative A3 would result in the highest traffic volumes among all the alternatives.

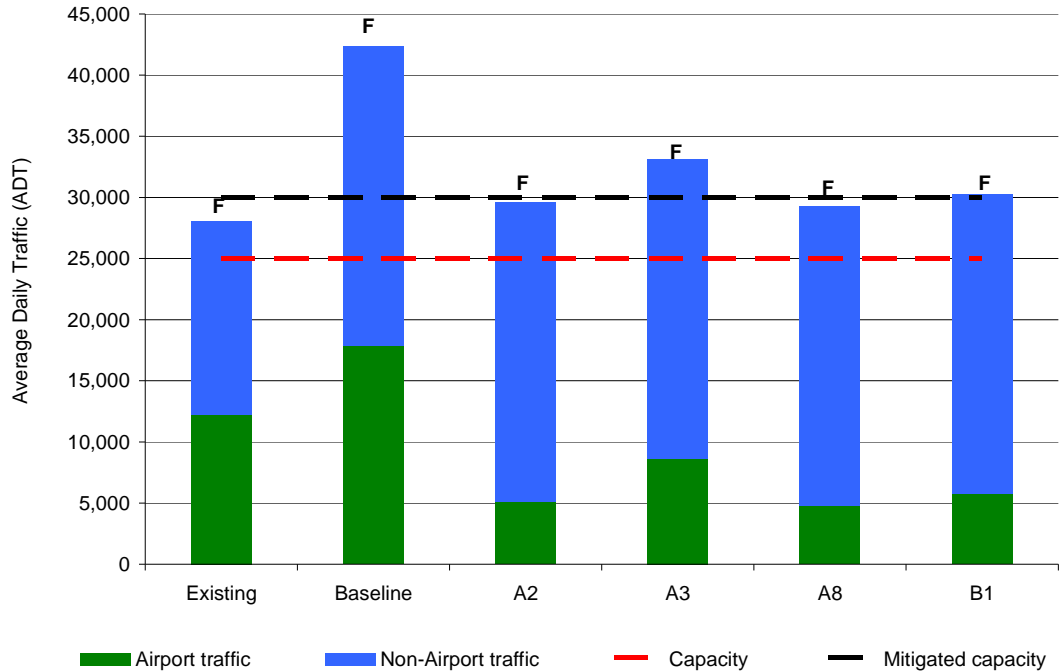
Notably, each of the alternatives would lower the share of airport related traffic relative to the existing condition on both Grape and Hawthorn. In addition, the overall level of traffic on Grape and Hawthorn under each of the alternatives would be significantly less than that of the baseline.

**Figure A-3. Grape Street
Kettner Boulevard to Interstate 5
PAL2 Traffic**



Source: HNTB, 2008.

**Figure A-4. Hawthorn Street
Kettner Boulevard to Interstate 5
PAL2 Traffic**



Source: HNTB, 2008.

Pacific Highway

Figure A-5 depicts estimated PAL2 traffic volumes for Pacific Highway between Palm and Laurel Streets. Currently Pacific Highway, which has an assumed capacity of 50,000 ADT, operates at LOS A with demand at approximately 19,000 ADT. Under each of the alternatives, Pacific Highway would operate at an acceptable LOS C or better.

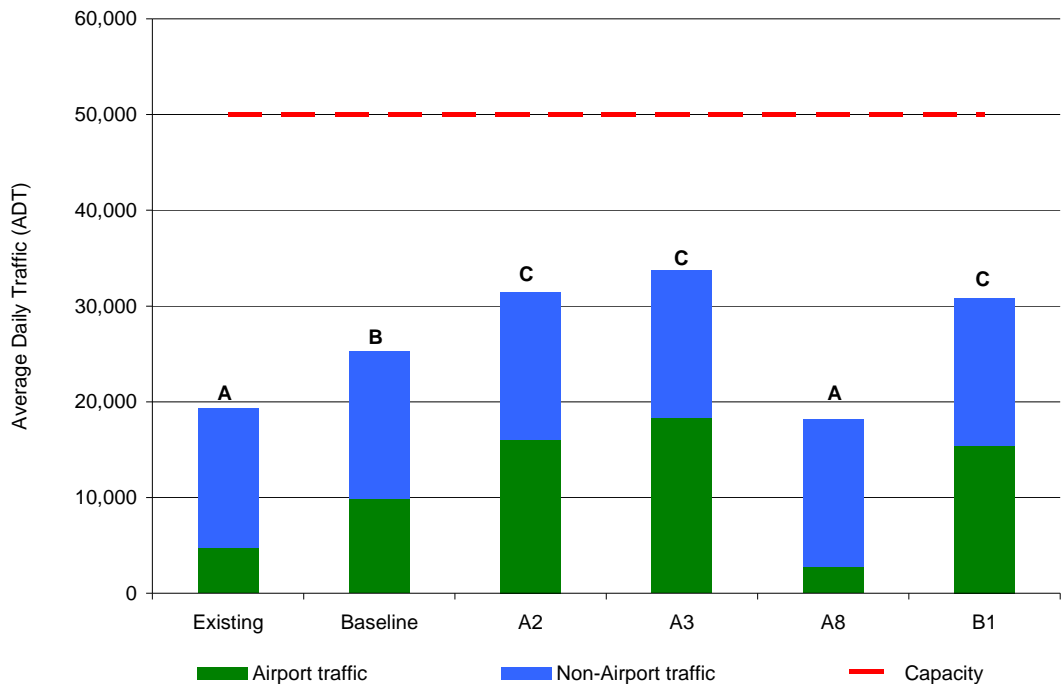
Alternative A8 would maintain the passenger terminal in the south and provide an internal on-airport roadway adjacent to Pacific Highway to connect the north facilities and freeway ramps with terminal facilities in the south. As a result, Alternative A8 would result in the lowest traffic volume for Pacific Highway and a LOS A.

Alternatives A2 and B1 would relocate the passenger terminal to the north, and the terminal would be accessed via direct freeway ramps. In both alternatives, Pacific Highway would operate at LOS C. Pacific Highway would experience slightly higher ADT than the baseline condition as local airport traffic would access the north terminal via Pacific Highway. Alternative B1 would result in a slightly lower traffic volume than Alternative A2 due to the relocation of cargo and other support facilities to the south side of the Airport.

Alternative A3 would also operate at LOS C but would yield the highest volume of traffic at 33,800 ADT. This volume of traffic would be primarily due to both local traffic coming from north of the Airport destined for either the north terminal or Terminal 2 West utilizing Pacific Highway to access the Airport.

Notably, the capacity of Pacific Highway is greater than demand at PAL2 levels for each of the alternatives.

**Figure A-5. Pacific Highway
Palm Street to Laurel Street
PAL2 Traffic**



Source: HNTB, 2008.

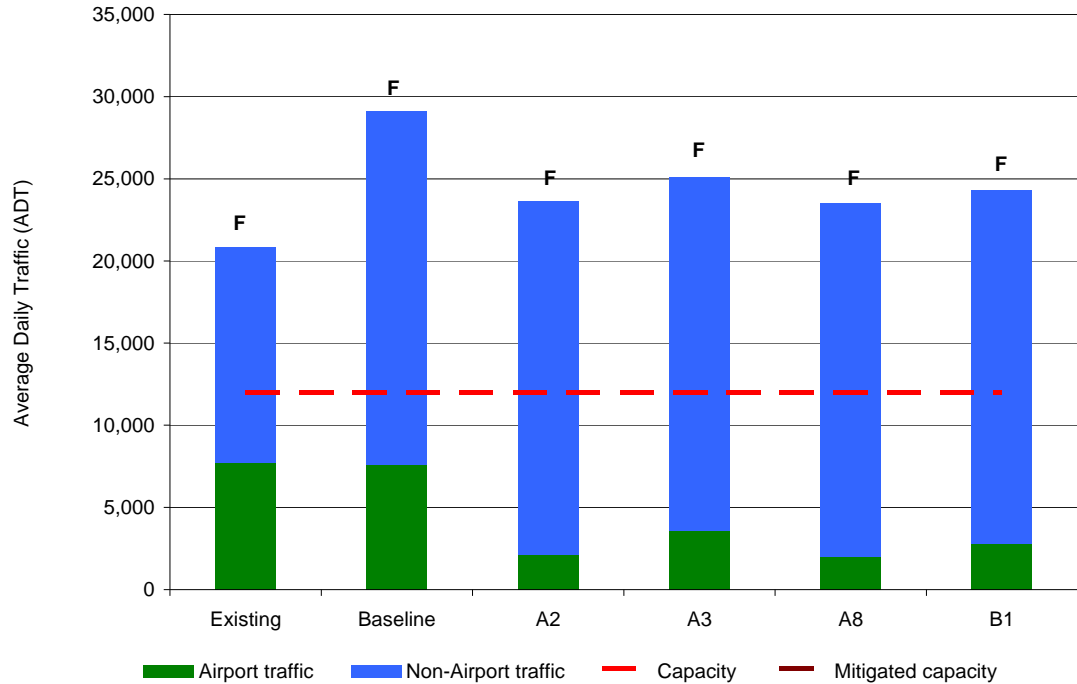
India Street

Figure A-6 depicts estimated PAL2 traffic volumes on India Street between Sassafras and Washington Streets. Currently, India Street operates at LOS F and would continue to do so for each alternative. India Street primarily serves non-airport traffic with airport traffic only comprising 37 percent of the current volume. The current traffic volume on India Street is 20,800 ADT versus a capacity of only 12,000 ADT.

Alternatives A2, A8, and B1 would remove all terminal traffic coming to and from Interstate 5 to direct freeway ramps, which would reduce traffic along India Street as it serves as the primary access to northbound Interstate 5. Alternative B1 would result in slightly higher traffic as cargo and other support facilities would be relocated to the south side of the Airport and would utilize India Street to access Interstate 5.

Alternative A3 would yield the highest level of traffic of the alternatives on India Street as passengers traveling to and from Terminal 2 West would continue to utilize India Street to access Interstate 5.

**Figure A-6. India Street
Sassafras Street to Washington Street
PAL2 Traffic**



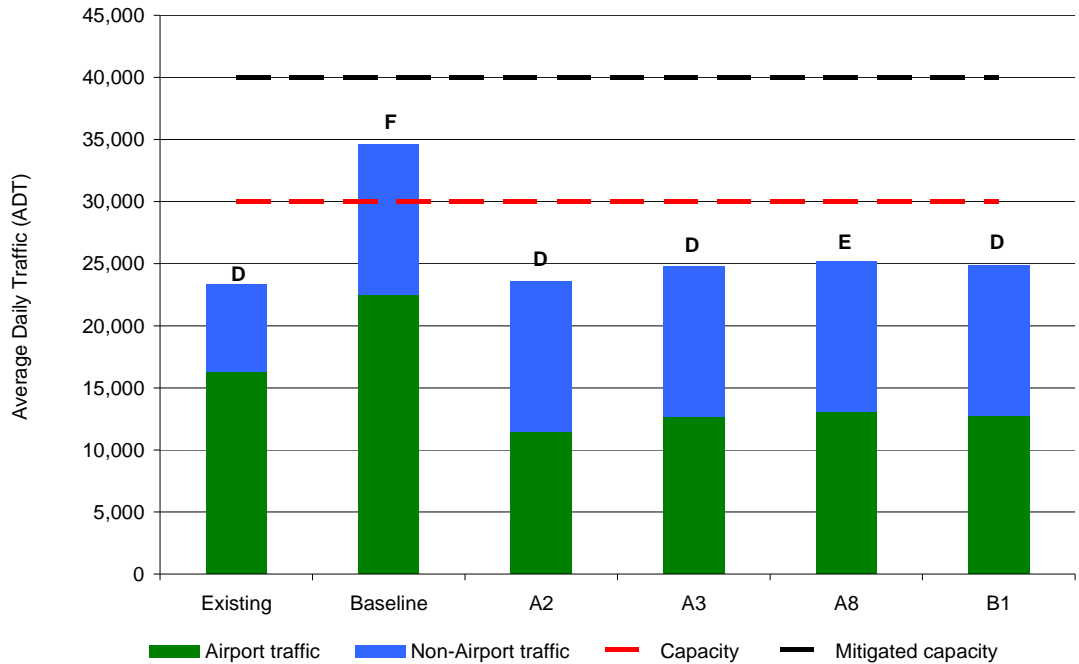
Source: HNTB, 2008.

Laurel Street

Figure A-7 depicts estimated PAL2 traffic volume for Laurel Street between Pacific Highway and Kettner Boulevard. Currently, Laurel Street operates at LOS D with demand at approximately 23,300 ADT and capacity at 30,000 ADT.

Alternatives A2 and B1 would remove all terminal traffic from Laurel Street due to the relocation of the passenger terminal to the north side of the Airport. Alternative B1 would have a slightly higher traffic volume relative to Alternative A2 due to the relocation of support facilities to the south side of the Airport. The traffic volume for Alternative A3 would be slightly greater than Alternative B1 due to passengers accessing Terminal 2 West via Laurel Street. Laurel Street would operate at LOS D for Alternatives A2, A3, and B1. Under Alternative A8 Laurel Street would operate at LOS E as local airport traffic would continue to use Laurel Street to access Terminal 2 West.

**Figure A-7. Laurel Street
Pacific Highway to Kettner Boulevard
PAL2 Traffic**



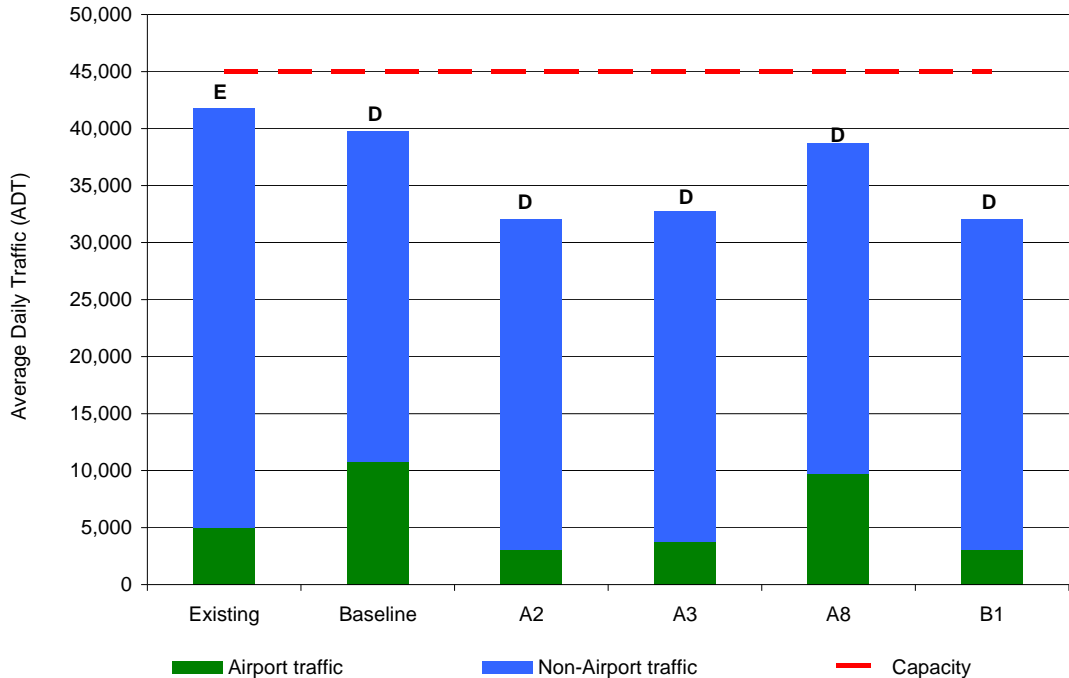
Source: HNTB, 2008.

Rosecrans Street

Figure A-8 depicts the estimated PAL2 traffic volume for Rosecrans Street between Quimby Street and Barnett Avenue. For each alternative, this roadway segment would operate at LOS D. The majority of traffic, approximately 29,000 ADT for each alternative, is non-airport related. Traffic currently utilizing Rosecrans to access the passenger terminals was assumed to continue using this path. However, under each alternative the portion of airport traffic on Rosecrans is relatively small and ranges from 9 to 25 percent of the total.

Alternatives A2 and B1 would result in the lowest traffic volumes along Rosecrans of each of the alternatives due to the relocation of the passenger terminal to the north. Alternative A3 would result in slightly more traffic along Rosecrans as passengers traveling to Terminal 2 West would continue to use Rosecrans. Alternative A8 results in highest traffic volume along Rosecrans, as this alternative would maintain the passenger terminal on the south side of the Airport.

**Figure A-8. Rosecrans Street
Quimby Street to Barnett Avenue
PAL2 Traffic**



Source: HNTB, 2008.

A.4 Recommended Development Plan Traffic Analysis

A preliminary assessment of potential traffic impacts was conducted for the recommended development plan. This assessment evaluated the same local street segments as analyzed for each of the short-listed alternatives using the same methodology. However, this assessment included an evaluation of the recommended development alternative at four activity levels: Baseline, Opening Day, PAL1, and PAL2.

Each phase of the recommended development plan is assumed to have the following improvements affecting traffic patterns and volumes as follows.

Baseline. The Baseline phase, approximately 2010, represents the build out of 10 new gates at Terminal 2 West but no other major infrastructure improvements. Primary traffic patterns would remain the same for all facilities as they are today.

Opening Day. The Opening Day phase, approximately 2015, represents the opening of the Intermodal Transit Center (ITC), consolidated rental car facility (CONRAC), and internal circulation roadway. In this phase, the rental car facilities along Harbor Island would be relocated to the north side of the Airport, removing rental car customer traffic from North Harbor Drive. In addition, an on-airport roadway would allow rental car shuttles to travel between the CONRAC and the airline terminals in the south removing rental car shuttle traffic from North Harbor Drive, Laurel Street, and Pacific Highway. In this phase access to Interstate 5 from the ITC and CONRAC would be via existing roadway infrastructure.

The aviation demand forecast projects an increase in airport passengers of approximately 9 percent between the Baseline and Opening Day phases. Airport passengers using transit to access the Airport was assumed to increase slightly from the Baseline phase as the ITC would be in-place. Airline passenger transit ridership was based on SANDAG's ridership forecast and was assumed to be between 3 and 4 percent with an additional 6 percent using shared-ride vans.

PAL1. In the PAL1 phase, approximately 2020, passengers would be able to travel to the north terminal regardless of their departure gate for ticketing and check-in. In this phase, direct freeway ramps to and from the south would be constructed to directly link Interstate 5 to the north terminal. The north terminal would process passengers for the new concourse with approximately 34 aircraft gates on the south with an automated people mover (APM) connecting the facilities. All passengers destined for the new concourses, CONRAC and ITC would utilize the new freeway ramps, and therefore traffic destined for these facilities would be removed from local streets. Traffic associated with the remaining aircraft gates would continue to use local streets to access the south terminal.

The aviation demand forecast projects an increase in airport passengers of approximately 12 percent between the Opening Day and PAL1 phases. The number of airport passengers using transit to access the Airport was assumed to increase from the Opening Day phase as the north terminal would provide more services and the ITC would be expanded to accommodate an additional trolley line. Airline passenger transit ridership was based on SANDAG's ridership forecast and was assumed to be

approximately 8 percent with an additional 6 percent using shared-ride vans.

PAL2. In the PAL2 phase, approximately 2030, all passengers would travel to the airport's north terminal. In this phase, direct freeway ramps to and from the north would be constructed. The north terminal would process all passengers regardless of the location of their aircraft gate. All passengers destined for the terminal, CONRAC and ITC would utilize the direct freeway ramps, and therefore all passenger traffic would be removed from local streets.

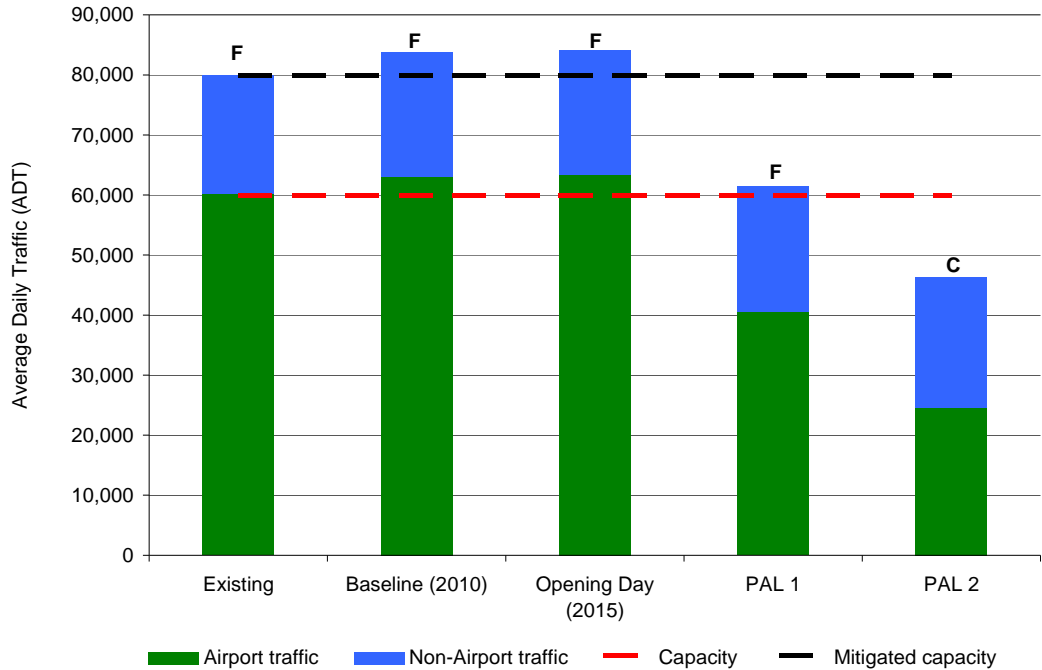
The aviation demand forecast projects an increase in airport passengers of approximately 25 percent between the PAL1 and PAL2 phases. Airport passengers using transit to access the Airport was assumed to increase from the PAL1 phase as the transit network would be expanded and the north terminal evolves to become the single airport access point, accommodating all airline passengers. Airline passenger transit ridership was based on SANDAG's ridership forecast and was assumed to be 13 percent with an additional 6 percent on shared-ride vans.

North Harbor Drive

Figure A-9 depicts estimated traffic volumes for North Harbor Drive between Rental Car Road and Laurel Street for each phase of the recommended development plan. The Baseline phase would result in a slight increase in traffic along North Harbor Drive due to the anticipated growth in passengers as projected by the aviation demand forecast. The 9 percent increase in passengers between the Baseline and Opening Day would be somewhat offset by the shift of rental car traffic from North Harbor Drive to the roadways which would access the new CONRAC. Airport traffic continues to decline in PAL1 and PAL2 as more passengers would access the Airport via the north terminal over time. While PAL1 would operate at LOS F, total traffic would decrease by 22,500 ADT as compared to Opening Day.

The resulting traffic volumes along North Harbor Drive are approximately 80,000 ADT under existing conditions; 84,000 ADT in the Baseline and Opening Day phases; 61,500 ADT in PAL1 and 46,000 ADT in PAL2.

**Figure A-9. North Harbor Drive
Rental Car Road to Laurel Street
Recommended Development Plan**



Source: HNTB, 2008.

Grape Street

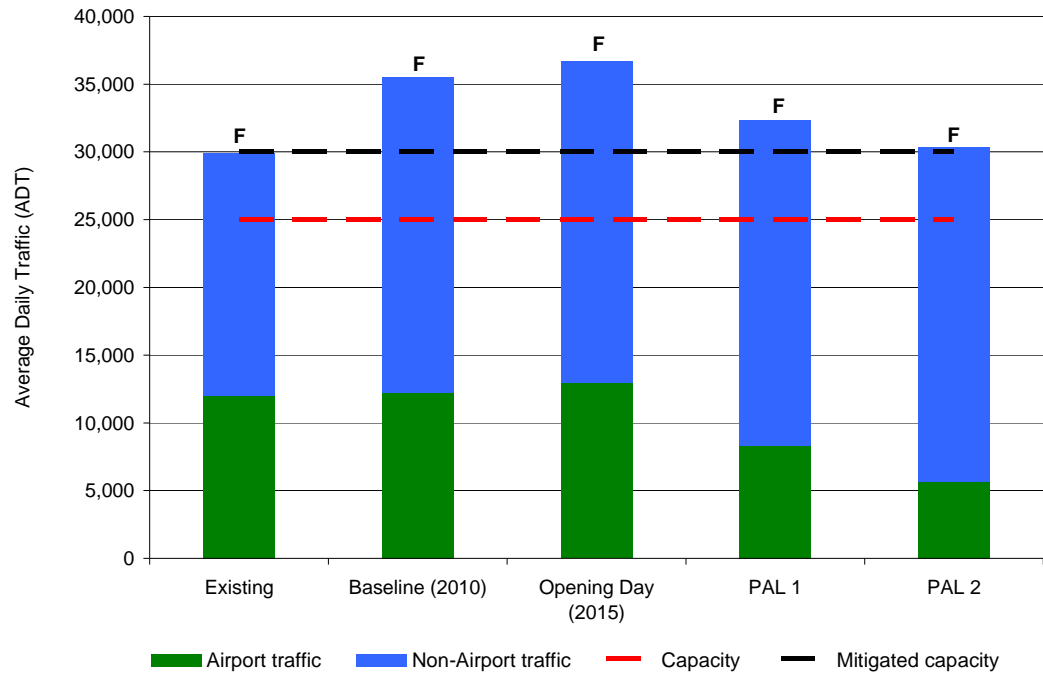
Figure A-10 depicts estimated traffic volumes for Grape Street between Kettner Boulevard and Interstate 5 for each phase of the recommended development plan. The Baseline phase would result in a slight increase in traffic along Grape Street relative to the existing condition. As described previously, this increase would be a result of the forecast increase in passengers. The Opening Day phase would also result in an increase in traffic along Grape Street due to the forecast increase in airline passengers. In the Opening Day phase, rental car traffic would be relocated to roadways accessing the north terminal, and it was assumed that the traffic accessing Interstate 5 south would utilize the Kettner Boulevard southbound on-ramp instead of Grape Street.

Airport traffic would begin to decline in PAL1 and PAL2 as more passengers would be using the north terminal. Due to the high level of non-airport traffic, Grape Street would remain at

LOS F in each of the phases; however, the volume and share of airport traffic would be less in PAL1 and PAL2 than it is currently. Some general aviation, off-site parking, and support facility traffic was assumed to remain on Grape Street throughout all phases of development.

The resulting traffic volumes along Grape Street are approximately 30,000 ADT under existing conditions; 35,500 ADT in the Baseline phase; 36,500 ADT in Opening Day; 32,500 ADT in PAL1 and 30,000 in PAL2.

**Figure A-10. Grape Street
Kettner Boulevard to Interstate 5
Recommended Development Plan**



Source: HNTB, 2008.

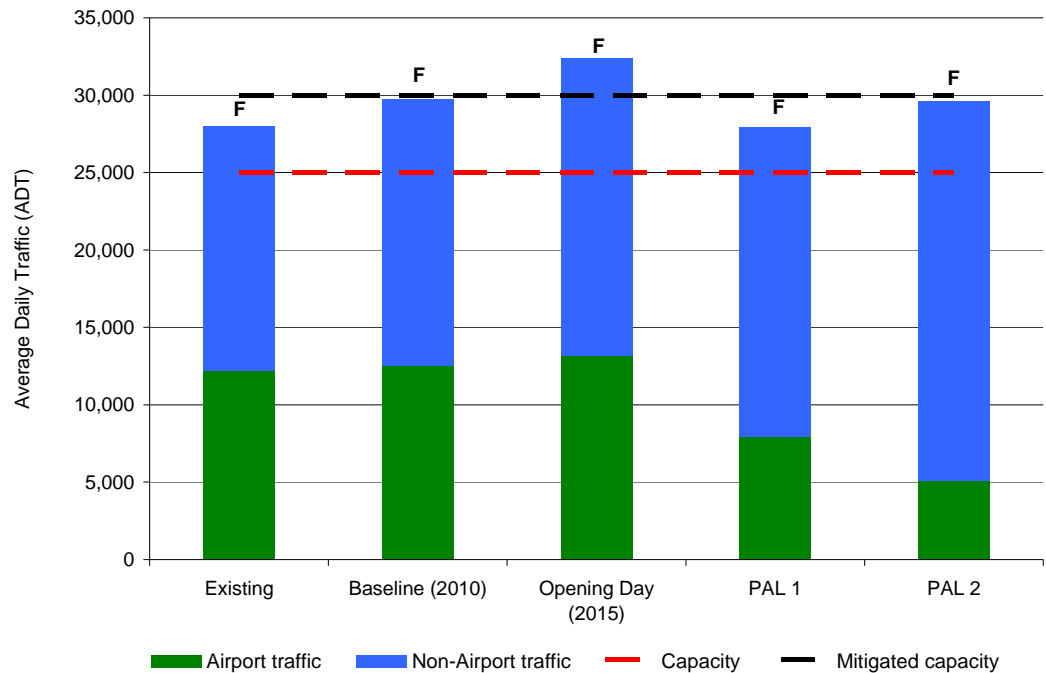
Hawthorn Street

Figure A-11 depicts estimated traffic volumes for Hawthorn Street between Kettner Boulevard and Interstate 5 for each phase of the recommended development plan. Notably, Hawthorn Street would evolve much the same as Grape Street. The Baseline phase would result in a slight increase in traffic along Hawthorn Street relative to the existing condition. As described previously, this increase would be a result of the forecast increase in passengers. The Opening Day phase would also result in an increase in traffic along Hawthorn Street due to the forecast increase in airline passengers. In the Opening Day phase, rental car traffic would be relocated to roadways accessing the north terminal, and it was assumed that the traffic accessing Interstate 5 south would utilize the India Street northbound off-ramp instead of Hawthorn Street.

Airport traffic would begin to decline in PAL1 and PAL2 as more passengers would be using the north terminal. Due to the high level of non-airport traffic, Hawthorn Street would remain at LOS F in each of the phases; however, the share of airport traffic would be less in PAL1 and PAL2 than it is currently. Some general aviation, off-site parking, and support facility traffic was assumed to remain on Hawthorn Street throughout all phases of development.

The resulting traffic volumes along Hawthorn Street are approximately 28,000 ADT under existing conditions; 29,700 ADT in the Baseline phase; 32,400 ADT in Opening Day; 27,900 ADT in PAL1 and 29,600 in PAL2. Total PAL2 traffic increases over PAL1 due to a large increase in non-airport traffic.

**Figure A-11. Hawthorn Street
Kettner Boulevard to Interstate 5
Recommended Development Plan**



Source: HNTB, 2008.

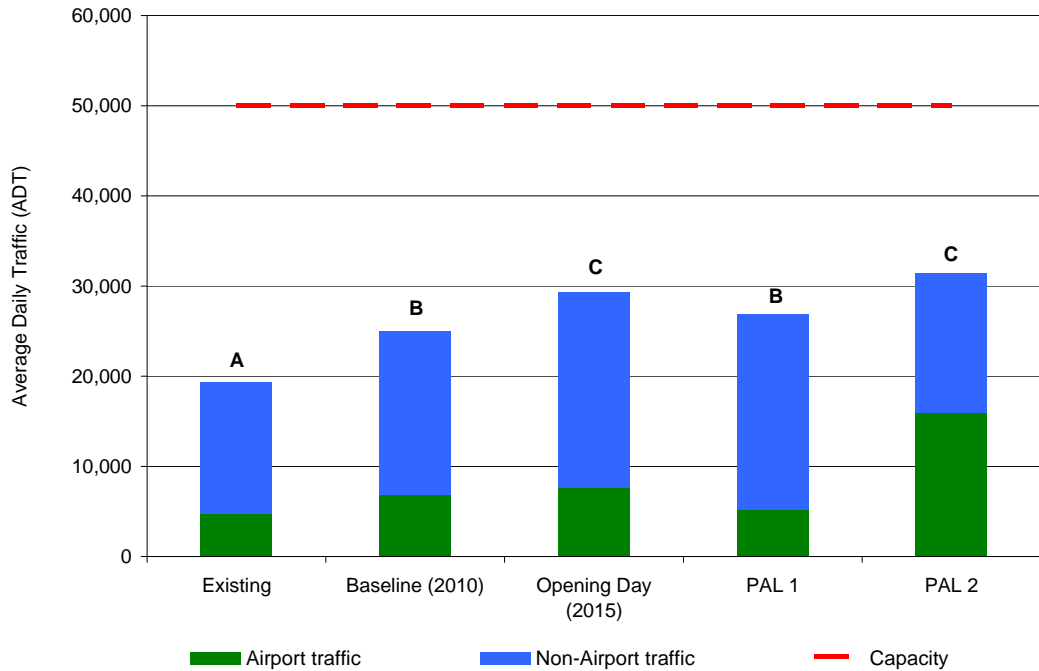
Pacific Highway

Figure A-12 depicts estimated traffic volumes for Pacific Highway between Palm and Laurel Streets for each phase of the recommended development plan. In the Opening Day phase airport traffic begins to increase along Pacific Highway as rental car traffic would shift to the CONRAC in the north. As more passengers use the north terminal in PAL1 and 2, traffic along Pacific Highway would continue to increase. However, the capacity of Pacific Highway is 50,000 ADT, and total traffic would remain far below this capacity and the roadway would operate at an acceptable LOS C or better throughout all phases of the recommended development plan. Notably, the share of airport traffic on Pacific Highway would increase from its present level of 24 percent to 51 percent in PAL2.

The resulting traffic volumes along Pacific Highway are approximately 19,500 ADT under existing conditions; 25,000 ADT in the

Baseline phase; 29,500 ADT in Opening Day; 27,000 ADT in PAL1 and 31,500 in PAL2.

**Figure A-12. Pacific Highway
Palm Street to Laurel Street
Recommended Development Plan**



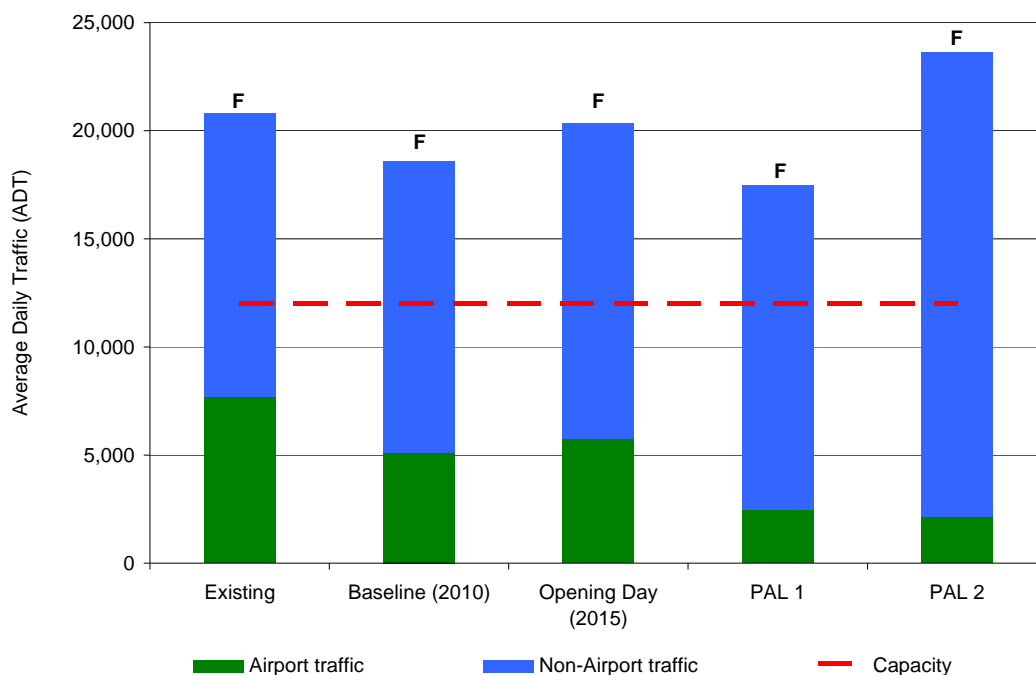
Source: HNTB, 2008.

India Street

Figure A-13 depicts estimated traffic volumes for India Street between Sassafras and Washington Streets for each phase of the recommended development plan. The volume of airport traffic along India Street would decrease as more passengers use the north terminal and the rental car facilities would be relocated to the north. Further reduction in airport traffic would occur with the provision of direct freeway ramps. These improvements would reduce the volume of airport traffic along India Street as it currently serves as the primary access to northbound Interstate 5. However, non-airport traffic is forecast to increase throughout each phase, and the volume of non-airport traffic would remain above the capacity of the roadway resulting in a LOS F throughout all phases of development. Notably, the share of airport traffic on India Street would decline from its present level of 37 percent to 9 percent in PAL2.

The resulting traffic volumes along India Street are approximately 20,800 ADT under existing conditions; 18,500 ADT in the Baseline phase; 20,500 ADT in Opening Day; 17,500 ADT in PAL1 and 23,500 in PAL2.

Figure A-13. India Street
Sassafras Street to Washington Street
Recommended Development Plan



Source: HNTB, 2008.

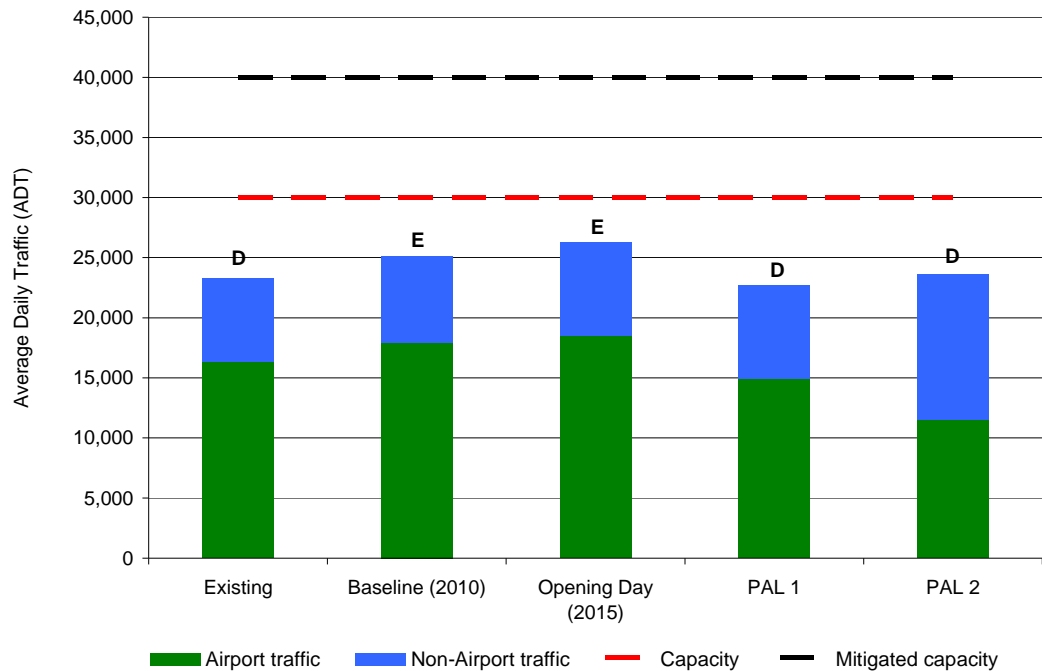
Laurel Street

Figure A-14 depicts estimated traffic volumes for Laurel Street between Pacific Highway and Kettner Boulevard for each phase of the recommended development plan. The volume of airport traffic along Laurel Street would decrease as more passengers use the north terminal and the rental car facilities would be relocated to the north. However, traffic associated with some off-site public parking including private parking operators and support facilities was assumed to remain on Laurel Street throughout all phases of development. The volume of traffic along Laurel Street would remain below the roadway capacity of 30,000 ADT throughout all phases of development. Notably, the

share of airport traffic on Laurel Street would decline from its present level of 70 percent to 49 percent in PAL2.

The resulting traffic volumes along Laurel Street are approximately 23,300 ADT under existing conditions; 25,100 ADT in the Baseline phase; 26,300 ADT in Opening Day; 22,700 ADT in PAL1 and 23,600 in PAL2.

**Figure A-14. Laurel Street
Pacific Highway to Kettner Boulevard
Recommended Development Plan**



Source: HNTB, 2008.

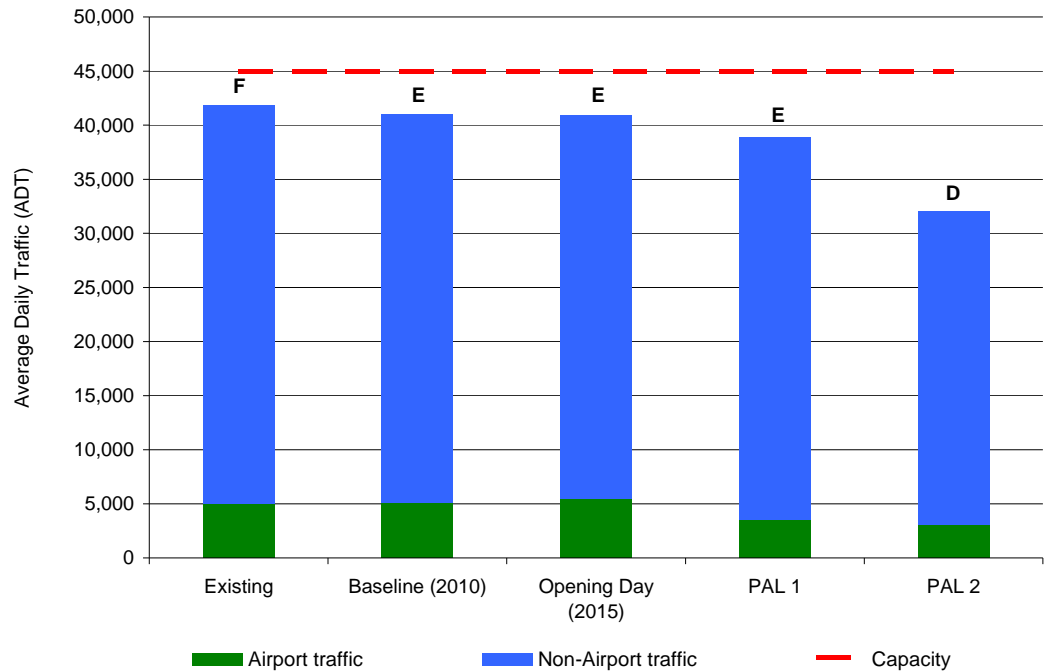
Rosecrans Street

Figure A-15 depicts estimated traffic volumes for Rosecrans Street between Quimby Street and Barnett Avenue for each phase of the recommended development plan. The volume of airport traffic along Rosecrans Street decreases from each phase to the next as more passengers use the north terminal and the rental car facilities would be relocated to the north. However, traffic associated with some off-site public parking and support facilities was assumed to remain on Rosecrans Street throughout each phase of development. The volume of traffic along

Rosecrans Street would remain below the roadway capacity of 45,000 ADT throughout all phases of development.

The resulting traffic volumes along Rosecrans Street are approximately 41,800 ADT under existing conditions; 41,000 ADT in the Baseline phase; 41,000 ADT in Opening Day; 38,800 ADT in PAL1 and 32,000 in PAL2. The decrease in traffic in PAL2 is related to a projected decline in non-airport traffic according to the SANDAG transportation model.

**Figure A-15. Rosecrans Street
Quimby Street to Barnett Avenue
Recommended Development Plan**



Source: HNTB, 2008.

A.5 Existing Transit Network

San Diego is fortunate to have an excellent system of buses, trains, and trolleys making travel accessible, convenient, and economical for commuters. The City works with local agencies to provide transportation systems for its residents and visitors. SANDAG provides funding administration and planning for public transit in the San Diego region, and it shares public transit planning and decision-making responsibilities with several

agencies, most notably the Metropolitan Transit System and the North County Transit District (NCTD).

North County Transit District. The NCTD service area encompasses 1,020 square miles of north San Diego County, extending from Del Mar in the south, northeasterly to Escondido, north to the Riverside County line, and west to the Orange County line. The total population of NCTD's service area is more than 800,000. NCTD operates three transit services: the Breeze bus service, the Coaster and the Sprinter. Breeze buses transport passengers on 53 routes in North County. In addition to 2,200 bus stops, NCTD maintain several transit centers located in Oceanside, Escondido, Carlsbad, San Marcos and Encinitas, which serve as transfer hubs between the buses and other transit modes.

The Sprinter rail line runs 22 miles between Oceanside and Escondido along the Highway 78 Corridor in North San Diego County and serves fifteen stations including stops at Oceanside Transit Center, Palomar College, California State San Marcos, and the Escondido Transit Center.

The Coaster provides regional rail service for commuters and travelers between the Cities of Oceanside and San Diego. The Coaster serves eight stations, located in Oceanside, Carlsbad (the Village and Poinsettia Stations), Encinitas, Solana Beach, Sorrento Valley, Old Town, and the Santa Fe Depot in Downtown San Diego. Notably, the rail corridor for the Coaster (as well as the trolley and Amtrak) runs parallel to the north property line of the Airport between Interstate 5 and Pacific Highway.

Metropolitan Transit System. The MTS network covers 570 square miles of the urbanized areas of San Diego County as well as rural parts of East County, for a total of 3,240 square miles. MTS serves approximately 3 million people in San Diego County. The system consists of 3 trolley routes connecting downtown San Diego with East County, Old Town, South Bay, Mission Valley, Qualcomm Stadium and the international border crossing with Mexico. The trolley network totals 53 stations and 50 miles of line. MTS also operates 82 bus routes, including Route 992 which connects the Airport with downtown and Santa Fe Depot.

A.6 Transit Ridership Forecast

The transit ridership forecast prepared by SANDAG projected levels of activity expected to use the ITC. The ITC would serve both airport-bound passengers and regional transit passengers. Regional transit passengers are those who would be using the ITC to transfer between two transit modes to reach other destinations. For example, an airport-bound passenger might board the trolley at San Diego State University and disembark at the ITC to access the airport. Another passenger might board the trolley at the Sante Fe Depot, travel to the ITC and transfer to the future high-speed rail line to travel to San Francisco.

The approach used in developing the transit ridership forecast included review of comparative data from other airports and regions similar to San Diego, use of the SANDAG model to forecast non-airport ITC users, and a final review of the forecasts by a peer group of aviation and transit industry experts.

Airport-bound passengers. Today, approximately 1.3% of airline passengers use mass transit to travel to the Airport via the MTS 992 bus route. In 2030, with the construction of the ITC the SANDAG forecast projects that the between 8.5 and 13.0 percent of airline passengers would use mass transit to travel to the Airport. If the ITC was not built, the range of airline passengers using transit would only be between 4.0 and 6.0 percent. Included in this projection are passengers who would use the trolley, Coaster/Amtrak, bus rapid transit, and local buses to travel to the Airport. If the San Diego high-speed rail terminus were located at the ITC, the transit share range rises to 9.5 to 15.0 percent of airline passengers. The 9.5 to 15.0 percent ridership share range equates to between 7,300 and 11,300 daily passengers using the ITC.

The ITC could also accommodate those airline passengers using shared-ride van shuttles to travel to the airport. These shuttles are estimated to transport approximately 4,800 daily passengers in 2030.

Regional transit passengers. To develop an estimate of regional transit passengers who would use the ITC, SANDAG accounted for those projects adopted within the *2030 RTP* with modifications based on the location of the ITC. In 2030, it is estimated that approximately 14,900 daily regional transit passengers would use the ITC daily. This estimate includes those

passengers arriving or departing the ITC via the Coaster, commuter rail, trolley, bus rapid transit, and local buses.

Therefore, in 2030 the ITC would need to be capable of serving approximately 31,000 daily passengers (14,900 regional transit passengers, 4,800 shared-ride van patrons, and up to 11,300 airport passengers using transit).