APPENDIX IV.F
Traffic Study

DRAFT

TRAFFIC ANALYSIS FOR
THE HERALD EXAMINER MIXED-USE PROJECT
CITY OF LOS ANGELES

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EXECUTIVE SUMMARY

The Herald Examiner Project ("the project") involves the redevelopment of three sites located in the Central Business District of the City of Los Angeles ("downtown Los Angeles"). The three sites are part of a unified development project, and are identified individually as the Broadway Site, the Hill Street Site, and the 12th Street Site. The Broadway Site is located at 1111 South Broadway, between 11th Street and 12th Street; the Hill Street Site is located at 1108 South Hill Street, between 11th Street and 12th Street; and the 12th Street Site is located on the south side of 12th Street, between South Broadway and South Main Street. The project will create a mixed-use development through rehabilitation of the historic Herald Examiner Building at the Broadway Site and construction of new buildings on the Hill Street and 12th Street Sites.

The existing Herald Examiner Building on the Broadway Site will be rehabilitated to house new retail and office uses. The building will provide approximately 29,000 square feet of ground floor retail use fronting both Broadway and 11th Street. The upper levels will feature approximately 39,725 square feet of office space. Vehicular access will be provided via a driveway on the south side of the building. Parking will be provided in a subterranean garage to be constructed under the adjacent Hill Street Site. The Broadway Site is expected to be completed and occupied by 2008.

The Hill Street Site is currently occupied by a vacant industrial press building. This building will be removed as a part of the project and will be replaced with a new 23-story mixed-use building, which will include 256 condominium units and approximately 2,560 square feet of ground floor retail. Vehicular access will be provided via a driveway located on the south side of the site. Six parking levels (two subterranean and four above grade) will be constructed, providing approximately 422 parking spaces for the Hill Street building and the adjacent Herald Examiner Building. The Hill Street Site is expected to be completed and occupied by 2009.

A 37-story building with 319 condominium units and approximately 8,050 square feet of ground floor retail space will be developed at the 12th Street Site. Two subterranean and four above-grade parking levels will provide a total of approximately 487 parking spaces. Access to the parking facilities on the 12th Street Site will be provided via a driveway located near the south end of the site on both Broadway and Main Street. The 12th Street Site is expected to be completed and occupied by 2010.

Overall, the Herald Examiner Project will provide 575 new residential units, 39,610 square feet of retail use, 39,725 square feet of office space, and approximately 909 parking spaces. The project will likely be built in several phases, with completion of the entire project expected by the year 2010. For purposes of this study, it was assumed that the project would be developed as a unified development, with completion and full occupancy by the year 2010. Once completed and occupied, the project is expected to generate approximately 5,416 net new daily trips, including 348 (137 inbound and 211 outbound) net new trips during the AM peak hour, and 548 (280 inbound and 268 outbound) net new trips during the PM peak hour.

The traffic study presented herein analyzed existing (2005) and future (2010) AM and PM peak hour traffic conditions at 20 intersections in the vicinity of the project. The cumulative traffic conditions attributable to 51 potential related projects in the surrounding area were also analyzed. Based on this analysis, the project is not expected to result in any significant traffic impacts, and therefore no off-site mitigation measures are required. Project traffic impacts were also analyzed for Congestion Management Program (CMP) locations. No significant regional traffic impacts were determined for the CMP monitoring intersections or freeway locations.

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INTRODUCTION

The Herald Examiner Project ("the project") involves the redevelopment of three sites located in the Central Business District of the City of Los Angeles ("downtown Los Angeles"). The three sites are part of a unified development project, and are identified individually as the Broadway Site, the Hill Street Site and the 12th Street Site. As shown on Figure 1, Site Vicinity Map, the Broadway Site is located at 1111 Broadway and is bounded by 11th Street on the north, Broadway on the east, an existing building on the south, and the Hill Street Site on the west. The Hill Street Site is located at 1108 South Hill Street and is currently occupied by a vacant industrial press building. This site is bounded by 11th Street on the north, the Broadway Site on the east, an existing building on the south, and Hill Street on the west. The 12th Street Site is currently occupied by a 47,916 square-foot surface parking lot and is bounded by 12th Street on the north, Main Street on the east, existing buildings on the south, and Broadway on the west.

Redevelopment of these three sites will create a mixed-use development through rehabilitation of the historic Herald Examiner Building at the Broadway Site and construction of new buildings at the Hill Street Site and 12th Street Site. The existing uses on the Hill Street Site and the 12th Street Site will be removed as a part of the project. In total, the Herald Examiner Project will provide 575 new residential units, 39,610 square feet of retail use, and 39,725 square feet of office space. The Broadway Site is expected to be completed and occupied by 2008, and the Hill Street Site and 12th Street Site are expected to be completed and occupied by 2009 and 2010, respectively.

Crain & Associates has been retained to assess the potential impacts of the proposed project on the surrounding roadway system. The analysis that follows was prepared in accordance with the assumptions, methodology, and procedures approved by the City of

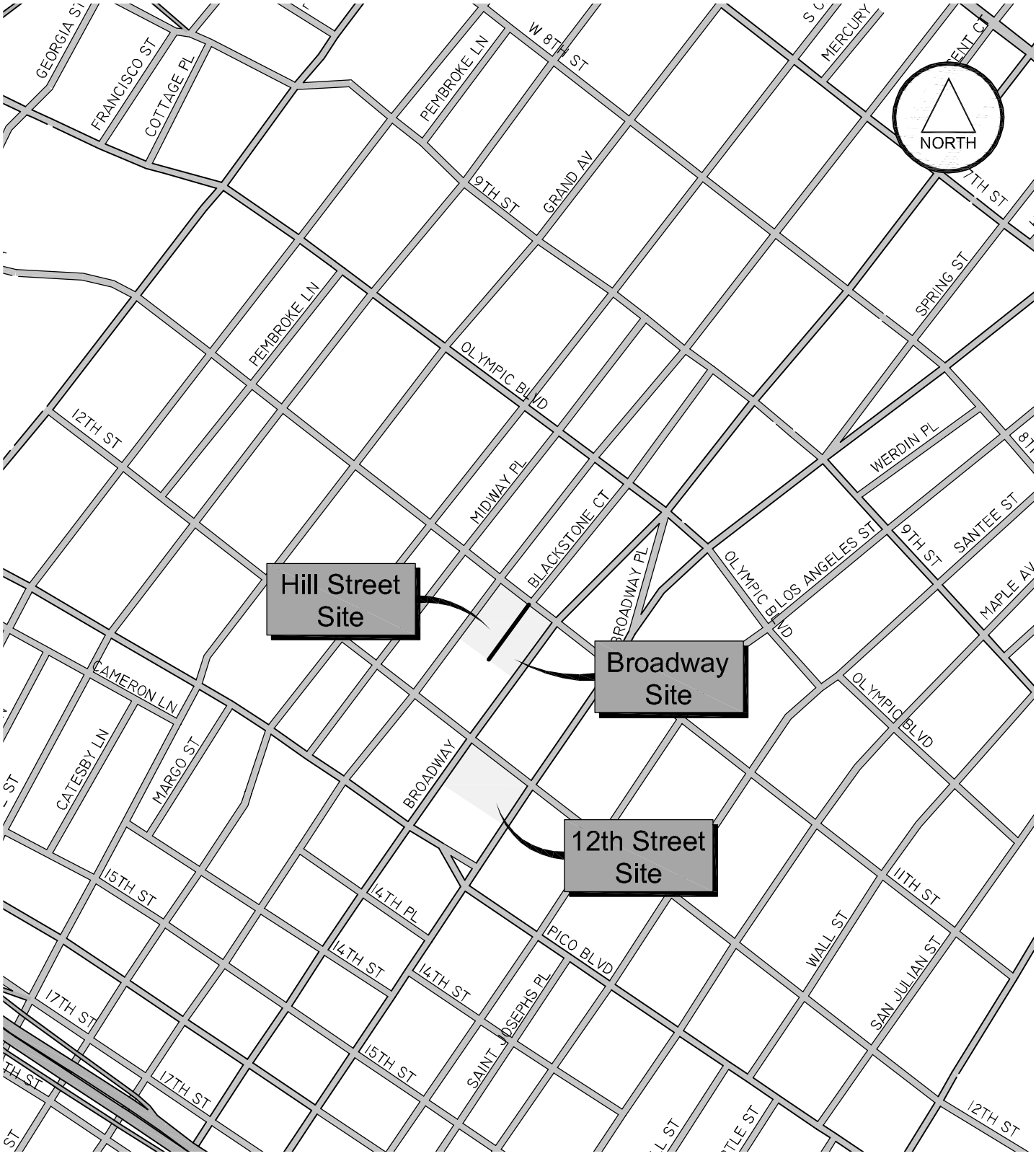

FIGURE 1

4/15/2005

:FN HERALD EXAMINER SITE\VICINITY

PROJECT SITE VICINITY

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Los Angeles Department of Transportation (LADOT). This report presents the results of an analysis of existing (2005) conditions and future (2010) traffic conditions before and after completion of the project. The analysis contains a detailed evaluation of traffic conditions during the AM and PM peak hours at the following 20 study intersections:

1. Olympic Boulevard and Hill Street
2. Olympic Boulevard and Broadway
3. Connecticut Street /I-110 SB Off-Ramp and Blaine Street
4. 11th Street and Blaine Street
5. 11th Street/Chick Hearn Court and Cherry Street/I-110 NB On-Ramp
6. 11th Street and Olive Street
7. 11th Street and Hill Street
8. 11th Street and Broadway
9. 11th Street and Main Street
10. 12th Street and Olive Street
11. 12th Street and Hill Street
12. 12th Street and Broadway
13. 12th Street and Main Street
14. 12th Street and Los Angeles Street
15. Pico Boulevard and Hill Street
16. Pico Boulevard and Broadway
17. 17th Street/I-10 WB On-Ramp and Grand Avenue
18. 18th Street/I-10 EB Off-Ramp and Grand Avenue
19. 17th Street/I-10 WB Off-Ramp and Los Angeles Street
20. 18th Street/I-10 EB On-Ramp and Los Angeles Street

The locations of these study intersections relative to the project are shown in Figure 2, Study Intersections Map. These locations include the key intersections located along the primary access routes to and from the site, and are those locations expected to be most directly impacted by project traffic.

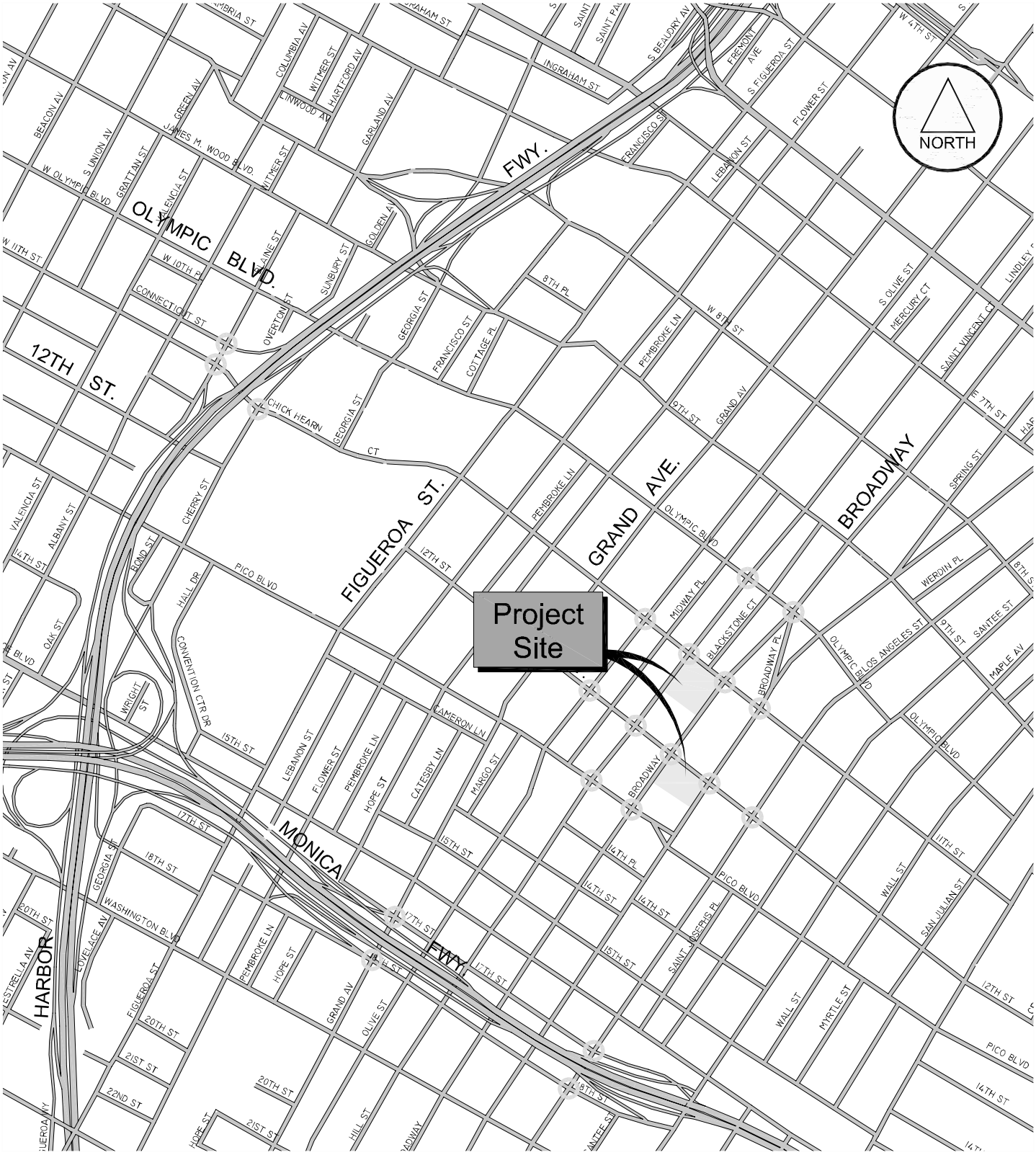

FIGURE 2

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:FN HERALD EXAMINER SITE\STUDY-INTS

STUDY INTERSECTION LOCATIONS

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PROJECT DESCRIPTION

The Herald Examiner Project involves the redevelopment of three sites located in the Central Business District of the City of Los Angeles, identified as the "Broadway Site", the "Hill Street Site", and the "12th Street Site". The project will develop these sites as a unified project, and create a mixed-use development by rehabilitating the historic Herald Examiner Building at the Broadway Site and constructing new buildings on the Hill Street Site and 12th Street Site.

As shown in Figure 3(a), the Herald Examiner Building on the Broadway Site will be rehabilitated to house new retail and office uses. The building will provide approximately 29,000 square feet of ground floor retail use fronting on both Broadway and 11th Street. The upper levels will feature approximately 39,725 square feet of office space. The Broadway Site is expected to be completed and occupied by 2008.

The Hill Street Site is currently occupied by a vacant industrial press building. This building will be removed as a part of the project and will be replaced with a new 23-story mixed-use building. The new building will provide 256 condominium units and approximately 2,560 square feet of ground floor retail use. On-site recreational amenities are expected to include a health club and pool, private balconies, roof deck, and a plaza over the eastern portion of the site. The Hill Street Site is expected to be completed and occupied by 2009.

The 12th Street Site will be developed with a 37-story building to include 319 condominium units and approximately 8,050 square feet of ground floor retail space, as shown in Figure 3(b). On-site recreational amenities are expected to include a health club and pool, private balconies, roof deck, and plaza over the parking levels. The 12th Street Site is expected to be completed and occupied by 2010.

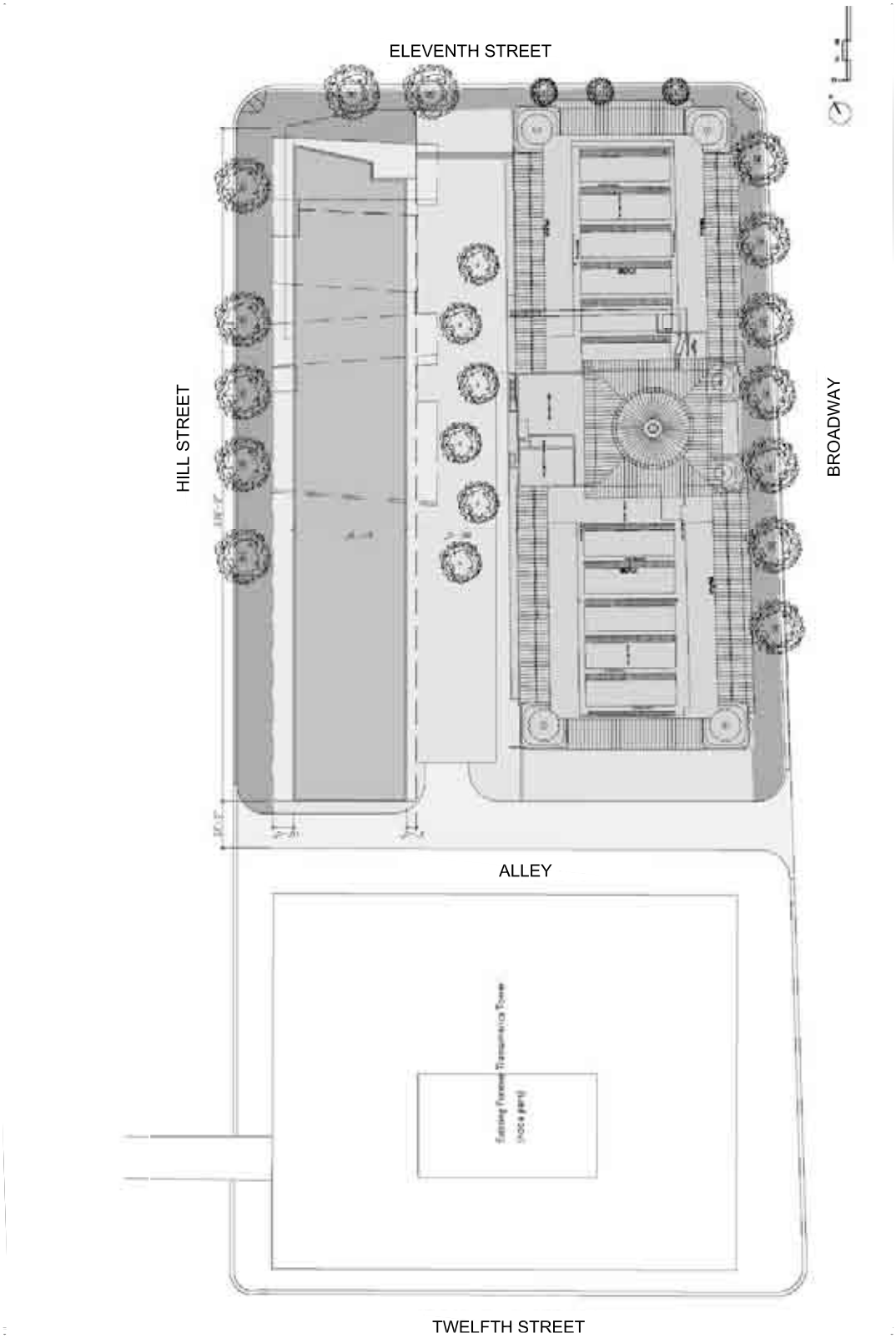

FIGURE 3(a)

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:FN HERALD EXAMINER SITE\SITE-PLAN A

PROJECT SITE PLAN
BROADWAY SITE AND HILL STREET SITE

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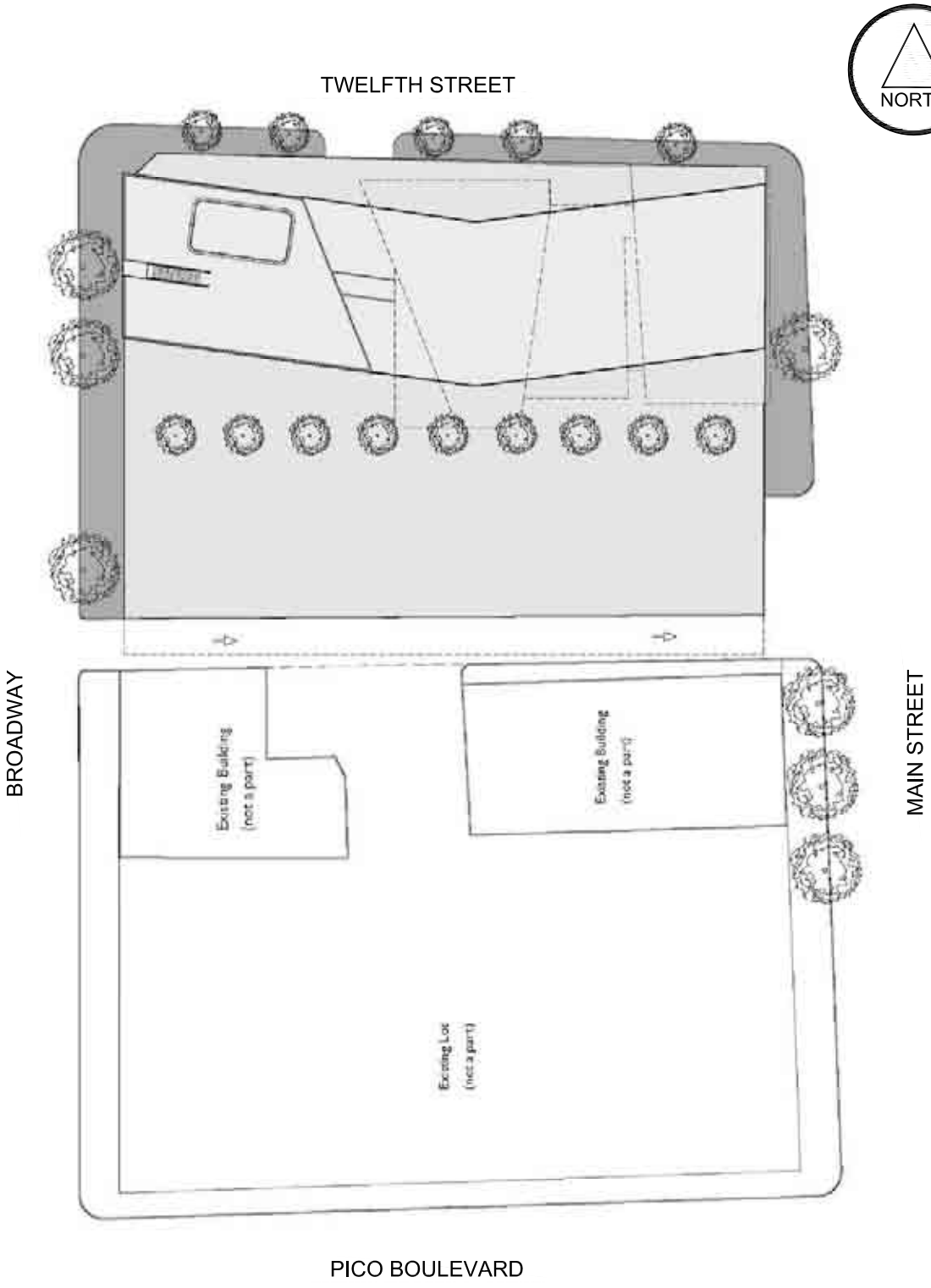

FIGURE 3(b)

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:FN HERALD EXAMINER SITE\SITE-PLAN B

PROJECT SITE PLAN
12TH STREET SITE

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Overall, the project will provide 575 new residential units, 39,610 square feet of retail use, and 39,725 square feet of office space. The project is expected to be completed and occupied by 2010.

Parking for the project will be provided in two subterranean parking structures. The subterranean parking beneath the Hill Street Site will provide approximately 422 parking spaces for the new Hill Street building as well as for the adjacent Herald Examiner Building. The existing Herald Examiner Building is a legal non-conforming use that currently provides no on site parking, and would not be required to provide additional parking as a result of the proposed rehabilitation project. However, adequate parking to meet the parking demands of the anticipated future use of the Herald Examiner Building is proposed within the Hill Street Site parking facilities. Two subterranean and four above-grade parking levels will be constructed at the 12th Street Site. This parking structure will provide approximately 487 parking spaces for the condominium and retail uses above. In total, the subterranean parking structures will supply approximately 909 parking spaces for the project.

Parking for the new Hill Street building and the adjacent Herald Examiner Building will be accessible via a driveway located on the south side of the site. Access to parking for the 12th Street Site will be provided via a driveway near the south end of the 12th Street Site along both the Broadway and Main Street frontages of the site.

ENVIRONMENTAL SETTING

The project is made up of three development sites under common ownership, generally located in the area of Broadway between 11th and 12th Streets near the southern edge of the Central Business District of the City of Los Angeles. Specifically, the three sites are identified as the Broadway Site, the Hill Street Site and the 12th Street Site. The Broadway Site is located at 1111 South Broadway, between 11th Street and 12th Street; the Hill Street Site is located at 1108 South Hill Street between, 11th Street and 12th Street; and the 12th Street Site is located on the south side of 12th Street, between South Broadway and South Main Street.

The project sites are within the South Park neighborhood boundaries of the Central City Community Plan area. The area surrounding the project is primarily commercial in nature, developed with offices, retail stores and wholesale outlets. The Transamerica Center, a large office complex, is located adjacent to the project on 12th Street, between South Olive Street and South Hill Street. Other prominent commercial structures located within the surrounding area include the Los Angeles Convention Center, Staples Center, the Fashion Institute of Design and Merchandising (FIDM), and the California Hospital Medical Center.

The project and surrounding uses are well-served by Major and Secondary Highways, including Grand Avenue, Olive Street, Hill Street, Broadway, Main Street, Los Angeles Street, Olympic Boulevard, and Pico Boulevard. In addition, two freeways provide surface street access within approximately two and one-quarter miles from the project. Surface street access to the Harbor (I-110) and the Santa Monica (I-10) Freeways is provided approximately three-quarters of a mile west, and one-half mile south of the project, respectively. These transportation facilities and other local roadways are described in more detail below.

Freeways

The Harbor Freeway (I-110) is an eight- to ten-lane facility in the vicinity of the study area, and interchanges with the Hollywood, Santa Ana and Santa Monica Freeways. It provides convenient access between the project and the greater Los Angeles metropolitan area. The Harbor Freeway begins as Interstate 110 in San Pedro to the south, becoming State Route 110 as it passes through downtown Los Angeles and continues northeasterly as the Pasadena Freeway into the City of Pasadena. The Harbor Freeway interchanges with the Santa Monica Freeway approximately three-quarters of a mile southeast of the project. Southbound on- and off-ramps are provided on Blaine Street at 11th street and Connecticut Street, respectively. A northbound on-ramp is provided on 11th Street at Cherry Street, and a northbound off-ramp is located on Cherry Street, south of Pico Boulevard.

The Santa Monica Freeway (I-10) is located one-half mile south of the project. It extends easterly from the City of Santa Monica through downtown Los Angeles, and continues easterly as the San Bernardino Freeway into San Bernardino and Riverside Counties. The Santa Monica Freeway provides four mainline travel lanes in each direction, with auxiliary lanes between some ramp locations. The nearest westbound off-ramp is provided at 17th Street/Los Angeles Street and eastbound off-ramps are provided at 18th Street/Grand Avenue and 18th Street/Maple Avenue. A westbound on-ramp is provided on 17th Street, west of Grand Avenue. Eastbound on-ramps are provided on Flower Street, north of 18th Street, and on Los Angeles Street, north of 18th Street. The Santa Monica Freeway has a full interchange with the Harbor Freeway approximately three-quarters of a mile southwest of the project.

Streets and Highways

Olympic Boulevard, located north of the project, is an east-west Major Highway Class II. Olympic Boulevard extends easterly from the City of Santa Monica through West Los Angeles, Century City, Beverly Hills and downtown Los Angeles, to its eastern termination in the City of Montebello in the San Gabriel Valley. In the vicinity of the project, Olympic Boulevard provides three travel lanes in each direction within an approximate 62 to 71 feet roadway width. AM and PM peak hour "No Parking" prohibitions are in effect along both sides of Olympic Boulevard, with one-hour metered parking permitted during other times of the day.

Connecticut Street is approximately 800 feet in length and provides southeast-northwest access between Valencia Street and Blaine Street, just west of the Harbor Freeway. Designated a Local Street, Connecticut Street provides one travel lane per direction within an approximate 40 feet roadway width. On-street parking is generally permitted.

11th Street/Chick Hearn Court is a designated Collector Street, with discontinuous access provided from Koreatown to southeast of downtown Los Angeles. In downtown Los Angeles, west of Cherry Street and the Harbor Freeway northbound on-ramp, 11th Street provides one to two travel lanes in each direction. Between Figueroa Street and Cherry Street, 11th Street is known as Chick Hearn Court and provides three westbound and two eastbound travel lanes. Between Figueroa and Flower Streets, 11th Street provides two westbound and one eastbound travel lane. East of Flower Street, 11th Street operates as a one-way only roadway with two westbound travel lanes provided. Along the northern project frontage of the Broadway Site, 11th Street operates as a one-way westbound only roadway, within an approximate 40 feet roadway width. Left-turn channelization is provided at some intersections within the study area, namely at Cherry, Figueroa, Flower, and Hill Streets. Right-turn channelization is also provided at

some intersections, including Olive Street. One-hour metered parking is provided along some portions of 11th Street during non-peak commute hours.

12th Street provides discontinuous east-west access from Koreatown to southeast of downtown Los Angeles. Designated a Collector Street throughout its length, 12th Street operates as a bi-directional roadway west of Flower Street and a one-way eastbound only roadway to the east. West of Flower Street, 12th Street provides one to two travel lanes per direction. Between Flower Street and Broadway, 12th Street provides two eastbound travel lanes within an approximate 40 feet roadway width. East of Broadway, 12th Street provides three eastbound travel lanes, and east of Main Street 12th Street provides four eastbound travel lanes. Along the northern project boundary of the 12th Street Site, 12th Street operates as a one-way eastbound only roadway with three travel lanes provided. In the project vicinity two-hour metered parking is provided from 8:00 AM to 6:00 PM on both sides of 12th Street.

Pico Boulevard, designated a Secondary Highway, provides east-west access between the City of Santa Monica and its eastern terminus at Central Avenue, less than one mile southeast of the project. In the project area this roadway generally provides two travel lanes in each direction within an approximate 48 feet roadway width. West of the project, between Figueroa and Cherry Streets, Pico Boulevard provides three travel lanes in each direction. Left- and/or right-turn channelization is provided at some intersections. At the study intersection of Pico Boulevard and Broadway, left-turn channelization is provided on both legs of Pico Boulevard, and right-turn channelization is provided on the west leg of the intersection. In the vicinity of the project, parking prohibitions are in effect along both sides of Pico Boulevard during morning and afternoon peak commute periods, with one-hour metered parking available during non-commute periods.

17th Street is a one-way Collector Street located north of, and parallel to, the Santa Monica Freeway. South of the project, this street extends the Santa Monica Freeway off-

ramp at Los Angeles Street to west of Grand Avenue where it bends north to Hope Street. This roadway primarily serves the off-ramp traffic at Los Angeles Street and traffic using the on-ramp located west of Grand Avenue. Beyond the project area, 17th Street provides discontinuous east-west access between the Mid-City community to the west and its eastern terminus southeast of downtown Los Angeles. South of the project, 17th Street provides two westbound travel lanes within an approximate 40 feet roadway width. On-street parking is prohibited from 7:00 AM to 5:00 PM on school days.

18th Street, designated a Local Street, is a discontinuous one-way eastbound roadway that extends south of, and parallel to, the Santa Monica Freeway. This roadway is primarily used by traffic to access the Santa Monica Freeway eastbound off-ramp at Grand Avenue and the eastbound on-ramp at Los Angeles Street. Similar to 17th Street, 18th Street provides discontinuous east-west access between the Mid-City community to the west and its eastern termination southeast of downtown Los Angeles. South of the project, within an approximately 40 feet roadway width, 18th Street provides two eastbound travel lanes plus left-turn channelization at most intersections. On-street parking is generally prohibited.

Blaine Street is designated a Secondary Highway. This roadway provides north-south access from north of Olympic Boulevard to the southbound on-ramp located at 11th Street. Between Olympic Boulevard and Connecticut Avenue, Blaine Street provides two travel lanes per direction, with the northbound travel lanes originating at the Harbor Freeway southbound off-ramp. North of Olympic Boulevard, Blaine Street reduces to one lane per direction. South of Connecticut Avenue, Blaine Street is a one-way southbound roadway with three travel lanes provided. North of Connecticut Avenue, on-street parking is prohibited at all times on the east side of the street and from 3:00 PM to 7:00 PM on the west side of the street, while to the south of Connecticut

Avenue, on-street parking on the west side of the street is prohibited at all times and limited parking is provided on the east side of the street.

Cherry Street is a one-way northbound roadway which originates north of Venice Boulevard, at the Harbor Freeway and Santa Monica Freeway off-ramps located just west of the Los Angeles Convention Center. From its origination to Pico Boulevard, Cherry Street is a one-way northbound Collector Street which provides four travel lanes within an approximate 50 feet roadway width. Left- and right-turn channelization is provided on Cherry Street at Pico Boulevard. Between Pico Boulevard and 11th Street, Cherry Street operates as a bi-directional Collector Street with three northbound and two southbound travel lanes provided plus left-turn channelization, within an approximate 75 to 81 feet roadway width. North of 11th Street to its termination at Olympic Boulevard, Cherry Street is a one-way northbound Local Street, approximately 34 feet in width, with two travel lanes. On-street parking is generally prohibited on Cherry Street.

Grand Avenue provides one-way southbound traffic flow between 5th Street and 18th Street, and two-way traffic flow north of 5th Street and south of 18th Street. Designated a Major Highway Class II roadway, Grand Avenue provides access between north of Cesar E. Chavez Avenue and its southern termination at 39th Street near Exposition Park. In the project vicinity, between 5th Street and 18th Street, Grand Avenue generally provides four southbound travel lanes within an approximate 56 feet roadway width. South of 18th Street, where Grand Avenue transitions to a bi-directional roadway, one to two travel lanes are generally provided per direction within an approximate 56 feet roadway width. On-street parking is permitted on some portions of Grand Avenue, north of 18th Street.

Olive Street is designated a Secondary Highway which extends southwesterly from 1st Street at the Civic Center, to its southern termination at 21st Street just south of the Santa Monica Freeway. Between 5th Street and Washington Boulevard, Olive Street is

a one-way northbound roadway which provides four travel lanes within an approximate 56 feet roadway width. North of 5th Street and south of Washington Boulevard, Olive Street provides two travel lanes in each direction with some segments providing one or three travel lanes in each direction. Near the project, between 11th and 12th Streets, two-hour metered parking is provided on Olive Street, from 8:00 AM to 4:00 PM on the west side of the street and from 8:00 AM to 6:00 PM on the east side of the street. Stopping on the west side of Olive Street is prohibited from 4:00 to 6:00 PM.

Hill Street forms the western boundary of the Hill Street Site. Designated a Secondary Highway, Hill Street provides northeast-southwest access between the Pasadena Freeway (SR-110) to the north and Martin Luther King, Jr. Boulevard to the south. In the vicinity of the project, Hill Street provides two travel lanes per direction within an approximate 55 feet roadway width. Left-turn channelization is provided at most intersections. North of its intersection with 12th Street, Hill Street provides two southbound travel lanes and one northbound bus only lane; therefore northbound traffic at 12th Street is diverted to eastbound 12th Street. On some segments of Hill Street, one-hour metered parking is provided on the east side of the street from 8:00 AM to 4:00 PM and stopping is prohibited from 4:00 PM to 7:00 PM. Parking on the west side of the street is prohibited between 7:00 AM to 9:00 AM and 4:00 PM to 7:00 PM.

Broadway is a northeast to southwest roadway which forms the eastern boundary of the Broadway Site and the western boundary of the 12th Street Site. Broadway provides access between the Lincoln Heights community to the northeast of downtown Los Angeles, and the City of Carson to the southwest. In the vicinity of the project, Broadway is designated a Secondary Highway and generally provides two travel lanes per direction within an approximate 55 to 65 feet width. Left-turn channelization is provided at most intersections, including on Broadway at 11th and 12th Streets. Near the project, parking on Broadway is generally unrestricted.

Main Street is a one-way northbound roadway between 9th Street and Alameda Street. Designated a Secondary Highway, Main Street is the second part of the one-way couplet with North Spring Street. Northeast of its intersection with Alameda Street, Main Street provides bi-directional access to Mission Road. South of 9th Street, Main Street is a continuous, bi-directional roadway to its southern terminus in the City of Carson. In the vicinity of the project, this roadway generally provides two travel lanes per direction plus left-turn channelization, within an approximate 68 feet roadway width. Daytime one-hour metered parking is provided on some segments of Main Street.

Los Angeles Street is a bi-directional roadway which provides northeast-southwest access between Alameda Street to the northeast and its southwestern termination south of the Santa Monica Freeway at 23rd Street. East of the project, Los Angeles Street provides two travel lanes per direction within an approximate 56 to 63 feet roadway width. One- and two-hour metered parking from 8:00 AM to 6:00 PM is provided on segments of Los Angeles Street near the project. Approximately one-half mile southeast of the project Los Angeles Street accesses the Santa Monica Freeway westbound off-ramp at 17th Street and eastbound on-ramps at 18th Street.

Existing (2005) Traffic Volumes

Traffic volumes for existing conditions at the 20 study intersections were obtained from manual traffic counts conducted in late 2004 and 2005. Crain & Associates and its subcontractor performed thirteen of the manual intersection counts in December 2004. These counts were supplemented with manual traffic counts taken in May 2005 and counts taken at the intersection of 11th Street and Blaine Street in June 2004 for a previous study in the area. The counts cover the weekday 7:00 to 9:00 AM and 4:00 to 6:00 PM peak traffic periods. Peak hour volumes were determined individually for each intersection based on the combined four highest consecutive 15-minute volumes for all vehicular movements at the intersection. A growth factor of 1.0 percent was applied to

the 2004 volumes to represent existing volumes for the year 2005. Weekday peak hour volumes at the study intersections are illustrated in Figures 4(a) and 4(b). The manual intersection traffic count data sheets are provided in Appendix A.

Information pertaining to intersection widths and geometrics, bus stop locations, on-street parking restrictions, and traffic signal operations were obtained from both field checks and City engineering plans.

Public Transit

The project and downtown Los Angeles in general, are well served by public transit services provided by both the Los Angeles County Metropolitan Transportation Authority (MTA) and the City of Los Angeles Department of Transportation (LADOT). In addition, Foothill Transit and the City of Santa Monica also operate local and commuter express bus service in the vicinity of the project. The project's proximity to Union Station, approximately two miles northeast, also links the project to Amtrak, Metrolink, Metro rail services and numerous bus routes operated by the MTA and LADOT. The public transit service providers and the lines serving the project are detailed below.

The Los Angeles County Metropolitan Transportation Authority (MTA) operates several north-south aligned bus routes on Grand Avenue, Olive Street, Hill Street, Broadway, and Main Street in the vicinity of the project. Lines 14, 37, 38/71, 76/376, 78/79/378, 96, 439, 484, 485, 490, and 714 travel northbound on Olive Street and southbound on Grand Avenue. Lines 30/31, 40, 42, 45/46, and 68 provide service on Broadway. Lines

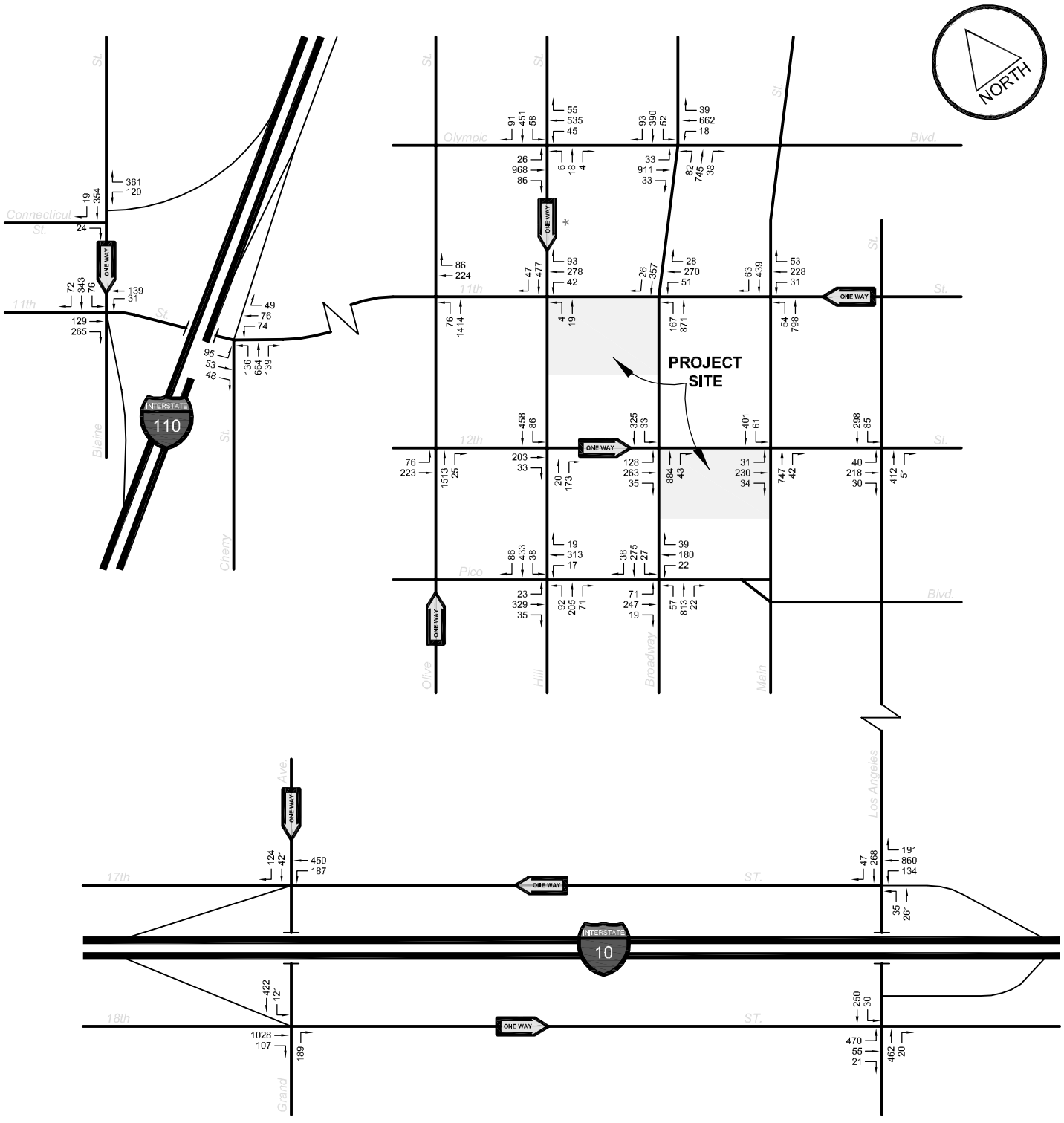

FIGURE 4(a)

7/26/2005

;FN HERALD EXAMINER SITE\AM2005

EXISTING (2005) TRAFFIC VOLUMES
AM PEAK HOUR

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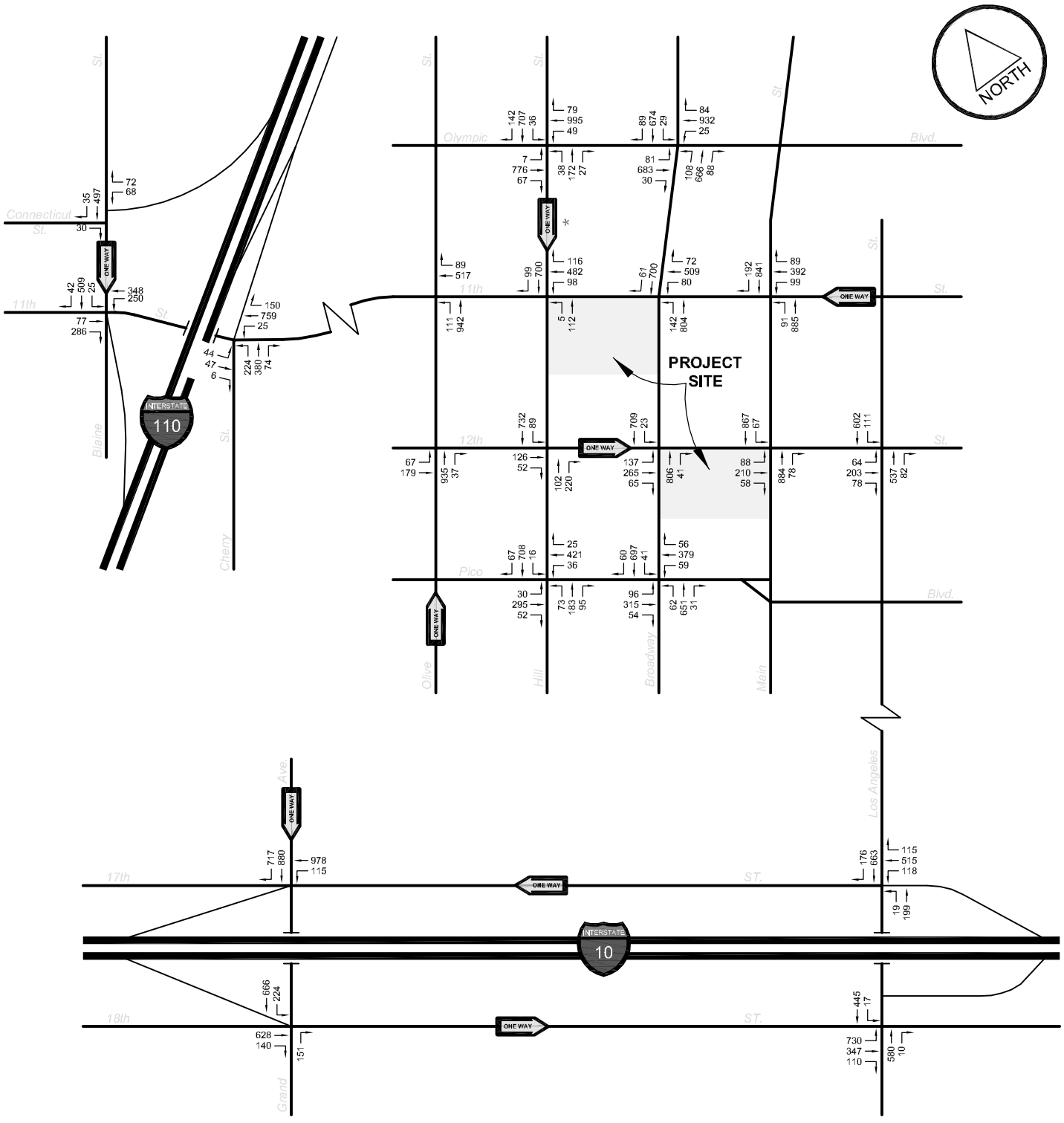

* CONTRA - FLOW NORTHBOUND BUS LANE

FIGURE 4(b)

7/26/2005

;FN HERALD EXAMINER SITE\PM2005

EXISTING (2005) TRAFFIC VOLUMES
PM PEAK HOUR

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740 and 745 also operate on Broadway as a part of the greater Metro Rapid Program, which uses a bus signal priority system in combination with frequent stops limited to major intersections in order to minimize travel time. Lines 10/11, 28/328, 33/333, 48, 55, 92, 70/370, 94/394 and 434 travel on Main Street. Lines 2/302 and Line 4 travel northbound on Main Street and southbound on Broadway. Each of these north-south aligned bus routes provide one or more stops within a one-quarter mile radius from the project.

The MTA also operates several east-west aligned bus routes that travel on Pico Boulevard, Olympic Boulevard and 9th Street. Line 30/31 travels east-west on Pico Boulevard and north-south on Broadway. Lines 28/328 and 83 operate east-west on Olympic Boulevard and Line 66/366 operates on 9th Street.

In addition to these bus routes, the MTA also operates the Metro Red and Blue Lines in the project vicinity. The Metro Red Line provides rail transportation through downtown Los Angeles, the Mid-Wilshire District, and North Hollywood. The Metro Blue Line provides north-south service between downtown Los Angeles and the City of Long Beach. The Metro Red Line provides a stop at the 7th Street/Metro Center/Julian Dixon Station located at 660 South Figueroa Street, approximately three-quarters of a mile northwest of the project. The Metro Blue Line also provides a stop at the 7th Street/Metro Center/Julian Dixon Station, as well as a stop at the Pico/Chick Hearn Station, located at 1236 South Flower Street, approximately one-half mile southwest of the project. These rail lines also provide stops at Union Station, thereby linking the project to the continually expanding rail network.

LADOT also provides bus routes in the vicinity of the project. The DASH (Downtown Area Short Hop), which primarily serves downtown Los Angeles, has two lines which provide stops near the project. DASH C provides weekday service between the Financial District and the project area. Near the project, DASH C operates northbound on Olive

Street and southbound on Grand Avenue, north of 12th Street. South of 12th Street, DASH C operates northbound on Hope Street and southbound on Grand Avenue. Stops nearest the project are provided on Grand Avenue at 12th Street and on Olive Street at 12th Street. DASH D provides service between Union Station, the Civic Center, the Jewelry District, and the project area. Near the project, DASH D operates on Main Street, north of Olympic Boulevard. Between Olympic Boulevard and Pico Boulevard, DASH D operates northbound on Olive Street and southbound on Hill Street. South of Pico Boulevard, DASH D operates northbound on Olive Street and southbound on Grand Avenue. Stops nearest the project are provided on Olive Street at Pico Boulevard, 12th Street and Olympic Boulevard; on Hill Street at Olympic Boulevard and 12th Street; and on Main Street, midblock between 9th Street and Olympic Boulevard.

In addition to these localized public transit routes, LADOT also operates five commuter express routes in the vicinity of the project. Route 413 travels on Hill Street with stops provided at Olympic Boulevard, 12th Street, and Pico Boulevard. Route 419 travels eastbound on Olympic Boulevard, northbound on Broadway and westbound on 8th Street. Stops nearest the project are provided on Olympic Boulevard at Grand Avenue and Olive Street. Routes 430, 431 and 437 operate northbound on Olive Street and southbound on Grand Avenue. Stops are provided in both directions at Pico Boulevard, 12th Street, Olympic Boulevard, and 9th Street. These commuter express routes operate on weekdays during peak commute periods.

Foothill Transit operates several bus lines near the project with service to the San Gabriel and Pomona Valley communities. Lines 482, 486, and 488 operate northbound on Olive Street and southbound on Grand Avenue. Line 480/481 operates weekdays and Saturdays. Lines 482, 486, and 488 operate daily but provide service in the project vicinity weekdays only.

Santa Monica Big Blue Bus operates Line 10 daily in the vicinity of the project, providing express service between downtown Los Angeles and the City of Santa Monica. In the vicinity of the project Line 10 operates northbound on Olive Street and southbound on Grand Avenue. Stops near the project are provided in both directions at 9th Street, Olympic Boulevard, 11th Street, 12th Street, and Pico Boulevard.

As shown by the preceding information, the project is well served by direct access to several public transit services and routes. In addition, when transfer opportunities are considered, the project is accessible to and from the greater Los Angeles region via public transit. Thus, it is expected that some of the person trips generated by the project will utilize public transportation as the primary travel mode instead of private vehicles.

Analysis of Existing (2005) Traffic Conditions

An analysis of current traffic conditions was conducted on the streets and highways serving the project area. Detailed traffic analyses of existing conditions were performed at the following 20 intersections:

1. Olympic Boulevard and Hill Street
2. Olympic Boulevard and Broadway
3. Connecticut Street /I-110 SB Off-Ramp and Blaine Street
4. 11th Street and Blaine Street
5. 11th Street/Chick Hearn Court and Cherry Street/I-110 NB On-Ramp
6. 11th Street and Olive Street
7. 11th Street and Hill Street
8. 11th Street and Broadway
9. 11th Street and Main Street
10. 12th Street and Olive Street
11. 12th Street and Hill Street
12. 12th Street and Broadway
13. 12th Street and Main Street

14. 12th Street and Los Angeles Street
15. Pico Boulevard and Hill Street
16. Pico Boulevard and Broadway
17. 17th Street/I-10 WB On-Ramp and Grand Avenue
18. 18th Street/I-10 EB Off-Ramp and Grand Avenue
19. 17th Street/I-10 WB Off-Ramp and Los Angeles Street
20. 18th Street/I-10 EB On-Ramp and Los Angeles Street

All of the study intersections are currently signalized, and are currently operated under the Adaptive Traffic Control System (ATCS), in addition to the previously implemented ATSAC (Automated Traffic Surveillance and Control) System. The ATCS/ATSAC system provides computer monitoring of traffic demand at signalized intersections within the system, and modifies traffic signal timing in real time to maximize capacity and decrease delay. The ATSAC signal enhancements have been recognized to increase intersection capacities by approximately seven percent at locations where it has been installed and the upgraded ATCS system is able to increase capacity by another three percent for a total intersection capacity increase of ten percent.

The methodology used in this study for the analysis and evaluation of traffic operations at each study intersection is based on procedures outlined in Circular Number 212 of the Transportation Research Board.[1] In the discussion of Critical Movement Analysis for signalized intersections, procedures have been developed for determining operating characteristics of an intersection in terms of the "Level of Service" provided for different levels of traffic volume and other variables, such as the number of signal phases. The term "Level of Service" (LOS) describes the quality of traffic flow. LOS A to C operate

[1] Interim Materials on Highway Capacity, Circular Number 212, Transportation Research Board, Washington, D.C., 1980.

well. LOS D typically is the level for which a metropolitan area street system is designed. LOS E represents volumes at or near the capacity of the highway which might result in stoppages of momentary duration and fairly unstable flow. LOS F occurs when a facility is overloaded and is characterized by stop-and-go traffic with stoppages of long duration.

A determination of the LOS at an intersection, where traffic volumes are known or have been projected, can be obtained through a summation of the critical movement volumes at that intersection. Once the sum of critical movement volumes has been obtained, the values indicated in Table 1 can be used to determine the applicable LOS.

Table 1
Critical Movement Volume Ranges*
For Determining Levels of Service

Level of Service	Maximum Sum of Critical Volumes (VPH) Two Phase	Three Phase	Four or More Phases
A	900	855	825
B	1,050	1,000	965
C	1,200	1,140	1,100
D	1,350	1,275	1,225
E	1,500	1,425	1,375
F	----------Not Applicable----------		

* For planning applications only, i.e., not appropriate for operations and design applications.

"Capacity" represents the maximum total hourly movement volume of vehicles in the critical lanes which has a reasonable expectation of passing through an intersection under prevailing roadway and traffic conditions. For planning purposes, capacity equates to the maximum value of LOS E, as indicated in Table 1. The Critical Movement Analysis (CMA) indices used in this study were calculated by dividing the

sum of critical movement volumes by the appropriate capacity value for the type of signal control present or proposed at the study intersections. Thus, the LOS corresponding to a range of CMA values is shown in Table 2.

Table 2
Level of Service
As a Function of CMA Values

Level of Service	Description of Operating Characteristics	Range of CMA Values
A	Uncongested operations; all vehicles clear in a single cycle.	< 0.60
B	Same as above.	>0.60 < 0.70
C	Light congestion; occasional backups on critical approaches.	>0.70 < 0.80
D	Congestion on critical approaches, but intersection functional. Vehicles required to wait through more than one cycle during short peaks. No long-standing lines formed.	>0.80 < 0.90
E	Severe congestion with some long-standing lines on critical approaches. Blockage of intersection may occur if traffic signal does not provide for protected turning movements.	>0.90 < 1.00
F	Forced flow with stoppages of long duration.	> 1.00

By applying this analysis procedure to the study intersections, the CMA value and the corresponding LOS for existing traffic conditions were calculated. These basic CMA calculations were adjusted, however, to account for traffic signal enhancements that are not considered in the CMA methodology. As described previously, the City's ATCS/ATSAC system has been implemented at all of the signalized intersections in the study area, which LADOT has determined results in an approximate ten percent increase in capacity over locations where the system is not implemented. Therefore, per LADOT policy, the CMA value calculated using the standard methodology was reduced by 0.100

for all 20 study intersections, in order to approximate the increase in intersection capacity resulting from the ATSAC/ATCS implementation.

The resulting intersection conditions for existing (2005) AM and PM peak hour conditions in the study area are shown in Table 3. As summarized in Table 3, all of the study intersections are currently operating at very good levels of service (LOS A) during both the AM and PM peak hour. This is primarily due to the operations of the many one-way streets in the project vicinity, as well as lack of significant traffic volumes on most of the roadways. One-way streets generally provide substantially more operational capacity than typical two-way streets due to the lack of many of the conflicting moves that limit green time and traffic flow at intersections of two-way streets. The CMA calculation worksheets for existing (2005) traffic conditions are provided in Appendix C.

Table 3
Critical Movement Analysis (CMA) Summary
Existing (2005) Traffic Conditions

No.	Intersection	AM Peak Hour		PM Peak Hour	
		CMA	LOS	CMA	LOS
1.	Olympic Boulevard and Hill Street	0.388	A	0.512	A
2.	Olympic Boulevard and Broadway	0.504	A	0.596	A
3.	I-110 SB Off-Ramp and Blaine Street/Connecticut Street	0.185	A	0.204	A
4.	11th Street and Blaine Street	0.331	A	0.538	A
5.	11th Street/Chick Hearn Court and Cherry Street/I-110 NB On-Ramp	0.519	A	0.496	A
6.	11th Street and Olive Avenue	0.287	A	0.309	A
7.	11th Street and Hill Street	0.268	A	0.421	A
8.	11th Street and Broadway	0.327	A	0.450	A
9.	11th Street and Main Street	0.329	A	0.564	A
10.	12th Street and Olive Street	0.316	A	0.217	A
11.	12th Street and Hill Street	0.223	A	0.270	A
12.	12th Street and Broadway	0.426	A	0.404	A
13.	12th Street and Main Street	0.328	A	0.395	A
14.	12th Street and Los Angeles Street	0.231	A	0.331	A
15.	Pico Boulevard and Hill Street	0.304	A	0.397	A

Table 3 (continued)
Critical Movement Analysis (CMA) Summary
Existing (2005) Traffic Conditions

No.	Intersection	AM Peak Hour		PM Peak Hour	
		CMA	LOS	CMA	LOS
16.	Pico Boulevard and Broadway	0.392	A	0.547	A
17.	17th Street/I-10 WB On-Ramp and Grand Avenue	0.228	A	0.503	A
18.	18th Street/I-10 EB Off-Ramp and Grand Avenue	0.313	A	0.286	A
19.	17th Street/I-10 WB Off-Ramp and Los Angeles Street	0.423	A	0.442	A
20.	18th Street/I-10 EB On-Ramp and Los Angeles Street	0.395	A	0.595	A

PROJECT TRAFFIC

The following section describes the methodology used to determine the trip generation, distribution and assignment of the project. Driveway access and parking for the project are also described on the pages that follow.

Traffic Generation

Traffic-generating characteristics of many land uses, such as those comprising the project, have been extensively surveyed and documented in studies conducted under the auspices of the Institute of Transportation Engineers (ITE). The most recent information is available in the ITE 7th Edition Trip Generation Manual, which was used as a basis for project trip generation. This publication indicated that condominiums, office, and retail centers of the sizes associated with the project generally exhibit the trip-making characteristics presented in Table 4.

Accordingly, for this analysis, the ITE Trip Generation rates provided in Table 4 were used to determine estimates of the project daily, AM and PM peak hour trips. The rates and equations used to calculate the project's trip generation present a conservative condition, as these rates do not account for such trip-reducing factors as multi-purpose trips, extensive transit usage or pass-by trips. These factors play a significant role in determining the actual traffic generating characteristics of a particular project, and therefore, adjustments to the traffic generation estimates were deemed appropriate.

Trip reductions related to the proposed project are expected to occur as a result of "multi-purpose" or "internal" trips within the site. This type of trip generally occurs at integrated mixed-use developments containing a variety of uses. It is generally recognized that residents or patrons of a site will utilize other on-site uses if they are conveniently located or provide useful services or amenities, with the level of interaction

Table 4
Project Trip Generation Equations

Condominiums (trips per dwelling unit)

Daily:	Ln (T) = 0.85 Ln (A) + 2.55
AM Peak Hour:	Ln (T) = 0.80 Ln (A) + 0.26; I/B = 17%, O/B = 83%
PM Peak Hour:	Ln (T) = 0.82 Ln (A) + 0.32; I/B = 67%, O/B = 33%

Office (trips per 1,000 sq. ft.)

Daily:	Ln (T) = 0.65 Ln (A) + 5.83
AM Peak Hour:	Ln (T) = 0.60 Ln (A) + 2.29; I/B = 61%, O/B = 39%
PM Peak Hour:	Ln (T) = 0.66 Ln (A) + 3.40; I/B = 48%, O/B = 52%

Retail (Shopping Center) (trips per 1,000 sq. ft.)

Daily:	Ln (T) = 0.65 Ln (U) + 5.83
AM Peak Hour:	Ln (T) = 0.60 Ln (U) + 2.29; I/B = 61%, O/B = 39%
PM Peak Hour:	Ln (T) = 0.66 Ln (U) + 3.40; I/B = 48%, O/B = 52%

Where:

T =	trip ends	A =	building area in 1,000's of square feet
O/B =	outbound	U =	dwelling unit
I/B =	inbound		

Source:

Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington D.C., 2003.

dependent upon the number of residents or patrons, service providers, accessibility, and other factors. For this particular project, some of the apartment and condominium residents and office employees are expected to use the on-site retail use, and some of the office employees are expected to live in the on-site condominiums, thereby reducing some of the trips the retail and office uses would otherwise generate.

Thus, the advantages of this mixed-use project need to be considered for reasonable evaluation of the project's trip-making potential. It was estimated that approximately 10 percent of the retail patronage would be the result of utilization by on-site residents and on-site office employees, and five percent of the office employees would reside in the on-site condominiums.

The use of public transportation is another important consideration in the evaluation of the project's trip making potential. As noted previously in the Public Transit section of this report, the project is well served by bus lines provided by various transit operators. These transit operators provide both local and regional routes that are easily accessible to project residents, visitors, employees, and retail patrons. Significant transit use is not accounted for in the ITE trip generation rates; therefore, appropriate adjustments were made to the project trip generation to account for transit usage.

"Walk-in" trips are trips that are already occurring in the project vicinity, but which have other nearby downtown Los Angeles attractions as their specified destinations. These trips account for "built-in" patronage and subsequent traffic reductions for both the project specifically and downtown in general. These trips are expected to continue to occur with or without the development of the project. They are not directly site-oriented, but provide walk-in patronage from other nearby destinations, thereby reducing site vehicular trips. A five percent walk-in trip reduction was assumed for the retail use.

Trip reduction factors for the proposed project also account for the presence of "pass-by" trips. As these trips pass by the project, the specific convenient facilities provided by the project, or other factors produces a stop at the site. Such activity is considered to be an interim stop along a trip which existed without development of the project, and therefore vehicles making these stops are not considered to be newly generated project-related traffic. LADOT has developed a series of recommended pass-by trip reduction percentages for various development types and sizes. Based on these recommendations, it was assumed that the project retail use would experience a 50 percent pass-by reduction. A summary of the baseline trip generation reduction factors, including the 50 percent pass-by reduction for the retail use, is shown in Table 5.

Table 5
Project Trip Reduction Factors

	Internal Capture	Transit Use	Walk-In Factor	Pass-by Discount
Condominium	0%	10%	0%	0%
Office	5%	5%	0%	0%
Retail	10%	5%	5%	50%

Based on the trip generation rates and trip reduction factors, projections of the amount of new traffic to be generated by the project were derived, and are summarized in Table 6. As shown in Table 6, once completed and occupied, the project is expected to generate approximately 5,416 net new daily trips, including approximately 348 (137 inbound and 211 outbound) net new trips during the AM peak hour, and 548 (280 inbound and 268 outbound) net new trips during the PM peak hour. These trip estimates were used to identify the effects of project traffic at intersections farther away from the project sites.

However, per LADOT Policies and Procedures, trip reductions for retail pass-by activity were not applied to the project's driveways, since pass-by trips, while not new to the area roadways, will be included in the number of vehicles that enter and exit the site's driveways. The total project traffic volumes at the project driveways and site adjacent intersections were also calculated. These calculations indicate that approximately 7,410 daily trips, including 399 (168 inbound and 231 outbound) AM peak hour trips and 730 (367 inbound and 363 outbound) PM peak hour trips, would access the project driveways. This amount of new project traffic was used to estimate impacts at project site adjacent intersections.

Table 6
Project Trip Generation

Size/Use	Daily	AM Peak Hour I/B	AM Peak Hour O/B	AM Peak Hour Total	PM Peak Hour I/B	PM Peak Hour O/B	PM Peak Hour Total
"Broadway Site"							
39,725 sq. ft. Office	655	79	11	90	21	102	123
Less 10% Internal/Transit	(66)	(8)	(1)	(9)	(2)	(10)	(12)
Subtotal Office	589	71	10	81	19	92	111
29,000 sq. ft. Retail (Shopping Center)	3,037	45	29	74	133	144	277
Less 20% Internal/Transit/Walk-in	(607)	(9)	(6)	(15)	(26)	(29)	(55)
Less 50% Pass By [1]	(1,215)	(18)	(12)	(30)	(53)	(58)	(111)
Subtotal Retail	1,215	18	11	29	54	57	111
Broadway Site Total	1,804	89	21	110	73	149	222
"Hill Street Site"							
256 Condominiums	1,427	19	91	110	87	43	130
Less 10% Internal/Transit/Walk-in	(143)	(2)	(9)	(11)	(8)	(5)	(13)
Subtotal Condominiums	1,284	17	82	99	79	38	117
2,560 sq. ft. Retail (Shopping Center)	627	10	7	17	27	29	56
Less 20% Internal/Transit/Walk-in	(125)	(2)	(1)	(3)	(5)	(6)	(11)
Less 50% Pass By [1]	(251)	(4)	(3)	(7)	(11)	(12)	(23)
Subtotal Retail	251	4	3	7	11	11	22
Hill Street Site Total	1,535	21	85	106	90	49	139
"12th Street Site"							
319 Condominiums	1,721	22	109	131	105	51	156
Less 10% Internal/Transit/Walk-in	(172)	(3)	(10)	(13)	(10)	(6)	(16)
Subtotal Condominiums	1,549	19	99	118	95	45	140
8,050 sq. ft. Retail (Shopping Center)	1,320	21	14	35	57	62	119
Less 20% Internal/Transit/Walk-in	(264)	(4)	(3)	(7)	(12)	(12)	(24)
Less 50% Pass By [1]	(528)	(9)	(5)	(14)	(23)	(25)	(48)
Subtotal Retail	528	8	6	14	22	25	47
12th Street Site Total	2,077	27	105	132	117	70	187
Herald Examiner - Net Project Totals							
575 Condominiums	2,833	36	181	217	174	83	257
39,610 sq. ft. Retail (Shopping Center)	1,994	30	20	50	87	93	180
39,725 sq. ft. Office	589	71	10	81	19	92	111
	5,416	**137**	**211**	**348**	**280**	**268**	**548**

Note:
[1] Pass-by trip reductions calculated on net traffic after adjustment for internal/transit/walk-in factors.

Traffic Distribution

Estimation of the geographic distribution of project trips was the next step in the analytical process. This trip distribution pattern for the project was determined by considering the nature of the project uses, existing traffic patterns, characteristics of the surrounding roadway system, geographic location of the project and its proximity to freeways and major travel routes, employment centers to which residents would likely be attracted, and areas from which office employees and retail patrons would likely be attracted. Based on these factors, the overall project distributions were determined, and are summarized in Table 7.

Table 7
Directional Project Trip Distribution Percentages

Direction	Local	Freeway	Total
North	15%	20%	35%
South	5%	10%	15%
East	10%	10%	20%
West	15%	15%	30%
Total:	45%	55%	100%

Traffic Assignment

The general distribution percentages shown in Table 7 were then assigned to specific travel routes that are expected to be used to access the project. These trip assignment percentages are presented in Figure 5. Applying these inbound and outbound percentages to the project trip generation previously calculated in Table 6 for each of the proposed uses, net project traffic volumes at the 20 study intersections were determined for the AM and PM peak hours, as shown in Figures 6(a) and 6(b), respectively. The anticipated peak hour traffic volumes at each of the project driveways are shown in Figure 7.

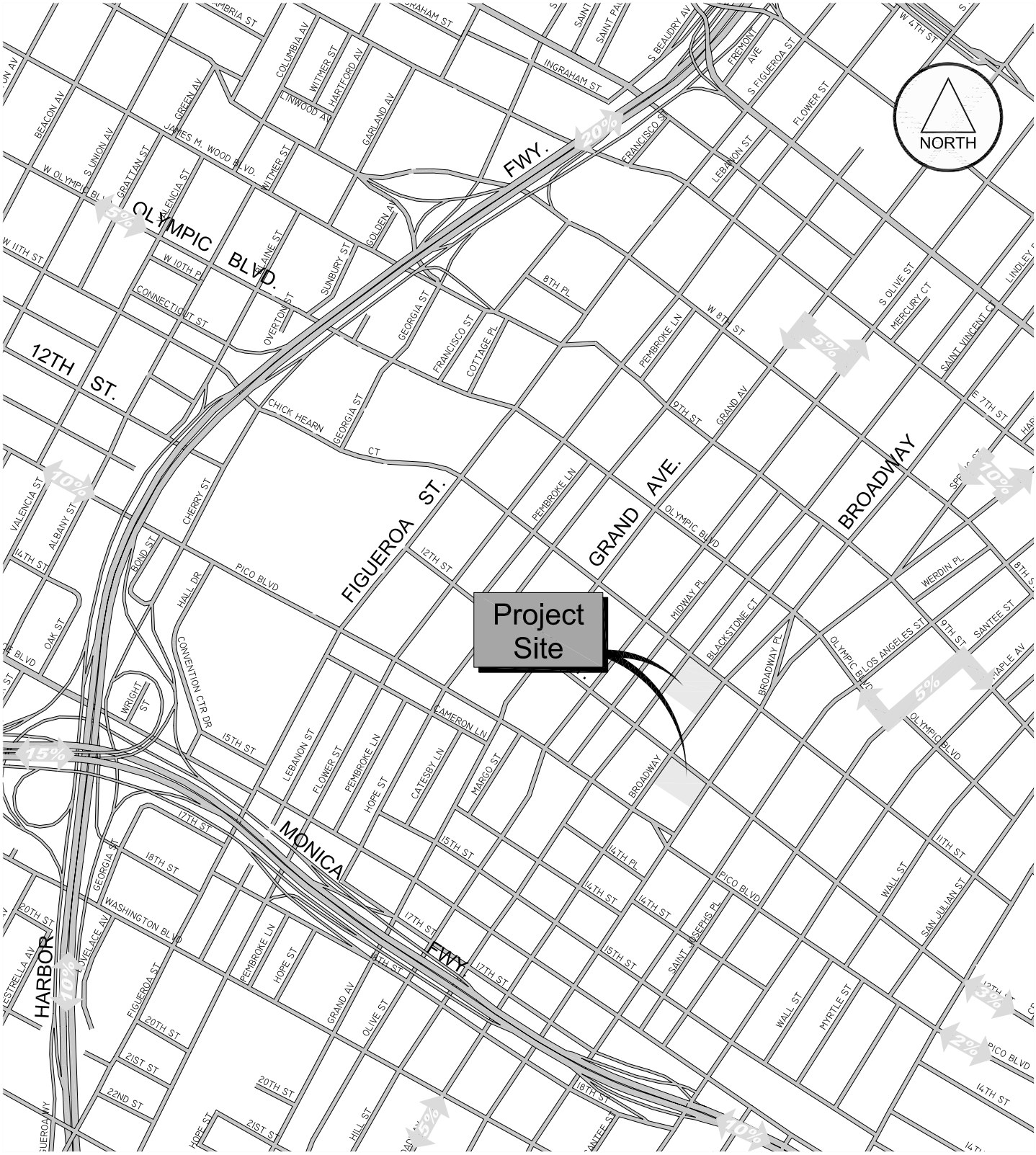

FIGURE 5

4/12/2005

:FN HERALD EXAMINER SITE\DISTRIBUTION

PROJECT TRAFFIC DISTRIBUTION PERCENTAGES

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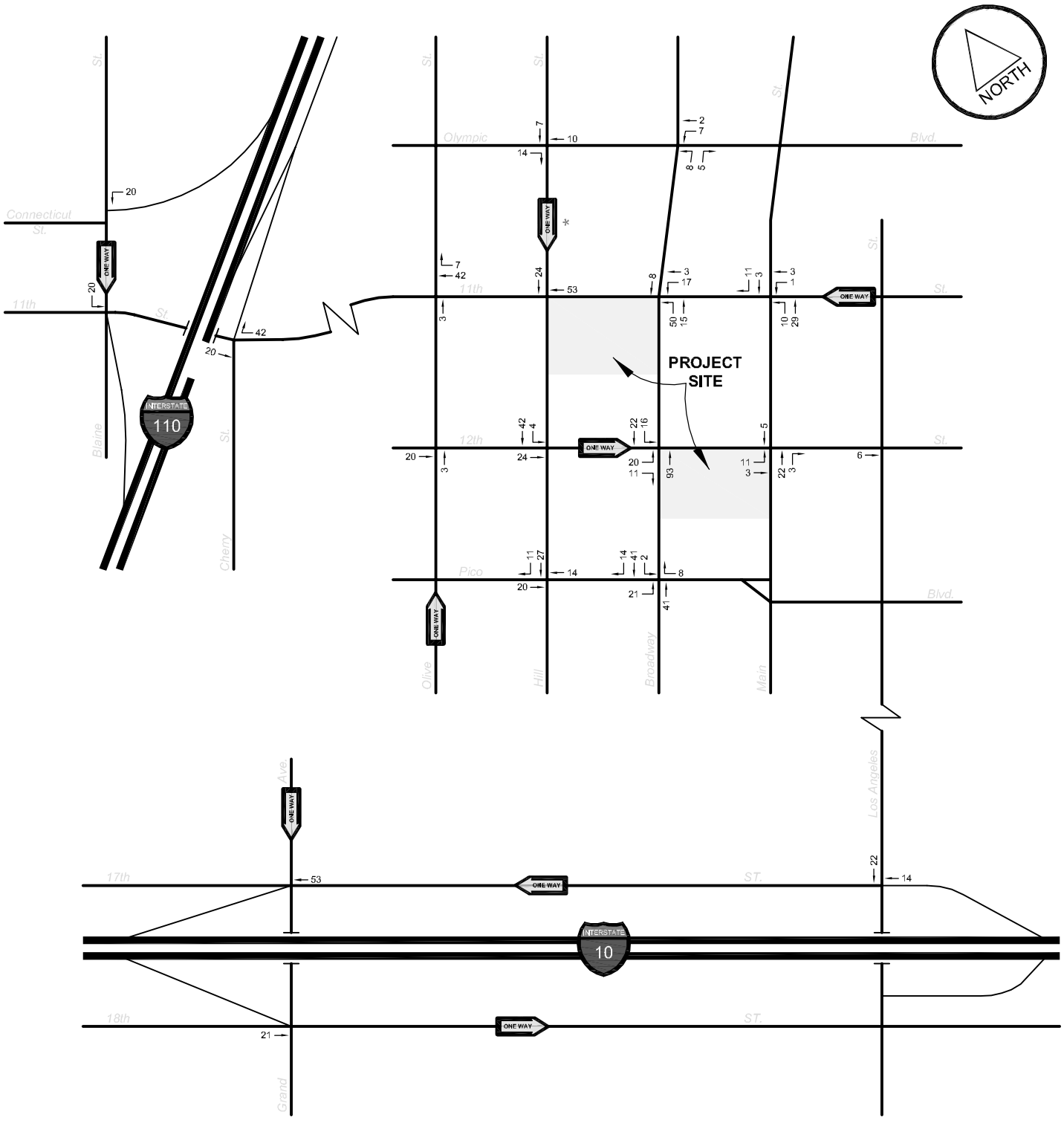

* CONTRA - FLOW NORTHBOUND BUS LANE

FIGURE 6(a)

11/29/2005

Herald Examiner Site\AMNETVOLS-1

NET PROJECT TRAFFIC VOLUMES
AM PEAK HOUR

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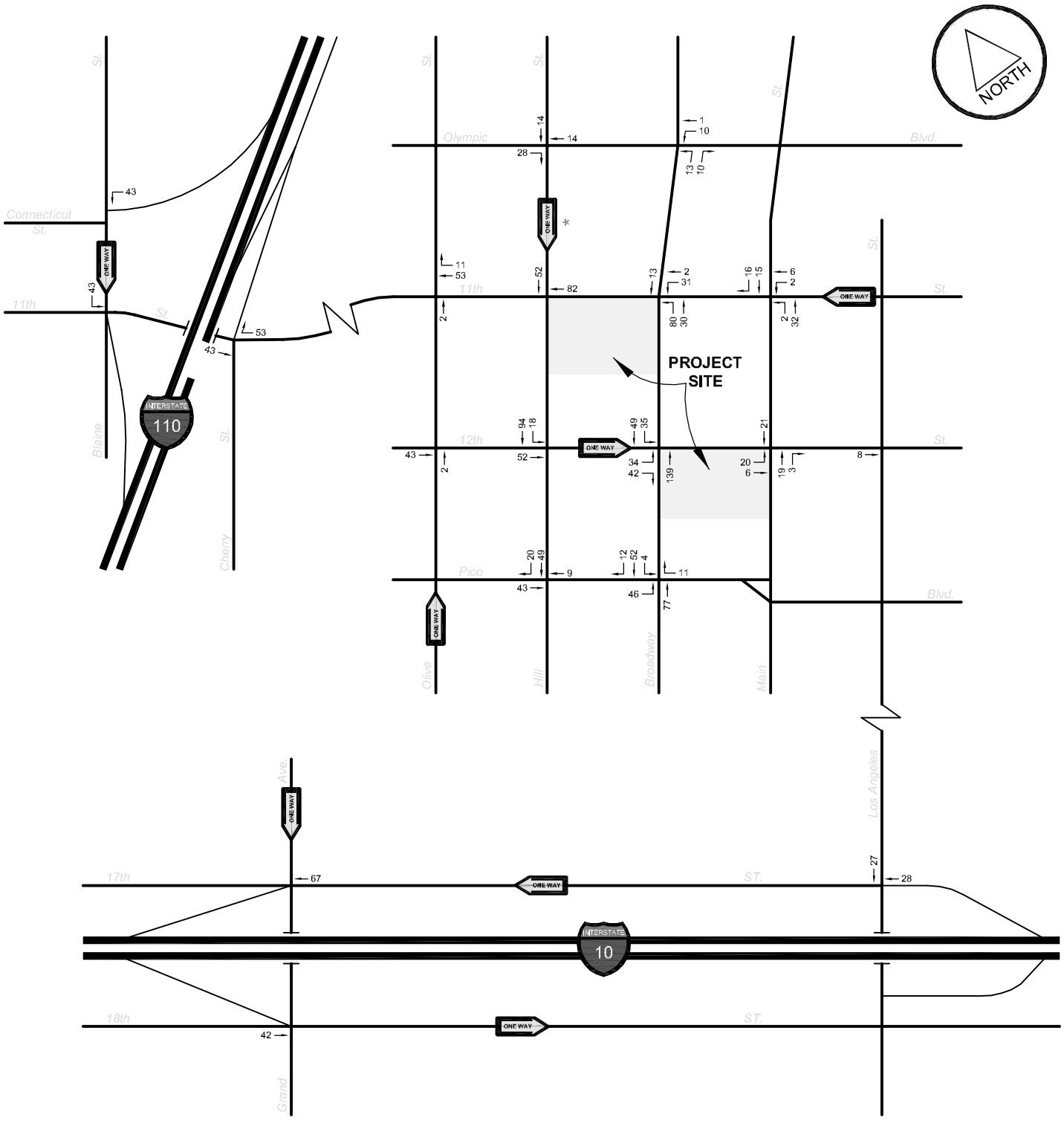

* CONTRA - FLOW NORTHBOUND BUS LANE

FIGURE 6(b)

11/29/2005

Herald Examiner Site\PMNETVOLS-1

NET PROJECT TRAFFIC VOLUMES
PM PEAK HOUR

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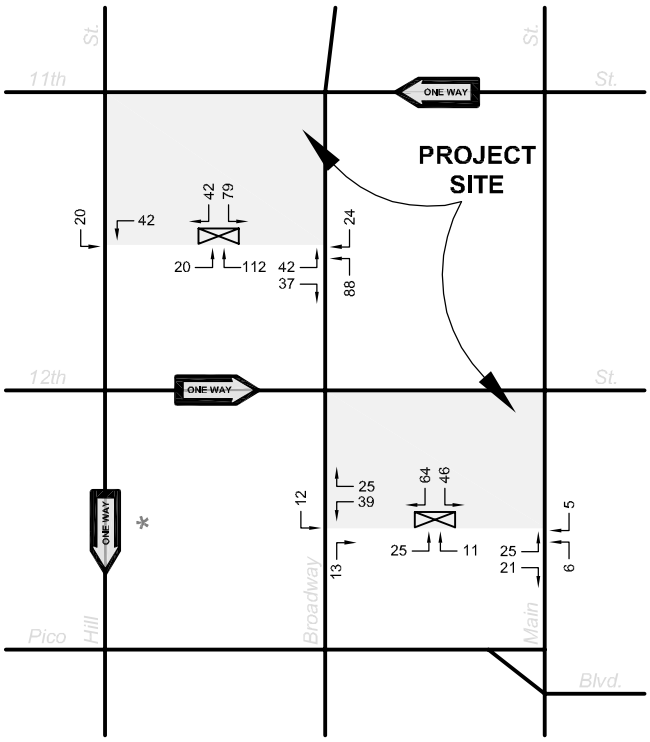
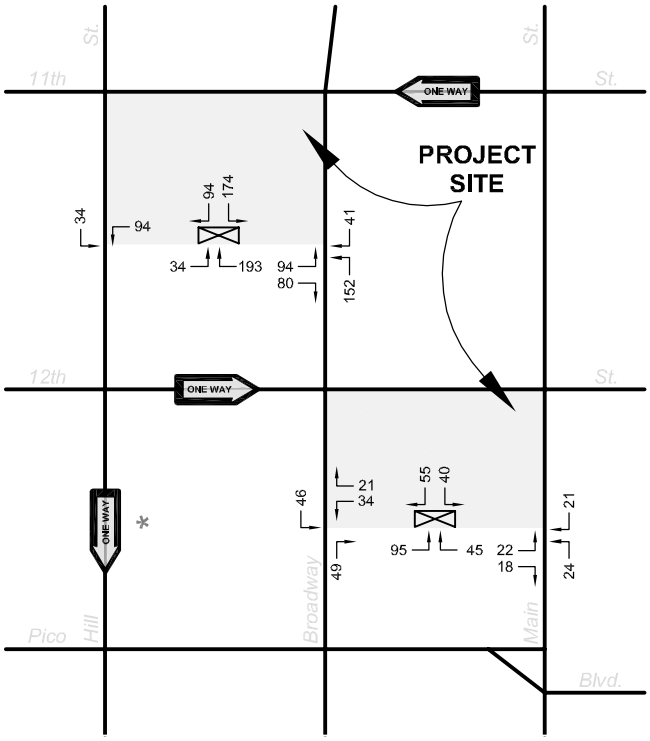
AM PEAK HOUR



PM PEAK HOUR



* CONTRA - FLOW NORTHBOUND BUS LANE

FIGURE 7

11/29/2005

:FN HERALD EXAMINER SITE\DRIVEWAY VOLUMES-1

TOTAL PROJECT DRIVEWAY VOLUMES

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Parking and Access

Parking for the Hill Street Site and the adjacent Broadway Site will be accessible via a driveway located on the south side of the site. Access to the parking facilities at the 12th Street Site will be provided via a driveway near the south end of the 12th Street Site along both the Broadway and Main Street frontages. The project will provide a total of approximately 909 off street parking spaces in two subterranean parking structures, including approximately 422 spaces on the combined Broadway/Hill Street sites and 487 spaces in two subterranean and four above-grade parking levels on the 12th Street site. The project will include assigned parking for the residents and guests of the proposed residential units, while the retail/commercial and office parking will occur within the remainder of the project's parking facilities.

The amount of parking required by the City for the project reflects the City of Los Angeles Municipal Code (LAMC) requirements as modified under the City's Downtown Business District parking exception, which requires most commercial uses of over 7,500 square feet, including office and retail, to provide a minimum of one parking space per 1,000 square feet of floor area (LAMC 12.21 A.4 (i)). Commercial uses of less than 7,500 square feet are not required to provide parking.

Residential developments are required to provide parking based on the number of "habitable rooms", which is generally interpreted to correspond to the number of bedrooms in a residence plus two additional rooms (such as a living room and kitchen/dining area). The current parking Code requires one parking space for each unit with less than three habitable rooms (studio/efficiency), and one and one-quarter spaces for each unit with three or more habitable rooms (one or more bedroom), as noted in the LAMC parking exceptions for the Central City area, of which the proposed project is a part (LAMC 12.21 A.4 (p) (1)). No specific requirements for additional "guest" parking beyond those parking ratios noted above are identified in the LAMC.

The applicable LAMC parking requirement calculations for the project, including consideration of the appropriate commercial and residential parking ratios, are summarized in Table 8. As detailed in Table 8, based on these parking requirement ratios, overall, the proposed project would require a total of approximately 727 spaces, including about eight (8) commercial and 719 residential spaces. The project as currently proposed contains a total of 909 spaces.

Table 8
Code Parking Ratios and Required Spaces

Use	Size	Parking Ratio	Spaces Required
Broadway			
Retail	39,725 sq. ft.	n/a [1]	0 spaces
Office	29,000 sq. ft.	n/a [1]	0 spaces
Retail/Office Total	68,725 sq. ft.		0 spaces
Total Broadway Parking Required			0 spaces
Hill Street			
Retail	2,560 sq. ft.	n/a [2]	0 spaces
Residential			
1 Bedroom	179 units	1.25 spaces/unit	224 spaces
2 Bedroom	77 units	1.25 spaces/unit	96 spaces
Residential Total	256 units		320 spaces
Total Hill Street Required Parking			320 spaces
12th Street			
Retail	8,050 sq. ft.	1.0 space/1,000 sq. ft	8 spaces
Residential			
1 Bedroom	185 units	1.25 spaces/unit	231 spaces
2 Bedroom	134 units	1.25 spaces/unit	168 spaces
Residential Total	319 units		399 spaces
Total 12th Street Required Parking			407 spaces
Total Required Project Parking			**727 spaces**

Notes:

[1] As an existing legal non-conforming use, the Broadway Building does not require on site parking as part of the proposed rehabilitation project. Therefore, the proposed 29,000 square feet of office and 39,725 square feet of retail space proposed within this building are not subject to LAMC parking requirements.

[2] Per LAMC 12.21 A.4 (i), commercial uses less than 7,500 square feet are not required to provide parking.

Specifically, the Broadway Site would not require the provision of on site parking, since the existing Herald Examiner Building is a legal non-conforming use that currently provides no on site parking, and would not be required to provide additional parking as a result of the proposed rehabilitation project. The Hill Street portion of the project would require a total of approximately 320 residential spaces only, since the proposed on site retail space is less than 7,500 square feet and will not require parking to be provided. Finally, the 12th Street portion of the site requires a total of 407 parking spaces, including approximately eight (8) commercial spaces and 399 residential spaces.

Although the Broadway Site does not require parking, a total of 38 parking spaces will be provided within the Hill Street Site parking structure for the Herald Examiner Building's proposed commercial uses. The Hill Street Site parking structure will also provide a total of 384 additional residential parking spaces, at 1.50 spaces per unit including 0.25 guest spaces per unit, or 64 more than are required. Finally, the 12th Street Site will provide a total of 487 spaces, including eight (8) commercial and 479 residential spaces, or 80 residential spaces more than are required. The residential parking for the 12th Street Site is also provided at a ratio of 1.50 spaces per unit (including 0.25 guest parking spaces per unit). A summary of the project's parking requirements described above as compared to its proposed parking supply is provided in Table 9, which shows that the proposed project parking supply will meet the City's parking requirements both for the project as a whole, and for each of the individual parcels.

However, although the project will provide adequate on site parking to meet the applicable LAMC parking requirements, a project parking demand analysis was conducted to ensure that adequate on site parking is provided for both the commercial and residential uses. The assumptions, methodology, and results of that supplemental project parking demand analysis are described in the following section. The results of that analysis indicate that the project will be able to meet its on site parking demands, and no significant parking impacts to the surrounding area are anticipated.

Table 9
Required Parking vs. Spaces Provided (by use)

	LAMC Spaces Required	Spaces Provided	Surplus/ (Deficit)
Broadway			
Retail/Office	0	38 *	38
Hill Street			
Retail	0	0	0
Residential	320	384	64
Hill Street Totals	320	384	64
12th Street			
Retail	8	8	0
Residential	399	479	80
12th Street Totals	407	487	80
Project Totals			
Retail/Office	8	8	0
Residential	719	901	182
Project Totals	727	909	182

Note:
* Broadway Site parking spaces provided within Hill Street Site parking structure.

Project Parking Demand Analysis

The supplemental parking demand analysis was conducted for the project to more accurately describe the parking needs of the site as compared to the more static LAMC parking ratios. The LAMC parking requirements generally identify the average maximum parking need for a given land use, and require that amount of parking throughout the day, whether it is utilized or not. As such, the City parking ratios do not consider the actual time-of-day parking utilizations of the proposed uses, nor do they reflect the unique compatibility of the project's mix of land uses. The proposed project is a fully integrated development, featuring both residential and commercial uses in close

proximity, which provides substantial opportunities for on site interactions. For these reasons, a detailed “shared use” parking analysis was conducted for the project to better reflect actual parking demands for the site.

The concept of shared parking recognizes that different uses within a project may exhibit unique hourly parking demand fluctuations, and generally do not utilize all of the Code-required parking at most times of the day. Further, the different individual uses may not produce “peak” parking necessary to meet the demands of the entire project. For example, office uses typically exhibit peak parking needs during the midday and early afternoon, but require little to no parking on evenings and throughout the weekend. Retail uses peak during the midday and continue to exhibit moderately high parking needs through the early evenings. Conversely, other land uses such as restaurants are active during the day, but exhibit peak parking utilizations during weekday evening/nighttime and weekend periods. Therefore, some of the parking provided for the office and retail uses can be used to meet the parking demands of restaurants during these times.

In addition to the effects on overall parking demands from these individual parking utilization hourly variation factors, parking code requirements typically are calculated based on “stand alone” development components. As such, they do not include intrinsic reductions in parking demands resulting from “mixed-use” projects, which have two or more symbiotic uses on the same site. These types of projects are generally designed to incorporate multiple uses that compliment each other, so that patrons of one use may visit other uses on the site in a single trip. This “internal interaction” factor allows patrons of the site to shop, dine, or perform multiple tasks during a single visit to the site, all the while using only a single parking space. This factor is identical to the mixed-use reductions assumed for the project trip generation estimates.

Finally, the location of the project lends itself to parking reductions due to patron and employee use of public transit options, and as a result of "walk in" patronage due to the proximity of other off-site developments whose residents and/or employees will visit the project site to shop, dine, or perform other errands. The project site is served by several bus lines, with stops immediately adjacent to or within convenient walking distance. Additionally, the immediate vicinity provides a substantial number of residences and other commercial development from which to draw patrons of the retail and restaurant components of the project. Again, the transit and walk in factors mirror the assumptions applied to the project's trip generation calculations.

Therefore, a parking analysis was conducted for the proposed project to estimate the effects of these factors on the parking needs for the development, independent of the number of spaces required by the LAMC parking ratios. The anticipated "base" parking needs for each of the site's components, prior to adjustment for the mixed use and other factors described above, were based on recommended parking ratios obtained from the Urban Land Institute[2] (ULI), or from other sources, including the LAMC.

The hourly parking accumulation assumptions for the project's retail and office components were taken directly from ULI's "Shared Parking" publication, which documents shared parking research conducted across the country. The publication also provides data on "seasonal variations" in parking demand for several of the uses. For example, peak retail parking demands typically occur during the winter holiday shopping season (Thanksgiving to Christmas), while parking demands during other times of the year are somewhat lower. Conversely, restaurant use generally peaks during the summer months, but is slightly reduced during the winter periods. These factors also affect the amount of parking needed for the various components of mixed use developments, depending on the types of uses proposed.

[2] Shared Parking, 2nd Edition, Urban Land Institute, Washington, D.C., 2005.

The internal interaction factors accounting for the mixed use nature of the site were estimated based on the size, type of use, and percentage of total development for each of the proposed uses, while the transit/walk in factors were estimated based on number and frequency of bus trips past the site, and potential retail customer base in the surrounding developments. These factors are the same as assumed earlier for the project's trip generation calculations.

The results of the parking demand analysis are shown in Table 10(a) for peak summer conditions and Table 10(b) for the peak winter holiday season scenario. As shown in these tables, although the project will provide somewhat less than the LAMC parking requirements, in general, both sites (Broadway/Hill Street, and 12th Street) will provide adequate on site parking to meet their anticipated parking demands, although the Broadway/Hill Street site would experience a nominal parking deficit of between five (5) and nine (9) spaces during the weekday evening period (7:00 to 9:00 PM) of the winter holiday season. However, this maximum anticipated parking demand represents a seasonal parking demand that occurs only about 15 or so times per year during the peak holiday shopping period between Thanksgiving and Christmas. Minor short-term parking deficits during this season should not be confused with inadequate parking for the project under normal peak conditions. As also shown in Tables 10(a) and 10(b), the amount of parking allocated to the commercial uses at both the Broadway/Hill Street site and 12th Street site will not be adequate during most periods to meet the expected demands. However, this is a parking allocation issue, and not a parking supply issue, as the total number of parking spaces provided by the project will, with the exception of the nominal Broadway/Hill Street parking deficit discussed above, exceed the anticipated parking demands for both sites during all time periods. As a result, no off-site parking impacts or "overflow" onto adjacent streets or into nearby neighborhoods is anticipated.

Table 10(a)
Shared Parking Demand Calculations – Summer Conditions

Proposed Development Use and Size		Weekday Parking Ratio	Stand-Alone Spaces Required	Internal Capture Factor	Transit/ "Walk In" Factor	July Monthly Use Factor	Adjusted Parking Demand
Broadway Site							
Office	39,725 sq. ft.	2.00 /1,000 sq. ft.	79	5%	5%	100%	71
Retail	29,000 sq. ft.	4.00 /1,000 sq. ft.	116	10%	10%	75%	71
					"Baseline" Commercial Demand		142
Hill Street Site							
Condominiums	256 -units	1.25 /dwelling unit	320	0%	10%	100%	288
Guests		0.25 /dwelling unit	64	0%	0%	100%	64
	256 -units		384		"Baseline" Residential Demand		352
Retail	2,560 sq. ft.	4.00 /1,000 sq. ft.	10	10%	10%	75%	6
					"Baseline" Commercial Demand		6
					Total "Baseline" Residential/Guest Parking Demand - Broadway & Hill Street Sites		***352 spaces***
					Total Residential/Guest Parking Provided		***384 spaces***
					Total "Baseline" Retail/Office Parking Demand - Broadway & Hill Street Sites		***148 spaces***
					Total Retail/Office Parking Provided		***38 spaces***
12th Street Site							
Condominiums	319 -units	1.25 /dwelling unit	399	0%	10%	100%	359
Guests		0.25 /dwelling unit	80	0%	0%	100%	80
	319 -units		479		"Baseline" Residential Demand		439
Retail	8,050 sq. ft.	4.00 /1,000 sq. ft.	32	10%	10%	75%	20
					"Baseline" Commercial Demand		20
					Total "Baseline" Residential/Guest Parking Demand - 12th Street Site		***439 spaces***
					Total Residential/Guest Parking Provided		***479 spaces***
					Total "Baseline" Retail Parking Demand - 12th Street Site		***20 spaces***
					Total Retail/Office Parking Provided		***8 spaces***

Table 10(a) (continued)
Shared Parking Demand Calculations

Summer Weekday Parking Accumulations

Time of Day	Combined Broadway and Hill Street Sites								12th Street Site					
	Retail	Office	Total Commercial	Surplus/ (Deficit)	Residential Guest	Residential Reserved	Site Total	Surplus/ (Deficit)	Retail	Surplus/ (Deficit)	Residential Guests	Residential Reserved	Site Total	Surplus/ (Deficit)
6:00 AM	0	2	2	36	64	288	354	68	0	8	80	359	439	48
7:00 AM	6	14	20	18	56	251	327	95	2	6	70	312	384	103
8:00 AM	14	45	59	(21)	51	228	338	84	4	4	63	284	351	136
9:00 AM	32	66	98	(60)	47	210	355	67	8	0	58	262	328	159
10:00 AM	52	71	123	(85)	44	196	363	59	14	(6)	54	244	312	175
11:00 AM	67	71	138	(100)	38	170	346	76	17	(9)	47	212	276	211
12:00 PM	75	64	139	(101)	38	173	350	72	19	(11)	48	215	282	205
1:00 PM	77	64	141	(103)	38	170	349	73	20	(12)	47	212	279	208
2:00 PM	75	69	144	(106)	38	173	355	67	19	(11)	48	215	282	205
3:00 PM	73	66	139	(101)	39	176	354	68	19	(11)	49	219	287	200
4:00 PM	67	55	122	(84)	42	190	354	68	17	(9)	53	237	307	180
5:00 PM	61	33	94	(56)	49	222	365	57	16	(8)	62	276	354	133
6:00 PM	63	16	79	(41)	54	245	378	44	16	(8)	68	305	389	98
7:00 PM	69	5	74	(36)	60	271	405	17	18	(10)	75	337	430	57
8:00 PM	67	5	72	(34)	61	276	409 *	13	17	(9)	77	345	439	48
9:00 PM	47	2	49	(11)	63	282	394	28	12	(4)	78	352	442 *	45
10:00 PM	25	2	27	11	63	285	375	47	6	2	79	355	440	47
11:00 PM	10	0	10	28	64	288	362	60	3	5	80	359	442 *	45
12:00 AM	0	0	0	38	64	288	352	70	0	8	80	359	439	48

"*" indicates maximum site parking demand (including reserved resident and guest parking).

Table 10(a) (continued)
Shared Parking Demand Calculations

Summer Weekend Parking Accumulations

Time of Day	Combined Broadway and Hill Street Sites								12th Street Site					
	Retail	Office	Total Commercial	Surplus/ (Deficit)	Residential Guest	Residential Reserved	Site Total	Surplus/ (Deficit)	Retail	Surplus/ (Deficit)	Residential Guests	Residential Reserved	Site Total	Surplus/ (Deficit)
6:00 AM	0	0	0	38	64	288	352	70	0	8	80	359	439 *	48
7:00 AM	2	4	6	32	61	274	341	81	1	7	76	341	418	69
8:00 AM	8	11	19	19	56	253	328	94	2	6	70	316	388	99
9:00 AM	23	14	37	1	52	233	322	100	6	2	65	291	362	125
10:00 AM	35	14	49	(11)	47	213	309	113	9	(1)	59	266	334	153
11:00 AM	56	18	74	(36)	45	204	323	99	15	(7)	57	255	327	160
12:00 PM	65	18	83	(45)	45	204	332	90	17	(9)	57	255	329	158
1:00 PM	73	14	87	(49)	45	202	334	88	19	(11)	56	251	326	161
2:00 PM	77	11	88	(50)	45	204	337	85	20	(12)	57	255	332	155
3:00 PM	77	7	84	(46)	47	210	341	81	20	(12)	58	262	340	147
4:00 PM	69	7	76	(38)	48	216	340	82	18	(10)	60	269	347	140
5:00 PM	58	4	62	(24)	52	233	347	75	15	(7)	65	291	371	116
6:00 PM	50	4	54	(16)	54	245	353	69	13	(5)	68	305	386	101
7:00 PM	46	4	50	(12)	56	251	357	65	12	(4)	70	312	394	93
8:00 PM	42	4	46	(8)	59	265	370 *	52	11	(3)	74	330	415	72
9:00 PM	31	0	31	7	61	274	366	56	8	0	76	341	425	62
10:00 PM	29	0	29	9	61	276	366	56	8	0	77	345	430	57
11:00 PM	10	0	10	28	63	282	355	67	3	5	78	352	433	54
12:00 AM	0	0	0	38	64	288	352	70	0	8	80	359	439 *	48

"*" indicates maximum site parking demand (including reserved resident and guest parking).

Table 10(b)
Shared Parking Demand Calculations – Winter Holiday Conditions

Proposed Development Use and Size		Weekday Parking Ratio	Stand-Alone Spaces Required	Internal Capture Factor	Transit/ "Walk In" Factor	July Monthly Use Factor	Adjusted Parking Demand
Broadway Site							
Office	39,725 sq. ft.	2.00 /1,000 sq. ft.	79	5%	5%	100%	71
Retail	29,000 sq. ft.	4.00 /1,000 sq. ft.	116	10%	10%	100%	94
					"Baseline" Commercial Demand		165
Hill Street Site							
Condominiums	256 -units	1.25 /dwelling unit	320	0%	10%	100%	288
Guests		0.25 /dwelling unit	64	0%	0%	100%	64
	256 -units		384		"Baseline" Residential Demand		352
Retail	2,560 sq. ft.	4.00 /1,000 sq. ft.	10	10%	10%	100%	8
					"Baseline" Commercial Demand		8
					Total "Baseline" Residential/Guest Parking Demand - Broadway & Hill Street Sites		***352 spaces***
					Total Residential/Guest Parking Porvided		***384 spaces***
					Total "Baseline" Retail/Office Parking Demand - Broadway & Hill Street Sites		***173 spaces***
					Total Retail/Office Parking Provided		***38 spaces***
12th Street Site							
Condominiums	319 -units	1.25 /dwelling unit	399	0%	10%	100%	359
Guests		0.25 /dwelling unit	80	0%	0%	100%	80
	319 -units		479		"Baseline" Residential Demand		439
Retail	8,050 sq. ft.	4.00 /1,000 sq. ft.	32	10%	10%	100%	26
					"Baseline" Commercial Demand		26
					Total "Baseline" Residential/Guest Parking Demand - 12th Street Site		***439 spaces***
					Total Residential/Guest Parking Porvided		***479 spaces***
					Total "Baseline" Retail Parking Demand - 12th Street Site		***26 spaces***
					Total Retail/Office Parking Provided		***8 spaces***

Table 10(b) (continued)
Shared Parking Demand Calculations

Winter Holiday Weekday Parking Accumulations

Time of Day	Combined Broadway and Hill Streets Sites								12th Street Site					
	Retail	Office	Total Commercial	Surplus/ (Deficit)	Residential Guest	Residential Reserved	Site Total	Surplus/ (Deficit)	Retail	Surplus/ (Deficit)	Residential Guests	Residential Reserved	Site Total	Surplus/ (Deficit)
6:00 AM	0	2	2	36	64	288	354	68	0	8	80	359	439	48
7:00 AM	8	14	22	16	56	251	329	93	2	6	70	312	384	103
8:00 AM	18	45	63	(25)	51	228	342	80	5	3	63	284	352	135
9:00 AM	43	66	109	(71)	47	210	366	56	11	(3)	58	262	331	156
10:00 AM	69	71	140	(102)	44	196	380	42	18	(10)	54	244	316	171
11:00 AM	89	71	160	(122)	38	170	368	54	23	(15)	47	212	282	205
12:00 PM	99	64	163	(125)	38	173	374	48	25	(17)	48	215	288	199
1:00 PM	102	64	166	(128)	38	170	374	48	26	(18)	47	212	285	202
2:00 PM	99	69	168	(130)	38	173	379	43	25	(17)	48	215	288	199
3:00 PM	97	66	163	(125)	39	176	378	44	25	(17)	49	219	293	194
4:00 PM	89	55	144	(106)	42	190	376	46	23	(15)	53	237	313	174
5:00 PM	81	33	114	(76)	49	222	385	37	21	(13)	62	276	359	128
6:00 PM	84	16	100	(62)	54	245	399	23	21	(13)	68	305	394	93
7:00 PM	91	5	96	(58)	60	271	427	(5)	23	(15)	75	337	435	52
8:00 PM	89	5	94	(56)	61	276	431 *	(9)	23	(15)	77	345	445	42
9:00 PM	62	2	64	(26)	63	282	409	13	16	(8)	78	352	446 *	41
10:00 PM	33	2	35	3	63	285	383	39	8	0	79	355	442	45
11:00 PM	13	0	13	25	64	288	365	57	3	5	80	359	442	45
12:00 AM	0	0	0	38	64	288	352	70	0	8	80	359	439	48

"*" indicates maximum site parking demand (including reserved resident and guest parking).

Table 10(b) (continued)
Shared Parking Demand Calculations

Winter Holiday Weekend Parking Accumulations

Time of Day	Combined Broadway and Hill Street Sites								12th Street Site					
	Retail	Office	Total Commercial	Surplus/ (Deficit)	Residential Guest	Residential Reserved	Site Total	Surplus/ (Deficit)	Retail	Surplus/ (Deficit)	Residential Guests	Residential Reserved	Site Total	Surplus/ (Deficit)
6:00 AM	0	0	0	38	64	288	352	70	0	8	80	359	439 *	48
7:00 AM	3	4	7	31	61	274	342	80	1	7	76	341	418	69
8:00 AM	10	11	21	17	56	253	330	92	3	5	70	316	389	98
9:00 AM	31	14	45	(7)	52	233	330	92	8	0	65	291	364	123
10:00 AM	46	14	60	(22)	47	213	320	102	12	(4)	59	266	337	150
11:00 AM	74	18	92	(54)	45	204	341	81	19	(11)	57	255	331	156
12:00 PM	87	18	105	(67)	45	204	354	68	22	(14)	57	255	334	153
1:00 PM	97	14	111	(73)	45	202	358	64	25	(17)	56	251	332	155
2:00 PM	102	11	113	(75)	45	204	362	60	26	(18)	57	255	338	149
3:00 PM	102	7	109	(71)	47	210	366	56	26	(18)	58	262	346	141
4:00 PM	92	7	99	(61)	48	216	363	59	23	(15)	60	269	352	135
5:00 PM	77	4	81	(43)	52	233	366	56	20	(12)	65	291	376	111
6:00 PM	66	4	70	(32)	54	245	369	53	17	(9)	68	305	390	97
7:00 PM	61	4	65	(27)	56	251	372	50	16	(16)	70	312	398	89
8:00 PM	56	4	60	(22)	59	265	384 *	38	14	(6)	74	330	418	69
9:00 PM	41	0	41	(3)	61	274	376	46	10	(2)	76	341	427	60
10:00 PM	39	0	39	(1)	61	276	376	46	10	(2)	77	345	432	55
11:00 PM	13	0	13	25	63	282	358	64	3	5	78	352	433	54
12:00 AM	0	0	0	38	64	288	352	70	0	8	80	359	439 *	48

"*" indicates maximum site parking demand (including reserved resident and guest parking).

FUTURE TRAFFIC CONDITIONS

There are a number of projects either under construction or planned for development in the project vicinity which may contribute to traffic volumes in the study area. For this reason, the analysis of future traffic conditions has been expanded to include potential traffic volume increases expected to be generated by projects that have not yet been developed. In order to evaluate future (year 2010) traffic conditions in the project area, an ambient traffic growth factor of 1.0 percent per year, compounded annually, was applied to the existing (2005) traffic volumes at the 20 study intersections.

The result provides the "baseline" traffic volumes for the analysis of future (2010) conditions. Although the inclusion of the annual growth factor usually accounts for area-wide traffic increases, for the purposes of providing a conservative analysis, the traffic generated by "related projects" in the study area was also added to the future baseline traffic volumes. The total future volumes, including related projects, provide the basis for the "Without Project" condition. Finally, project traffic was analyzed as an incremental addition to the Future (2010) "Without Project" condition to determine the Future (2010) "With Project" condition.

Ambient Traffic Growth

Based on analyses of the trends in traffic growth in the downtown Los Angeles area over the last several years, as documented in the Los Angeles County Congestion Management Program (CMP), LADOT has determined that an annual traffic growth factor of 1.0 percent is reasonable. This growth factor is used to account for increases in traffic resulting potential development projects not yet proposed or outside of the study area. The ambient traffic growth factor was applied to the existing 2005 traffic volumes to develop the estimated volumes for the future (2010) baseline conditions.

Related Projects

In addition to the use of the 1.0 percent ambient growth rate, listings of potential projects located in the study area ("related projects") that might be developed within the study time frame were obtained from LADOT, the City of Los Angeles Planning Department, Los Angeles Unified School District (LAUSD), and recent studies of projects in the area. A review of the information currently available indicated that a total of 51 individual projects near the project might add traffic to the study intersections. As noted previously, the ambient traffic growth rate is expected to accurately represent all area traffic growth within the study period, and as such, the inclusion of the 51 related projects in addition to assumed background traffic growth may tend to overstate cumulative conditions.

The locations of these related projects are shown in Figure 8, and the projects are listed and described in Table 11. This list of cumulative projects accurately reflects the related project proposals at the time of preparation of this document. The number of trips expected to be generated by the related projects was determined by applying the appropriate trip generation rates and equations from the ITE Trip Generation, 7th Edition manual, or were obtained from LADOT records. The ITE trip generation rates and equations are provided in Appendix B. The related project trip generation estimates are summarized in Table 12.

For the analysis of future (2010) "Without Project" traffic conditions, the related projects trip generation was assigned to the study area circulation system, using methodologies similar to those previously described for project trip assignment. The total related projects traffic volumes assigned to the study intersections are illustrated in Figures 9(a) and 9(b) for the AM and PM peak hours, respectively.

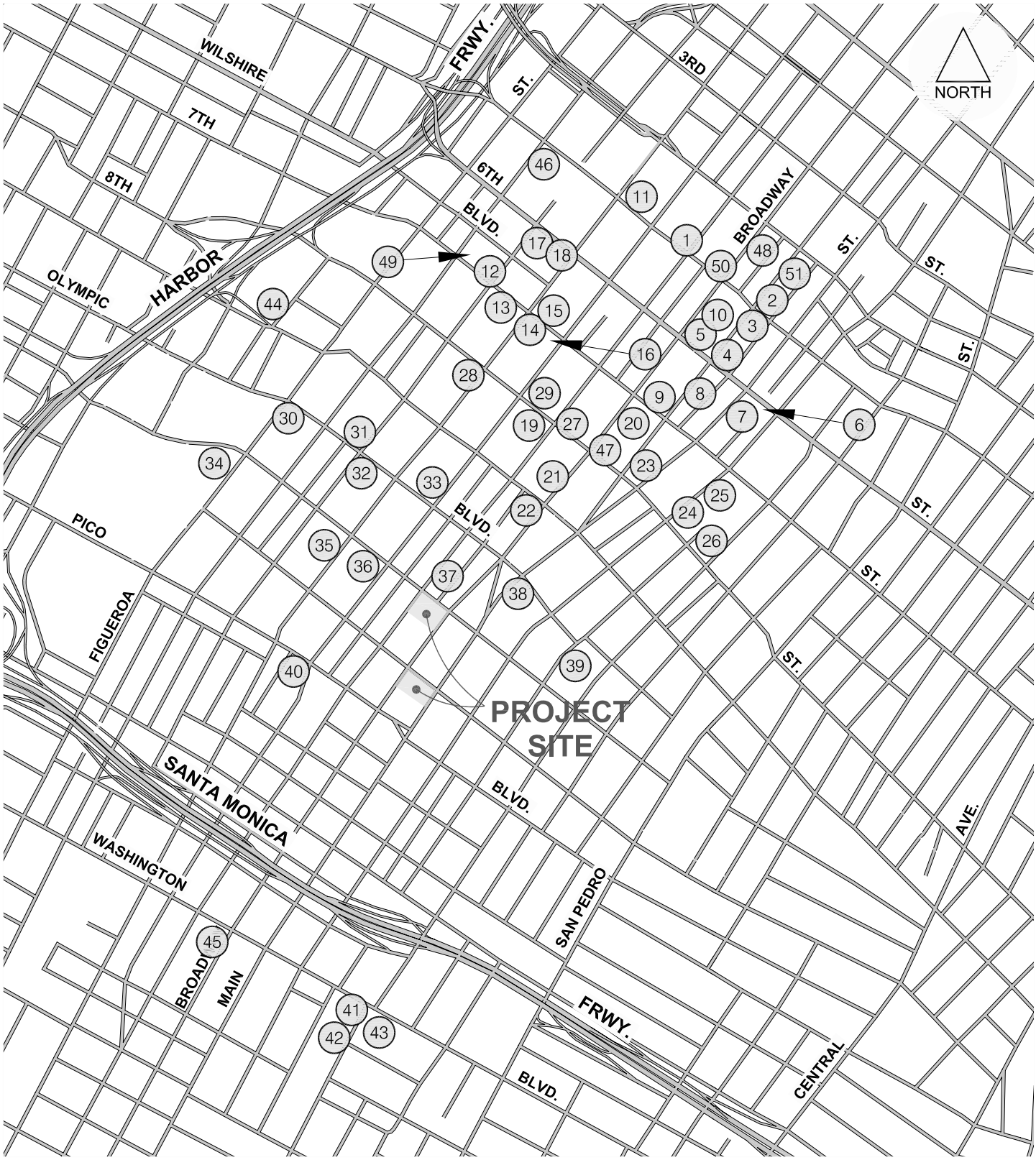

FIGURE 8

11/21/2005

FN: HERALD EXAMINER SITE/RELPROJS

RELATED PROJECTS LOCATION MAP

C&A
CRAIN & ASSOCIATES
2007 Sawtelle Boulevard
Los Angeles, California 90025
(310) 473-6508
Transportation Planning · Traffic Engineering

Table 11
Related Projects Descriptions

Map No.	Location/Address	Description (Size/Use)	
1.	411 W. 5th Street	74 unit	Apartment
2.	458 S. Spring Street	209 unit	Apartment
3.	510 S. Spring Street	153 unit	Apartment
4.	548 S. Spring Street	157 unit	Apartment
5.	540 S. Broadway	143 unit	Apartment
6.	600-610 S. Main Street	314 unit	Apartment
7.	620 S. Main Street	35 unit	Apartment
8.	618-620 S. Spring Street	36 unit	Apartment
9.	219-225 W. 7th Street	73 unit	Apartment
10.	510 S. Broadway	32 unit	Apartment
11.	565 W. 5th Street	10 unit	Apartment
12.	655 S. Hope Street	90 unit	Apartment
13.	600 W. 7th Street	70 unit	Apartment
14.	520 W. 7th Street	76 unit	Apartment
15.	515 7th Street	8,891 sq. ft. 7,668 sq. ft.	Quality Restaurant Bar
16.	500-518 W. 7th Street	55 unit	Apartment
17.	630 W. 6th Street	90 unit	Apartment
18.	609 S. Grand Avenue	94 unit	Apartment
19.	416-432 W. 8th Street	110 unit	Apartment
20.	740 S. Broadway	12,500 sq. ft.	Dancing Hall
21.	849 S. Broadway	147 unit	Apartment
22.	901-909 S. Broadway	82 unit	Apartment
23.	756 S. Spring Street	84 unit	Apartment
24.	752-756 S. Los Angeles Street	45 unit	Apartment
25.	738-750 S. Los Angeles Street	308 unit	Apartment
26.	315-317 E. 8th Street	64 unit	Apartment
27.	760 S. Hill Street	92 unit	Apartment
28.	801-803 S. Grand Avenue	132 unit	Apartment
29.	485 W. 8th Street	8 unit	Apartment
30.	730 W. Olympic Boulevard	2,307 sq. ft.	Fast-Food Restaurant with Drive-Through
31.	605 W. Olympic Boulevard	7,142 sq. ft.	Quality Restaurant/Night Club

Table 11 (continued)
Related Projects Descriptions

Map No.	Location/Address	Description (Size/Use)	
32.	1000 S. Hope Street	116 unit	Apartment
33.	409 W. Olympic Boulevard	78 unit	Apartment
34.	Staples Entertainment Center [1]		
	Figueroa Street and 11th Street	1,800 room	Hotel
		7,000 seat	Live Theater
		195,000 sq. ft.	Entertainment
		265,000 sq. ft.	Restaurants
		385,000 sq. ft.	Retail
		125,000 sq. ft.	Health Club
		165,000 sq. ft.	General Office
		135,000 sq. ft.	Medical Office
		800 unit	Residential
35.	1111 S. Grand Avenue	417 unit	Condominium
		15,000 sq. ft.	Retail
36.	330 W. 11th Street	66 unit	Apartment
37.	1050 S. Hill Street	33,423 sq. ft.	Theater
38.	1022 S. Main Street	32,533 sq. ft.	Retail
		7,909 sq. ft.	Storage
39.	1010 S. Santee Street	7 unit	Apartment
40.	1301 Olive Street	105 unit	Condominium
		4,500 sq. ft.	Retail
41.	1921 S. Maple Avenue	2,112 student	South Central LA Area New High School No. 1 [2]
42.	1921 S. Maple Avenue	87 student	High School
43.	408 E. Washington Boulevard	143 unit	Condominium [3]
44.	Metropolis [4]		
	8th Street and San Francisco Street	836 unit	Condominium
		893,225 sq. ft.	Office
		480 room	Hotel
		46,000 sq. ft.	Retail
		95,000 sq. ft.	Museum
45.	LA Mart [5]		
	1933 Broadway	285,000 sq. ft.	
46.	506 S. Grand Avenue	140 unit	Apartment
47.	756 S. Broadway	46 unit	Apartment
48.	424-426 S. Broadway	54 unit	Apartment
49.	727 W. 7th Street	221 unit	Apartment

Table 11 (continued)
Related Projects Descriptions

Map No.	Location/Address	Description (Size/Use)	
50.	315-317 W. 5th Street	84 unit	Apartment
51.	416 S. Spring Street	66 unit	Apartment

Sources:

[1] L.A. Entertainment District EIR Traffic Study, The Mobility Group with Kaku Associates, January 2001.

[2] School No. 1A (Adapted) and Jefferson Continuation High School, Jones & Stokes, December 2001.

[3] Traffic Analysis for proposed Residential Development at 408 East Washington Boulevard, City of Los Angeles, Crain & Associates, November 2004.

[4] Traffic Impact Study and Parking Analysis for the Metropolis Mixed-Use project, Crain & Associates, February 2005.

[5] Traffic and Parking Impact Study for the proposed Suites at the LA Mart, Crain & Associates, August 2001.

Table 12
Related Projects Trip Generation

Map No.	Description (Size/Use)		Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
1.	74 unit	Apartment	497	8	30	30	16
2.	209 unit	Apartment	1,404	21	86	85	45
3.	153 unit	Apartment	1,028	16	62	62	33
4.	157 unit	Apartment	1,055	16	64	63	34
5.	143 unit	Apartment	961	15	58	58	31
6.	314 unit	Apartment	2,110	32	128	127	68
7.	35 unit	Apartment	235	4	14	14	8
8.	36 unit	Apartment	242	4	14	14	8
9.	73 unit	Apartment	491	7	30	29	16
10.	32 unit	Apartment	215	3	13	13	7
11.	10 unit	Apartment	67	1	4	4	2
12.	90 unit	Apartment	605	9	37	36	20
13.	70 unit	Apartment	470	7	29	28	15
14.	76 unit	Apartment	511	8	31	31	16
15.	8,891 sq. ft. 7,668 sq. ft.	Quality Restaurant Bar	800 690	59 51	13 11	45 57	22 30
			1,490	110	24	102	52
16.	55 unit	Apartment	370	6	22	22	12
17.	90 unit	Apartment	605	9	37	36	20
18.	94 unit	Apartment	632	10	38	38	20
19.	110 unit	Apartment	739	11	45	44	24
20.	12,500 sq. ft.	Dancing Hall	412	6	9	26	25
21.	147 unit	Apartment	988	15	60	59	32
22.	82 unit	Apartment	551	8	34	33	18
23.	84 unit	Apartment	564	9	34	34	18
24.	45 unit	Apartment	302	5	18	18	10
25.	308 unit	Apartment	2,070	31	126	124	67
26.	64 unit	Apartment	430	7	26	26	14
27.	92 unit	Apartment	618	9	38	37	20
28.	132 unit	Apartment	887	13	54	53	29
29.	8 unit	Apartment	54	1	3	3	2
30.	2,307 sq. ft.	Fast-Food Restaurant with Drive-Through	1,145	63	60	42	38
31.	7,142 sq. ft.	Quality Restaurant/Night Club	642	48	10	36	17

Table 12 (continued)
Related Projects Trip Generation

Map No.	Description (Size/Use)	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
32.	116 unit Apartment	780	12	47	47	25
33.	78 unit Apartment	524	8	32	31	17
34.	Staples Entertainment Center [1]					
	1,800 room Hotel	14,706	615	393	277	245
	7,000 seat Live Theater	12,320	56	14	63	63
	195,000 sq. ft. Entertainment	17,540	95	63	121	71
	265,000 sq. ft. Restaurants	23,837	129	86	586	289
	385,000 sq. ft. Retail	16,311	214	137	373	404
	125,000 sq. ft. Health Club	4,116	64	87	212	136
	165,000 sq. ft. General Office	1,962	246	34	40	198
	135,000 sq. ft. Medical Office	4,878	264	71	93	250
	800 unit Residential	3,360	60	180	116	74
		99,030	1,743	1,065	1,881	1,731
35.	417 unit Condominium	2,444	31	152	145	72
	15,000 sq. ft. Retail	1,979	31	19	86	93
		4,423	62	171	231	165
36.	66 unit Apartment	444	7	27	27	14
37.	33,423 sq. ft. Theater	2,609	6	1	194	12
38.	32,533 sq. ft. Retail	3,273	49	31	143	155
	7,909 sq. ft. Storage	20	1	-	1	1
		3,293	50	31	144	156
39.	7 unit Apartment	47	1	3	3	1
40.	105 unit Condominium	615	8	38	37	18
	4,500 sq. ft. Retail	905	15	9	39	42
		1,520	23	47	76	60
41.	2,112 studen South Central LA Area New High School No. 1 [2]	3,528	478	375	139	157
42.	87 studen High School	149	25	11	6	6
43.	143 unit Condominium [3]	628	8	39	37	18
44.	Metropolis [4]	10,274	303	329	519	624
	836 unit Condominium					
	893,225 sq. ft. Office					
	480 room Hotel					
	46,000 sq. ft. Retail					
	95,000 sq. ft. Museum					
45.	LA Mart [5]	---------- nominal ----------				
	285,000 sq. ft.					
46.	140 unit Apartment	941	14	57	57	30
47.	46 unit Apartment	309	5	18	19	10
48.	54 unit Apartment	363	6	22	21	12
49.	221 unit Apartment	1,485	23	90	89	48

Table 12 (continued)
Related Projects Trip Generation

Map No.	Description (Size/Use)	Daily	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour In	PM Peak Hour Out
50.	84 unit Apartment	564	9	34	34	18
51.	66 unit Apartment	444	7	27	27	14

Sources:

[1] L.A. Entertainment District EIR Traffic Study, The Mobility Group with Kaku Associates, January 2001.

[2] Draft Environmental Impact Report for the South Central Los Angeles Area New High School No. 1A (Adapted) and Jefferson Continuation High School, Jones & Stokes, December 2001.

[3] Traffic Analysis for proposed Residential Development at 408 East Washington Boulevard, City of Los Angeles, Crain & Associates, November 2004.

[4] Traffic Impact Study and Parking Analysis for the Metropolis Mixed-Use project, Crain & Associates, February 2005.

[5] Traffic and Parking Impact Study for the proposed Suites at the LA Mart, Crain & Associates, August 2001.

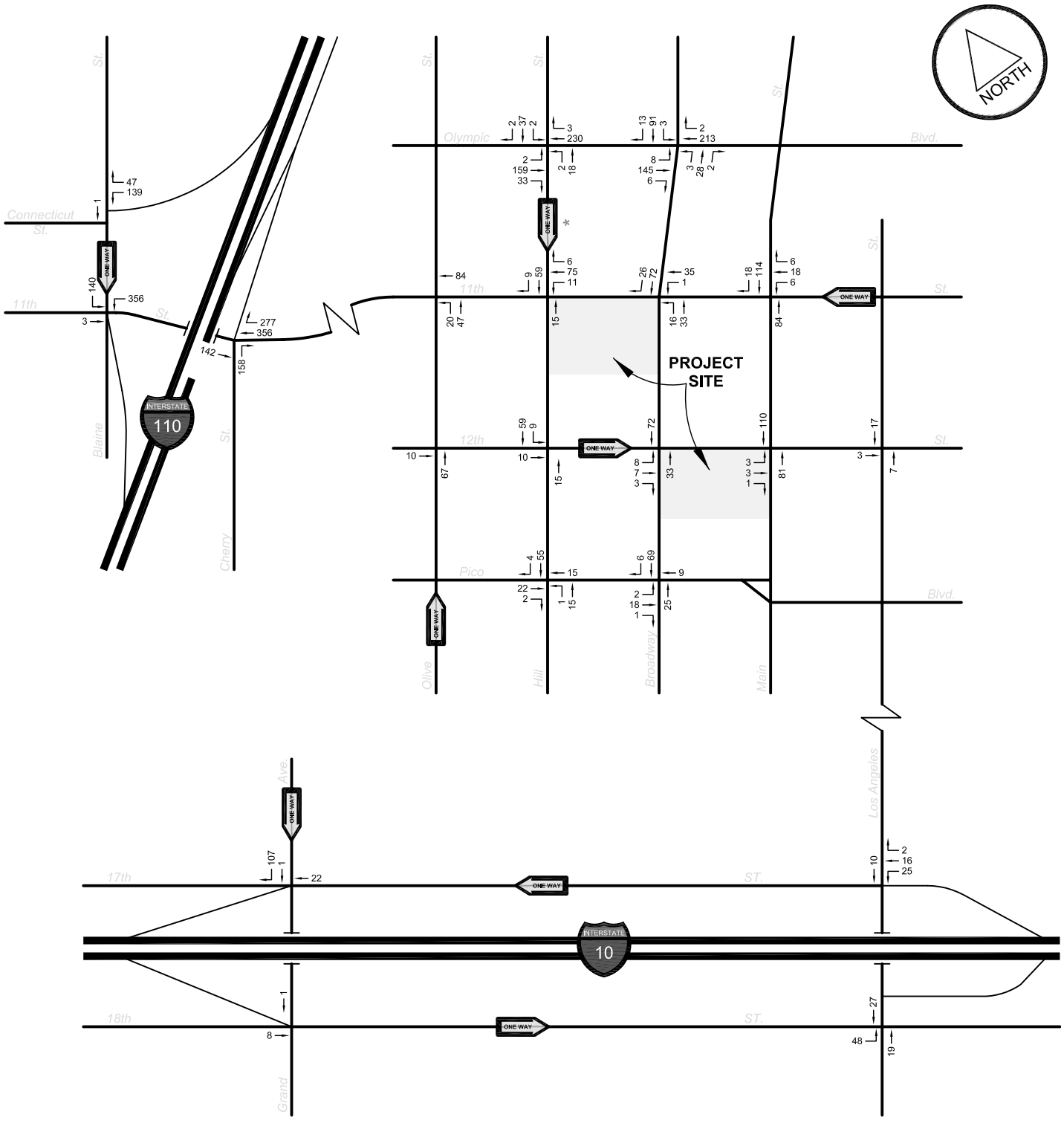

FIGURE 9(a)

11/22/2005

:FN HERALD EXAMINER SITE\AMRELVOL

FUTURE (2010) TRAFFIC VOLUMES
TOTAL RELATED PROJECTS TRAFFIC VOLUMES
AM PEAK HOUR

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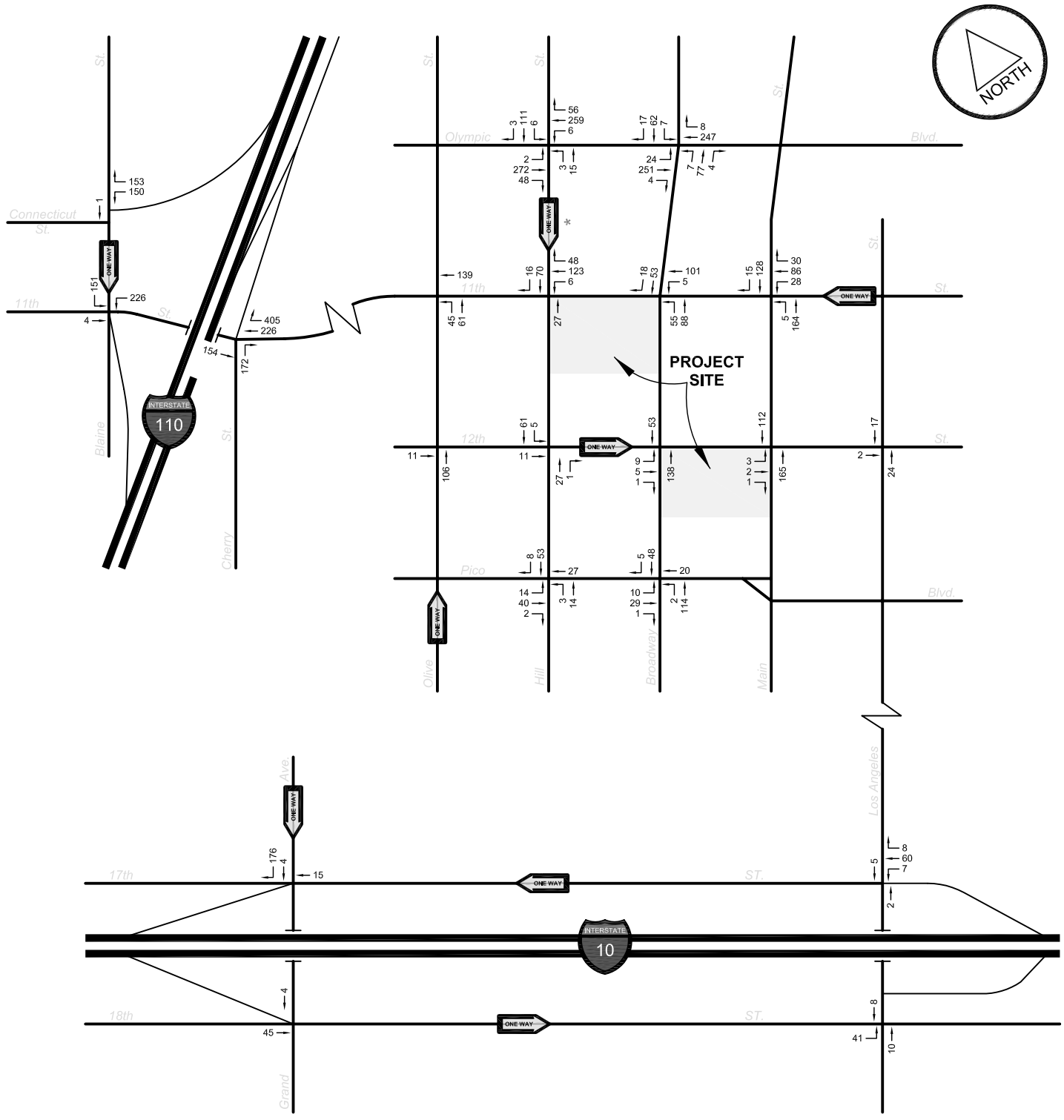

FIGURE 9(b)

11/22/2005

:FN HERALD EXAMINER SITE\PMRELVOL

FUTURE (2010) TRAFFIC VOLUMES
TOTAL RELATED PROJECTS TRAFFIC VOLUMES
PM PEAK HOUR

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Highway System Improvements

In order to accurately forecast future traffic conditions in the project area, an investigation into anticipated transportation improvements to the street system serving the project vicinity was also conducted. A review of the City of Los Angeles Capital Improvement Program (CIP), 2004/05 – 2006/07 revealed that no improvement projects are scheduled for implementation that would significantly affect the transportation system in the study area.

In addition, Caltrans Project Study Reports (PSR's) were reviewed to determine the transportation improvements planned for the freeway network serving the project vicinity. Several improvements along the Harbor Freeway (I-110) were the subject of the PSR. The first is an improvement to the northbound I-110 to provide additional capacity and merging/weaving area between the I-110/I-10 interchange and approximately 6th Street. This project will create an additional "mainline" freeway lane between the mainline/auxiliary lane "split" and the mainline/auxiliary lane "crossover" south of 6th Street, as well as relocate the existing "decision point" for choosing the main line or auxiliary lanes farther north. Reconstruction and realignment of the 9th Street on-ramp is also included in the northbound SR-110 freeway improvements. This project will also include the reconstruction of the 9th Street off-ramp from the northbound Harbor Freeway to add capacity on the off-ramp to 9th Street.

The second relevant project that is subject of a current PSR is an improvement to the southbound I-110 that includes the addition of an auxiliary lane from the 8th Street on-ramp to the I-10 interchange. The 8th Street on-ramp will also be realigned to provide additional merge/weave distance for better access from the on-ramp auxiliary lane to the southbound I-110.

The improvements have been approved by Caltrans and funding for their construction has been obtained. It should be noted that although other potential future improvements along the Harbor Freeway through downtown Los Angeles have been identified by Caltrans, their implementation is not considered reasonably assured.

The future improvement most likely to affect the project area is the Figueroa Corridor Economic Development Strategy. Currently, Figueroa Street operates as a one-way northbound arterial in the study area, and is a counter couplet to southbound Flower Street. The proposed improvement would convert Figueroa Street south of 9th Street to a two-way facility and provide three lanes in each direction. Left-turn channelization would be provided at major intersections only. The purpose of this improvement would be to revitalize Figueroa Street so that it would function more effectively as a local street in the surrounding area and as a regional route in the Los Angeles area.

Analysis of Future Traffic Conditions (Without and With Project)

The analysis of future traffic conditions at the study intersections was performed using the same analysis procedures described previously in this report. For the analysis of future project traffic impacts, the current roadway system's geometric and signal operation characteristics were assumed to prevail.

As described earlier, future (2010) baseline traffic volumes for the "Without Project" condition were determined by combining area ambient traffic growth with the total related projects traffic volumes. The Future (2010) "Without Project" traffic volumes are illustrated in Figures 10(a) and 10(b) for the AM and PM peak hours, respectively. Traffic volumes generated by the project, as determined earlier, were then added to these baseline volumes to develop the Future (2010) "With Project" condition to determine traffic impacts directly attributable to the project. Morning and afternoon peak hour traffic volumes are shown in Figures 11(a) and 11(b), respectively.

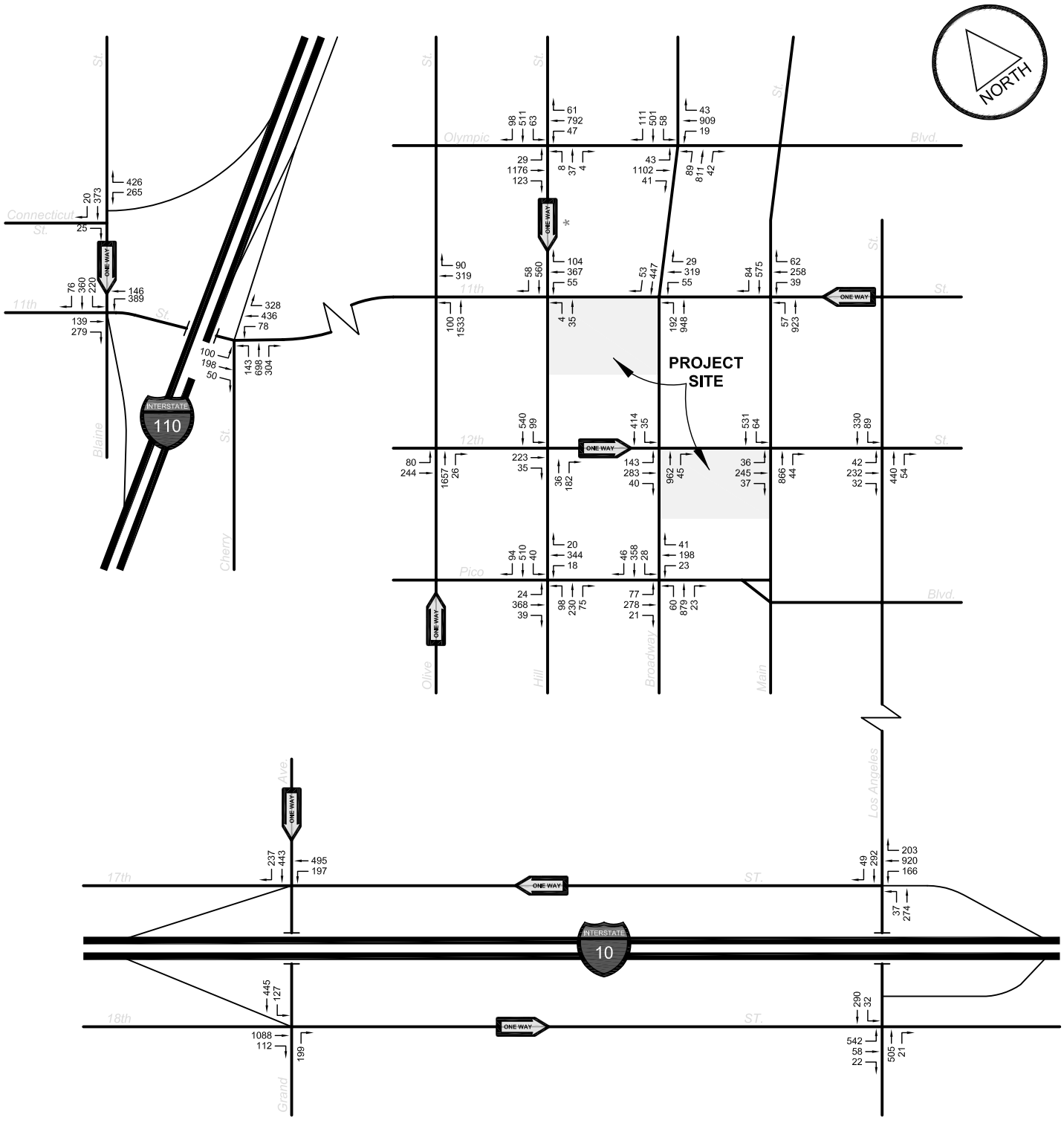

FIGURE 10(a)

7/26/2005

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FUTURE (2010) TRAFFIC VOLUMES
WITHOUT PROJECT
AM PEAK HOUR

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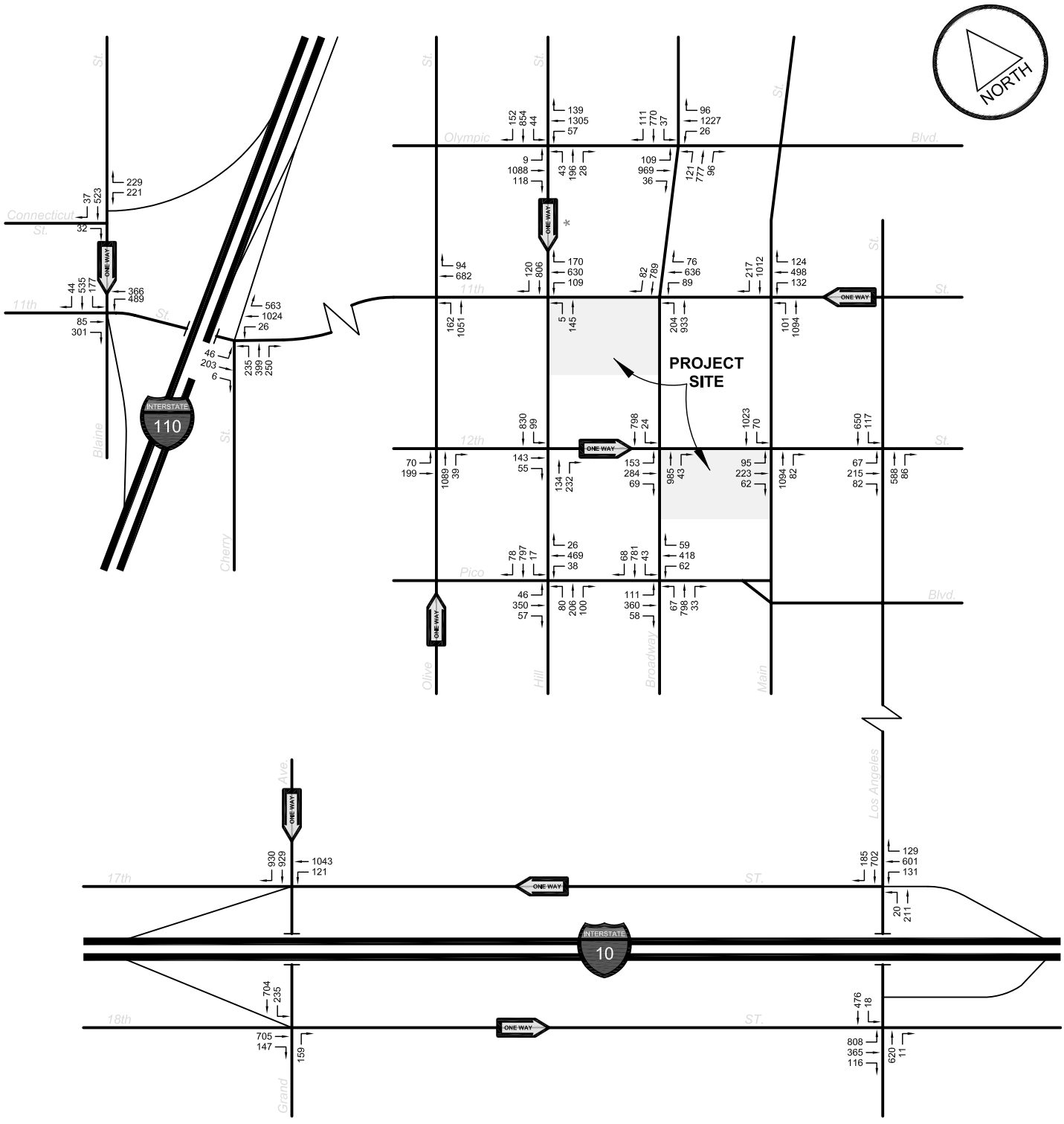

FIGURE 10(b)

11/22/2005

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FUTURE (2010) TRAFFIC VOLUMES
WITHOUT PROJECT
PM PEAK HOUR

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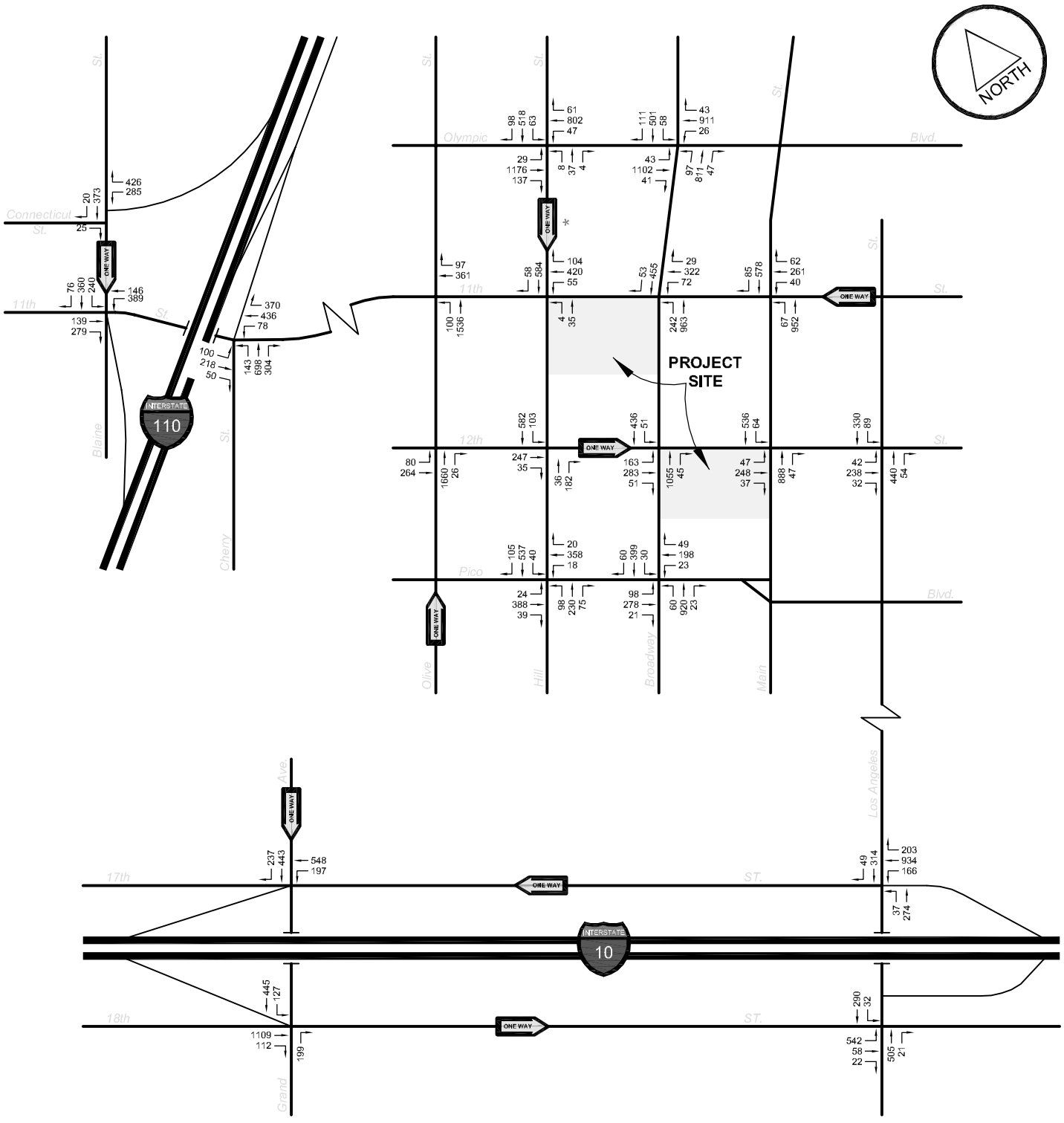

* CONTRA - FLOW NORTHBOUND BUS LANE

FIGURE 11(a)

11/29/2005

Herald Examiner Site\AM2010WP-1

FUTURE (2010) TRAFFIC VOLUMES
WITH PROJECT
AM PEAK HOUR

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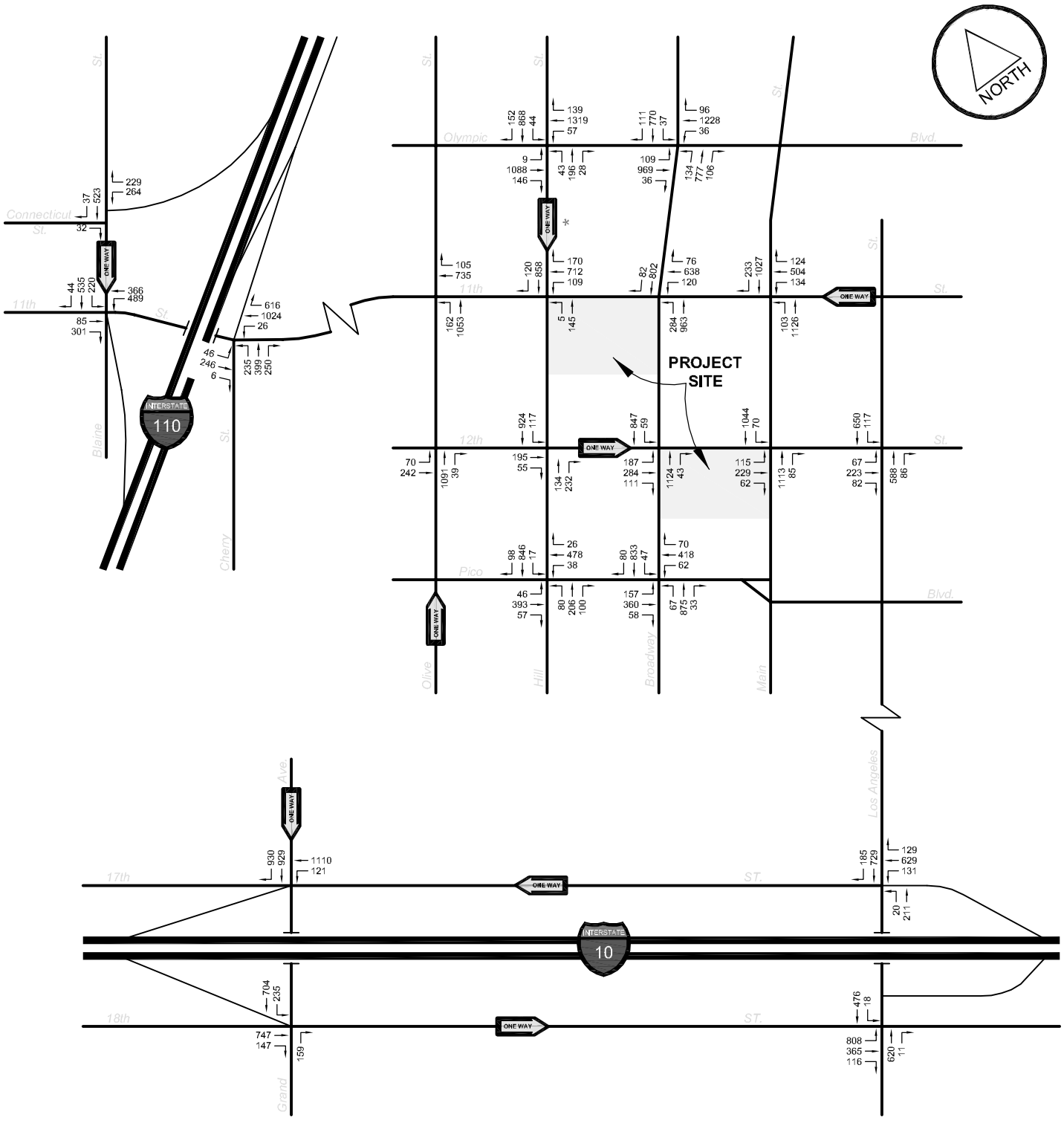

* CONTRA - FLOW NORTHBOUND BUS LANE

FIGURE 11(b)

11/29/2005

Herald Examiner Site\PM2010WP-1

FUTURE (2010) TRAFFIC VOLUMES
WITH PROJECT
PM PEAK HOUR

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The results of the analysis of future traffic conditions at the study intersections are summarized in Table 13. The CMA calculation worksheets for future conditions are included in Appendix C. As shown Table 13, all 20 study intersections will continue to operate at good levels of service (LOS A through C) in the future year 2010, both with and without the project. Traffic conditions at four of the study intersections are forecast to deteriorate to LOS C during the PM peak hour and the intersection of 11th Street/Chick Hearn Court and Cherry Street/I-110 NB On-Ramp is expected to operate at LOS C during the AM peak hour. The remaining intersections are expected to continue to operate at LOS A and LOS B during both peak hours.

Table 13
Critical Movement Analysis (CMA) Summary
Future (2010) Without and With Project Traffic Conditions

No.	Intersection	Peak Hour	Without Project		With Project		
			CMA	LOS	CMA	LOS	Impact
1.	Olympic Boulevard and Hill Street	AM	0.481	A	0.487	A	0.006
		PM	0.696	B	0.704	C	0.008
2.	Olympic Boulevard and Broadway	AM	0.605	B	0.613	B	0.008
		PM	0.756	C	0.778	C	0.022
3.	I-110 SB Off-Ramp and Blaine Street/Connecticut Street	AM	0.273	A	0.284	A	0.011
		PM	0.299	A	0.323	A	0.024
4.	11th Street and Blaine Street	AM	0.557	A	0.561	A	0.004
		PM	0.700	B	0.700	B	0.000
5.	11th Street/Chick Hearn Court and Cherry Street/I-110 NB On-Ramp	AM	0.734	C	0.765	C	0.031
		PM	0.647	B	0.686	B	0.039
6.	11th Street and Olive Avenue	AM	0.337	A	0.349	A	0.012
		PM	0.382	A	0.398	A	0.016
7.	11th Street and Hill Street	AM	0.325	A	0.348	A	0.023
		PM	0.543	A	0.593	A	0.050
8.	11th Street and Broadway	AM	0.360	A	0.377	A	0.017
		PM	0.572	A	0.644	B	0.072
9.	11th Street and Main Street	AM	0.380	A	0.390	A	0.010
		PM	0.709	C	0.725	C	0.016

Table 13 (continued)
Critical Movement Analysis (CMA) Summary
Future (2010) Without and With Project Traffic Conditions

No.	Intersection	Peak Hour	Without Project CMA	Without Project LOS	With Project CMA	With Project LOS	Impact
10.	12th Street and Olive Street	AM	0.345	A	0.352	A	0.007
		PM	0.247	A	0.260	A	0.013
11.	12th Street and Hill Street	AM	0.243	A	0.257	A	0.014
		PM	0.305	A	0.348	A	0.043
12.	12th Street and Broadway	AM	0.472	A	0.529	A	0.057
		PM	0.486	A	0.592	A	0.106
13.	12th Street and Main Street	AM	0.370	A	0.381	A	0.011
		PM	0.481	A	0.496	A	0.015
14.	12th Street and Los Angeles Street	AM	0.244	A	0.245	A	0.001
		PM	0.363	A	0.364	B	0.001
15.	Pico Boulevard and Hill Street	AM	0.343	A	0.359	A	0.016
		PM	0.467	A	0.495	A	0.028
16.	Pico Boulevard and Broadway	AM	0.430	A	0.465	A	0.035
		PM	0.619	B	0.679	B	0.060
17.	17th Street/I-10 WB On-Ramp and Grand Avenue	AM	0.257	A	0.271	A	0.014
		PM	0.598	A	0.621	B	0.023
18.	18th Street/I-10 EB Off-Ramp and Grand Avenue	AM	0.331	A	0.335	A	0.004
		PM	0.309	A	0.317	A	0.008
19.	17th Street/I-10 WB Off-Ramp and Los Angeles Street	AM	0.467	A	0.481	A	0.014
		PM	0.496	A	0.514	A	0.018
20.	18th Street/I-10 EB On-Ramp and Los Angeles Street	AM	0.458	A	0.458	A	0.000
		PM	0.661	B	0.661	B	0.000

Impact Significance Criteria

LADOT defines a significant traffic impact attributable to a project based on a “stepped scale”, with intersections at high volume-to-capacity ratios being more sensitive to additional traffic than those operating with available surplus capacity. A significant impact is identified as an increase in the CMA value, due to project-related traffic, of

0.010 or more when the final ("with project") Level of Service is E or F, a CMA increase of 0.020 or more when the final Level of Service is LOS D, or an increase of 0.040 or more at LOS C. No significant impacts are deemed to occur at LOS A or B, as these operating conditions exhibit sufficient surplus capacities to accommodate large traffic increases with little effect on traffic delays. These criteria are summarized in Table 14.

Table 14
LADOT Criteria for Significant Traffic Impact

LOS	Final CMA Value	Project-Related Increase in CMA Value
C	0.700 - 0.800	equal to or greater than 0.0400
D	> 0.800 - 0.900	equal to or greater than 0.0200
E, F	> 0.900	equal to or greater than 0.0100

Based on these criteria and as shown previously in Table 13, the project is not anticipated to significantly impact any of the study intersections during either peak hour.

Impacts on Regional Transportation System

To address the increasing public concern that traffic congestion was impacting the quality of life and economic vitality of the State of California, the Congestion Management Program (CMP) was enacted by Proposition 111. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. The Los Angeles County Metropolitan Transportation Authority (MTA), the local CMP agency, has established a countywide approach to implement the statutory requirements of the CMP. The countywide approach includes designating a highway network that includes all state highways and principal arterials within the County and monitoring the network's Level of Service standards.

The CMP project traffic impact analysis (TIA) guidelines require analyses of all CMP monitoring intersections where the project could add a total of 50 or more trips during either peak hour. Additionally, all freeway segments where a project could add 150 or more trips in either direction during the peak hours must be analyzed.

CMP Monitoring Intersection Impacts

The CMP lists the following three monitoring intersections, located within approximately three miles of the project:

- Alvarado Street and Sunset Boulevard
- Wilshire Boulevard and Alvarado Street
- Alameda Street and Washington Boulevard

Alvarado Street and Sunset Boulevard is located less than three miles northwest of the project and Wilshire Boulevard and Alvarado Street is located less than two miles northwest of the project. These two intersections are located west of the Harbor Freeway, and are anticipated to be largely unaffected by the project. The third location, Alameda Street and Washington Boulevard, is located approximately two miles southeast of the site.

As noted in the preceding discussion, the CMP requires that any project that will add 50 or more total trips through a CMP monitoring intersection during either the AM or PM peak hours must perform an impact analysis of that location. As indicated by the net project traffic volumes shown in Figures 6(a) and 6(b), the study intersections located immediately adjacent to the project are expected to experience project-related traffic increases of 50 or more vehicles. However, additional dispersal of the project traffic through the area roadway network will reduce project traffic additions to substantially less than 50 vehicles per hour during both peak hours at all of the CMP intersections noted. As such, the proposed project will not meet or exceed the trip thresholds at any CMP monitoring intersections, and no detailed CMP intersection analyses are warranted.

Freeway Segment Impacts

An examination was also made of the potential for project-related freeway impacts within the project study area. As shown previously in Table 6, the project is anticipated to generate approximately 348 (137 inbound and 211 outbound) net new trips during the AM peak hour, and 548 (280 inbound and 268 outbound) net new trips during the PM peak hour, and therefore could exceed the analysis thresholds prescribed by the CMP for freeway segment analysis.

In order to address this potential for regional traffic impacts, the number of net new project trips added to key freeway segments in the project vicinity was identified. These locations were selected as those closest to the project, where new project traffic will be at its highest. The first step in the analysis was to identify the amount of project traffic using the selected freeway segments to determine whether these volumes exceed the CMP threshold of 150 vehicles per hour. If the project volumes are not found to exceed the CMP threshold of 150 vehicles per hour, no further freeway impact analyses are required. Based on the project trip distributions described earlier in this report, the net new AM and PM peak hour traffic volumes on key segments of the freeway facilities near the project were calculated. The resulting net project peak hour traffic additions to the key area freeway segments are summarized in Table 15.

As shown in Table 15, net new project traffic additions to the freeways near the project do not exceed the 150 vehicle per hour directional thresholds identified in the CMP, and therefore, do not trigger the need for detailed freeway analyses under the CMP. Although a formal analysis of project freeway impacts was not warranted, a brief assessment of the potential freeway impacts was conducted to estimate the magnitude of project traffic impacts in the project vicinity, due to the high traffic volumes and congestion levels currently associated with many of the subject freeway segments.

Table 15
Net Project Traffic Volumes on Freeway System

Freeway	Segment	Direction	Peak Hour AM	Peak Hour PM
Harbor (I-110)	North of 11th Street	NB	42	54
		SB	21	42
	South of Santa Monica Freeway (I-10)	NB	14	28
		SB	21	27
Santa Monica (I-10)	West of Harbor Freeway (I-110)	EB	21	42
		WB	32	40
	East of Harbor Freeway (I-110) (between I-110 and Los Angeles Street)	EB	27	56
		WB	53	67
	East of Los Angeles Street	EB	21	28
		WB	14	27

Freeway segment peak hour traffic capacities are generally assumed to have a mainline travel lane capacity of 2,000 vehicles per hour (VPH), based on analysis procedures and methodologies established in the Transportation Research Board's (TRB) Highway Capacity Manual (HCM). Each of the subject freeway segments exhibits a total of four or five lanes per direction in the study area, thereby providing a directional capacity of between 8,000 and 10,000 vehicles per hour for each segment.

The CMP defines regional project impacts as significant if the demand-to-capacity ratio increases by 0.020 or more, and the final, "With Project" Level of Service is LOS F or worse. Because the subject freeway segments each provide a total capacity of between 8,000 and 10,000 vehicles per hour, an increase of 0.020 or more in the demand-to-capacity ratio equates to the addition of between 160 and 200 vehicles per hour during the peak hours. As shown in Table 15, the total project trips are not anticipated to exceed 67 vehicles in any single direction on any segment, which equates to a maximum impact of 0.008 on an 8,000 vehicle-per-hour capacity segment. Therefore, the project would only produce about 40 percent of the traffic necessary to produce significant impacts on

any of the freeway segments analyzed, and no such significant impacts are expected on any of the studied segments. Because the segments analyzed are those nearest the project, where project-related traffic is the most concentrated and the potential for significant impacts is greatest, it is not anticipated that the project could produce significant impacts on other freeway segments farther from the site.

MITIGATION MEASURES

As indicated in the preceding analyses, traffic generated by the proposed project is not expected to significantly impact any of the 20 study intersections; therefore, no traffic mitigation measures are required.

APPENDIX A

TRAFFIC COUNT DATA SHEETS

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South HILL STREET

East/West OLYMPIC BOULEVARD

Day: AM THURSDAY **Date:** DECEMBER 2, 2004 **Weather:** CLEAR
PM THURSDAY DECEMBER 2, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	11	7:45	161	8:30	297	8:00	163	7:45
PM PK 15 MIN	70	5:30	233	5:15	244	5:15	286	5:15
AM PK HOUR	30	7:00	594	7:45	1,069	7:45	629	7:45
PM PK HOUR	235	4:45	885	5:00	841	4:45	1,119	5:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	7	21	2	30
8 - 9	3	18	3	24
4 - 5	32	152	30	214
5 - 6	38	167	23	228
TOTAL	80	358	58	496

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	27	315	62	404
8 - 9	63	429	80	572
4 - 5	44	552	156	752
5 - 6	33	718	134	885
TOTAL	167	2,014	432	2,613

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
434	N/A	N/A	N/A	N/A
596	N/A	N/A	N/A	N/A
966	N/A	N/A	N/A	N/A
1,113	N/A	N/A	N/A	N/A
3,109	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	32	721	63	816
8 - 9	23	901	73	997
4 - 5	9	714	78	801
5 - 6	6	718	71	795
TOTAL	70	3,054	285	3,409

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	37	440	44	521
8 - 9	36	543	46	625
4 - 5	51	858	82	991
5 - 6	44	982	93	1,119
TOTAL	168	2,823	265	3,256

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
1,337	N/A	N/A	N/A	N/A
1,622	N/A	N/A	N/A	N/A
1,792	N/A	N/A	N/A	N/A
1,914	N/A	N/A	N/A	N/A
6,665	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South BROADWAY

East/West OLYMPIC BOULEVARD

Day: AM THURSDAY **Date:** DECEMBER 2, 2004 **Weather:** CLEAR
PM THURSDAY DECEMBER 2, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	230	8:15	146	8:15	265	7:45	215	8:15
PM PK 15 MIN	234	5:15	216	4:45	211	4:45	268	5:30
AM PK HOUR	857	7:45	541	8:00	968	7:45	752	8:00
PM PK HOUR	872	5:00	786	4:30	807	4:00	1,055	5:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	89	586	28	703
8 - 9	75	741	40	856
4 - 5	103	550	98	751
5 - 6	106	677	89	872
TOTAL	373	2,554	255	3,182

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	34	298	74	406
8 - 9	53	392	96	541
4 - 5	43	560	80	683
5 - 6	31	623	75	729
TOTAL	161	1,873	325	2,359

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,109	N/A	N/A	N/A	N/A
1,397	N/A	N/A	N/A	N/A
1,434	N/A	N/A	N/A	N/A
1,601	N/A	N/A	N/A	N/A
5,541	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	26	710	31	767
8 - 9	31	838	36	905
4 - 5	49	692	66	807
5 - 6	77	639	27	743
TOTAL	183	2,879	160	3,222

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	15	485	25	525
8 - 9	18	697	37	752
4 - 5	37	820	91	948
5 - 6	27	952	76	1,055
TOTAL	97	2,954	229	3,280

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
1,292	N/A	N/A	N/A	N/A
1,657	N/A	N/A	N/A	N/A
1,755	N/A	N/A	N/A	N/A
1,798	N/A	N/A	N/A	N/A
6,502	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South BLAINE STREET

East/West SR-110 SB OFF-RAMP / CONNECTICUT STREET

Day: AM WEDNESDAY **Date:** DECEMBER 15, 2004 **Weather:** CLEAR
PM WEDNESDAY DECEMBER 15, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7:00	115	8:45	12	7:30	139	8:45
PM PK 15 MIN	0	3:00	150	4:30	13	5:15	46	4:00
AM PK HOUR	0	7:00	369	8:00	36	7:00	476	8:00
PM PK HOUR	0	3:00	546	4:30	35	4:30	138	4:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	290	5	295
8 - 9	0	350	19	369
4 - 5	0	492	35	527
5 - 6	0	488	21	509
TOTAL	0	1,620	80	1,700

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
295	N/A	N/A	N/A	N/A
369	N/A	N/A	N/A	N/A
527	N/A	N/A	N/A	N/A
509	N/A	N/A	N/A	N/A
1,700	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	36	36
8 - 9	0	0	24	24
4 - 5	0	0	30	30
5 - 6	0	0	34	34
TOTAL	0	0	124	124

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	115	0	233	348
8 - 9	119	0	357	476
4 - 5	67	0	71	138
5 - 6	53	0	51	104
TOTAL	354	0	712	1,066

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
384	N/A	N/A	N/A	N/A
500	N/A	N/A	N/A	N/A
168	N/A	N/A	N/A	N/A
138	N/A	N/A	N/A	N/A
1,190	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South BLAINE STREET

East/West 11TH STREET

Day: AM TUESDAY **Date:** JUNE 8, 2004 **Weather:** CLEAR
PM TUESDAY JUNE 8, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7:00	161	8:45	104	7:30	75	8:45
PM PK 15 MIN	0	3:00	153	5:00	99	5:00	176	5:30
AM PK HOUR	0	7:00	486	7:00	390	7:00	220	8:00
PM PK HOUR	0	3:00	571	5:00	369	4:30	593	5:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	75	340	71	486
8 - 9	76	335	59	470
4 - 5	38	432	42	512
5 - 6	25	504	42	571
TOTAL	214	1,611	214	2,039

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
486	N/A	N/A	N/A	N/A
470	N/A	N/A	N/A	N/A
512	N/A	N/A	N/A	N/A
571	N/A	N/A	N/A	N/A
2,039	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	128	262	390
8 - 9	0	87	187	274
4 - 5	0	95	261	356
5 - 6	0	76	283	359
TOTAL	0	386	993	1,379

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	31	138	0	169
8 - 9	55	165	0	220
4 - 5	196	191	0	387
5 - 6	248	345	0	593
TOTAL	530	839	0	1,369

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
559	N/A	N/A	N/A	N/A
494	N/A	N/A	N/A	N/A
743	N/A	N/A	N/A	N/A
952	N/A	N/A	N/A	N/A
2,748	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South CHERRY STREET / SR-110 NB ON-RAMP

East/West 11TH STREET / CHICK HEARN COURT

Day: AM WEDNESDAY **Date:** MAY 11, 2005 **Weather:** CLEAR
PM WEDNESDAY MAY 11, 2005
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	248	7:45	0	7:00	66	7:00	59	8:45
PM PK 15 MIN	218	4:45	0	3:00	29	5:00	260	5:45
AM PK HOUR	939	7:45	0	7:00	249	7:00	212	8:00
PM PK HOUR	741	4:30	0	3:00	97	5:00	934	5:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	116	514	89	719
8 - 9	146	599	141	886
4 - 5	286	291	79	656
5 - 6	224	380	74	678
TOTAL	772	1,784	383	2,939

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
719	N/A	N/A	N/A	N/A
886	N/A	N/A	N/A	N/A
656	N/A	N/A	N/A	N/A
678	N/A	N/A	N/A	N/A
2,939	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	105	48	96	249
8 - 9	81	51	38	170
4 - 5	33	39	5	77
5 - 6	44	47	6	97
TOTAL	263	185	145	593

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	51	56	40	147
8 - 9	76	90	46	212
4 - 5	33	335	45	413
5 - 6	25	759	150	934
TOTAL	185	1,240	281	1,706

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
396	N/A	N/A	N/A	N/A
382	N/A	N/A	N/A	N/A
490	N/A	N/A	N/A	N/A
1,031	N/A	N/A	N/A	N/A
2,299	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South OLIVE AVENUE

East/West 11TH STREET

Day: AM THURSDAY **Date:** DECEMBER 2, 2004 **Weather:** CLEAR
PM THURSDAY DECEMBER 2, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	399	8:00	0	7:00	0	7:00	89	8:30
PM PK 15 MIN	275	4:30	0	3:00	0	3:00	161	5:15
AM PK HOUR	1,475	7:45	0	7:00	0	7:00	308	8:00
PM PK HOUR	1,043	4:30	0	3:00	0	3:00	600	4:30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	75	1,084	0	1,159
8 - 9	75	1,379	0	1,454
4 - 5	78	914	0	992
5 - 6	106	815	0	921
TOTAL	334	4,192	0	4,526

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,159	N/A	N/A	N/A	N/A
1,454	N/A	N/A	N/A	N/A
992	N/A	N/A	N/A	N/A
921	N/A	N/A	N/A	N/A
4,526	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	133	42	175
8 - 9	0	220	88	308
4 - 5	0	493	68	561
5 - 6	0	469	91	560
TOTAL	0	1,315	289	1,604

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
175	N/A	N/A	N/A	N/A
308	N/A	N/A	N/A	N/A
561	N/A	N/A	N/A	N/A
560	N/A	N/A	N/A	N/A
1,604	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South HILL STREET

East/West 11TH STREET

Day: AM THURSDAY **Date:** DECEMBER 2, 2004 **Weather:** CLEAR
PM THURSDAY DECEMBER 2, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	14	7:00	149	7:45	0	7:00	116	8:30
PM PK 15 MIN	30	4:45	216	5:15	0	3:00	208	5:00
AM PK HOUR	35	7:00	525	7:30	0	7:00	420	8:00
PM PK HOUR	117	4:45	811	5:00	0	3:00	689	4:30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	5	30	0	35
8 - 9	4	22	0	26
4 - 5	5	93	0	98
5 - 6	10	103	0	113
TOTAL	24	248	0	272

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	430	47	477
8 - 9	0	450	43	493
4 - 5	0	645	85	730
5 - 6	0	702	109	811
TOTAL	0	2,227	284	2,511

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
512	N/A	N/A	N/A	N/A
519	N/A	N/A	N/A	N/A
828	N/A	N/A	N/A	N/A
924	N/A	N/A	N/A	N/A
2,783	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	25	144	71	240
8 - 9	45	281	94	420
4 - 5	89	415	99	603
5 - 6	90	449	112	651
TOTAL	249	1,289	376	1,914

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
240	N/A	N/A	N/A	N/A
420	N/A	N/A	N/A	N/A
603	N/A	N/A	N/A	N/A
651	N/A	N/A	N/A	N/A
1,914	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South BROADWAY

East/West 11TH STREET

Day: AM THURSDAY **Date:** DECEMBER 2, 2004 **Weather:** CLEAR
PM THURSDAY DECEMBER 2, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	278	8:15	125	8:30	0	7:00	117	8:45
PM PK 15 MIN	269	5:15	230	5:15	0	3:00	184	5:00
AM PK HOUR	1,027	7:45	379	7:45	0	7:00	382	8:00
PM PK HOUR	937	4:30	755	5:00	0	3:00	654	4:30

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	92	700	0	792
8 - 9	148	828	0	976
4 - 5	142	723	0	865
5 - 6	118	815	0	933
TOTAL	500	3,066	0	3,566

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	267	19	286
8 - 9	0	346	22	368
4 - 5	0	665	44	709
5 - 6	0	688	67	755
TOTAL	0	1,966	152	2,118

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,078	N/A	N/A	N/A	N/A
1,344	N/A	N/A	N/A	N/A
1,574	N/A	N/A	N/A	N/A
1,688	N/A	N/A	N/A	N/A
5,684	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	31	143	21	195
8 - 9	58	288	36	382
4 - 5	77	427	81	585
5 - 6	69	487	72	628
TOTAL	235	1,345	210	1,790

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
195	N/A	N/A	N/A	N/A
382	N/A	N/A	N/A	N/A
585	N/A	N/A	N/A	N/A
628	N/A	N/A	N/A	N/A
1,790	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South MAIN STREET

East/West 11TH STREET

Day: AM TUESDAY **Date:** DECEMBER 7, 2004 **Weather:** CLEAR
PM TUESDAY DECEMBER 7, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	235	8:15	146	8:15	0	7:00	98	8:30
PM PK 15 MIN	253	4:45	266	5:15	0	3:00	165	4:45
AM PK HOUR	843	7:45	504	7:30	0	7:00	320	8:00
PM PK HOUR	979	4:00	1,023	4:45	0	3:00	588	4:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	71	731	0	802
8 - 9	49	772	0	821
4 - 5	71	908	0	979
5 - 6	90	861	0	951
TOTAL	281	3,272	0	3,553

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	401	50	451
8 - 9	0	422	67	489
4 - 5	0	757	167	924
5 - 6	0	824	181	1,005
TOTAL	0	2,404	465	2,869

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,253	N/A	N/A	N/A	N/A
1,310	N/A	N/A	N/A	N/A
1,903	N/A	N/A	N/A	N/A
1,956	N/A	N/A	N/A	N/A
6,422	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	18	146	27	191
8 - 9	31	232	57	320
4 - 5	108	368	112	588
5 - 6	98	354	91	543
TOTAL	255	1,100	287	1,642

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
191	N/A	N/A	N/A	N/A
320	N/A	N/A	N/A	N/A
588	N/A	N/A	N/A	N/A
543	N/A	N/A	N/A	N/A
1,642	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South OLIVE STREET

East/West 12TH STREET

Day: AM THURSDAY **Date:** MAY 12, 2005 **Weather:** CLEAR
PM THURSDAY MAY 12, 2005
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	431	8:00	0	7:00	88	7:45	0	7:00
PM PK 15 MIN	352	4:15	0	3:00	93	4:15	0	3:00
AM PK HOUR	1,538	7:45	0	7:00	299	7:45	0	7:00
PM PK HOUR	972	4:15	0	3:00	246	4:15	0	3:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	1,147	24	1,171
8 - 9	0	1,494	19	1,513
4 - 5	0	890	33	923
5 - 6	0	866	33	899
TOTAL	0	4,397	109	4,506

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,171	N/A	N/A	N/A	N/A
1,513	N/A	N/A	N/A	N/A
923	N/A	N/A	N/A	N/A
899	N/A	N/A	N/A	N/A
4,506	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	47	142	0	189
8 - 9	67	197	0	264
4 - 5	67	174	0	241
5 - 6	59	148	0	207
TOTAL	240	661	0	901

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
189	N/A	N/A	N/A	N/A
264	N/A	N/A	N/A	N/A
241	N/A	N/A	N/A	N/A
207	N/A	N/A	N/A	N/A
901	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South HILL STREET

East/West 12TH STREET

Day: AM TUESDAY **Date:** DECEMBER 7, 2004 **Weather:** CLEAR
PM TUESDAY DECEMBER 7, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	50	8:15	145	8:00	66	7:45	0	7:00
PM PK 15 MIN	90	5:15	213	5:30	60	4:30	0	3:00
AM PK HOUR	191	7:45	545	7:30	234	7:45	0	7:00
PM PK HOUR	319	4:45	813	4:45	197	4:30	0	3:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	7	119	126
8 - 9	0	20	165	185
4 - 5	0	90	146	236
5 - 6	0	97	219	316
TOTAL	0	214	649	863

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	51	410	0	461
8 - 9	86	429	0	515
4 - 5	89	652	0	741
5 - 6	79	719	0	798
TOTAL	305	2,210	0	2,515

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
587	N/A	N/A	N/A	N/A
700	N/A	N/A	N/A	N/A
977	N/A	N/A	N/A	N/A
1,114	N/A	N/A	N/A	N/A
3,378	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	117	19	136
8 - 9	0	188	37	225
4 - 5	0	144	43	187
5 - 6	0	104	44	148
TOTAL	0	553	143	696

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
136	N/A	N/A	N/A	N/A
225	N/A	N/A	N/A	N/A
187	N/A	N/A	N/A	N/A
148	N/A	N/A	N/A	N/A
696	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South BROADWAY

East/West 12TH STREET

Day: AM TUESDAY **Date:** DECEMBER 7, 2004 **Weather:** CLEAR
PM TUESDAY DECEMBER 7, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	240	7:30	111	8:30	121	8:30	0	7:00
PM PK 15 MIN	232	5:15	201	5:15	128	4:00	0	3:00
AM PK HOUR	928	7:30	355	7:45	429	8:00	0	7:00
PM PK HOUR	864	5:00	727	4:30	462	4:45	0	3:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	840	19	859
8 - 9	0	847	46	893
4 - 5	0	742	48	790
5 - 6	0	825	39	864
TOTAL	0	3,254	152	3,406

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	26	315	0	341
8 - 9	27	315	0	342
4 - 5	31	678	0	709
5 - 6	19	684	0	703
TOTAL	103	1,992	0	2,095

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,200	N/A	N/A	N/A	N/A
1,235	N/A	N/A	N/A	N/A
1,499	N/A	N/A	N/A	N/A
1,567	N/A	N/A	N/A	N/A
5,501	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	78	156	18	252
8 - 9	131	259	39	429
4 - 5	157	218	71	446
5 - 6	125	262	62	449
TOTAL	491	895	190	1,576

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
252	N/A	N/A	N/A	N/A
429	N/A	N/A	N/A	N/A
446	N/A	N/A	N/A	N/A
449	N/A	N/A	N/A	N/A
1,576	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South MAIN STREET

East/West 12TH STREET

Day: AM TUESDAY **Date:** DECEMBER 7, 2004 **Weather:** CLEAR
PM TUESDAY DECEMBER 7, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	251	8:30	130	7:45	81	8:30	0	7:00
PM PK 15 MIN	264	4:30	255	5:00	107	5:30	0	3:00
AM PK HOUR	804	8:00	457	7:45	296	8:00	0	7:00
PM PK HOUR	995	4:15	927	4:30	356	5:00	0	3:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	703	29	732
8 - 9	0	758	46	804
4 - 5	0	880	110	990
5 - 6	0	847	70	917
TOTAL	0	3,188	255	3,443

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	26	368	0	394
8 - 9	58	362	0	420
4 - 5	69	704	0	773
5 - 6	75	829	0	904
TOTAL	228	2,263	0	2,491

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,126	N/A	N/A	N/A	N/A
1,224	N/A	N/A	N/A	N/A
1,763	N/A	N/A	N/A	N/A
1,821	N/A	N/A	N/A	N/A
5,934	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	23	149	17	189
8 - 9	29	233	34	296
4 - 5	77	197	49	323
5 - 6	93	210	53	356
TOTAL	222	789	153	1,164

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
189	N/A	N/A	N/A	N/A
296	N/A	N/A	N/A	N/A
323	N/A	N/A	N/A	N/A
356	N/A	N/A	N/A	N/A
1,164	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South LOS ANGELES STREET

East/West 12TH STREET

Day: AM TUESDAY **Date:** MAY 10, 2005 **Weather:** CLEAR
PM TUESDAY MAY 10, 2005
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	142	8:30	112	7:45	84	7:45	0	7:00
PM PK 15 MIN	252	4:45	212	5:30	98	5:30	0	3:00
AM PK HOUR	500	8:00	383	7:45	288	7:45	0	7:00
PM PK HOUR	619	4:45	713	4:45	362	4:00	0	3:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	275	14	289
8 - 9	0	442	58	500
4 - 5	0	487	103	590
5 - 6	0	388	59	447
TOTAL	0	1,592	234	1,826

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	47	246	0	293
8 - 9	67	276	0	343
4 - 5	112	522	0	634
5 - 6	97	611	0	708
TOTAL	323	1,655	0	1,978

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
582	N/A	N/A	N/A	N/A
843	N/A	N/A	N/A	N/A
1,224	N/A	N/A	N/A	N/A
1,155	N/A	N/A	N/A	N/A
3,804	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	20	136	19	175
8 - 9	40	216	31	287
4 - 5	59	205	98	362
5 - 6	62	186	79	327
TOTAL	181	743	227	1,151

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
175	N/A	N/A	N/A	N/A
287	N/A	N/A	N/A	N/A
362	N/A	N/A	N/A	N/A
327	N/A	N/A	N/A	N/A
1,151	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South HILL STREET

East/West PICO BOULEVARD

Day: AM THURSDAY **Date:** MAY 12, 2005 **Weather:** CLEAR
PM THURSDAY MAY 12, 2005
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	99	7:45	173	7:45	106	8:00	92	8:45
PM PK 15 MIN	103	5:00	219	5:30	111	5:15	132	5:00
AM PK HOUR	368	7:45	582	7:30	392	8:00	350	7:30
PM PK HOUR	366	4:45	791	5:00	432	4:30	482	5:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	53	148	53	254
8 - 9	84	196	66	346
4 - 5	50	146	60	256
5 - 6	73	183	95	351
TOTAL	260	673	274	1,207

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	37	365	68	470
8 - 9	30	362	71	463
4 - 5	16	398	74	488
5 - 6	16	708	67	791
TOTAL	99	1,833	280	2,212

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
724	N/A	N/A	N/A	N/A
809	N/A	N/A	N/A	N/A
744	N/A	N/A	N/A	N/A
1,142	N/A	N/A	N/A	N/A
3,419	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	27	240	25	292
8 - 9	21	340	31	392
4 - 5	23	354	50	427
5 - 6	30	295	52	377
TOTAL	101	1,229	158	1,488

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	16	240	18	274
8 - 9	16	320	14	350
4 - 5	32	314	16	362
5 - 6	36	421	25	482
TOTAL	100	1,295	73	1,468

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
566	N/A	N/A	N/A	N/A
742	N/A	N/A	N/A	N/A
789	N/A	N/A	N/A	N/A
859	N/A	N/A	N/A	N/A
2,956	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South BROADWAY

East/West PICO BOULEVARD

Day: AM TUESDAY **Date:** DECEMBER 7, 2004 **Weather:** CLEAR
PM TUESDAY DECEMBER 7, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	228	8:00	95	8:00	89	8:15	76	8:00
PM PK 15 MIN	208	5:00	220	5:00	137	5:00	133	5:00
AM PK HOUR	883	7:45	337	7:45	338	7:30	241	7:15
PM PK HOUR	800	5:00	790	4:30	460	4:30	495	4:15

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	71	694	15	780
8 - 9	46	780	26	852
4 - 5	57	559	32	648
5 - 6	70	688	42	800
TOTAL	244	2,721	115	3,080

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	10	233	27	270
8 - 9	31	249	37	317
4 - 5	50	595	53	698
5 - 6	25	656	69	750
TOTAL	116	1,733	186	2,035

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
1,050	N/A	N/A	N/A	N/A
1,169	N/A	N/A	N/A	N/A
1,346	N/A	N/A	N/A	N/A
1,550	N/A	N/A	N/A	N/A
5,115	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	68	188	17	273
8 - 9	61	226	21	308
4 - 5	94	276	46	416
5 - 6	85	308	42	435
TOTAL	308	998	126	1,432

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	10	166	32	208
8 - 9	26	154	39	219
4 - 5	55	326	66	447
5 - 6	42	346	33	421
TOTAL	133	992	170	1,295

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
481	N/A	N/A	N/A	N/A
527	N/A	N/A	N/A	N/A
863	N/A	N/A	N/A	N/A
856	N/A	N/A	N/A	N/A
2,727	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South GRAND AVENUE

East/West 17TH STREET / I-10 WB ON-RAMP

Day: AM TUESDAY **Date:** MAY 10, 2005 **Weather:** CLEAR
PM TUESDAY MAY 10, 2005
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	0	7:00	153	8:00	0	7:00	173	8:00
PM PK 15 MIN	0	3:00	418	5:15	0	3:00	297	5:15
AM PK HOUR	0	7:00	575	7:15	0	7:00	637	7:45
PM PK HOUR	0	3:00	1,597	5:00	0	3:00	####	5:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	418	133	551
8 - 9	0	398	125	523
4 - 5	0	760	525	1,285
5 - 6	0	880	717	1,597
TOTAL	0	2,456	1,500	3,956

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
551	N/A	N/A	N/A	N/A
523	N/A	N/A	N/A	N/A
1,285	N/A	N/A	N/A	N/A
1,597	N/A	N/A	N/A	N/A
3,956	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	167	314	0	481
8 - 9	173	456	0	629
4 - 5	113	794	0	907
5 - 6	115	978	0	1,093
TOTAL	568	2,542	0	3,110

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
481	N/A	N/A	N/A	N/A
629	N/A	N/A	N/A	N/A
907	N/A	N/A	N/A	N/A
1,093	N/A	N/A	N/A	N/A
3,110	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South GRAND AVENUE

East/West 18TH STREET / I-10 EB OFF-RAMP

Day: AM WEDNESDAY **Date:** MAY 11, 2005 **Weather:** CLEAR
PM WEDNESDAY MAY 11, 2005
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	54	8:00	150	7:45	296	8:00	0	7:00
PM PK 15 MIN	50	5:00	265	4:45	238	4:30	0	3:00
AM PK HOUR	189	7:45	575	7:15	1,135	7:45	0	7:00
PM PK HOUR	163	4:45	890	4:15	770	4:00	0	3:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	155	155
8 - 9	0	0	186	186
4 - 5	0	0	132	132
5 - 6	0	0	151	151
TOTAL	0	0	624	624

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total	TOTAL N-S	XING S/L Ped	XING S/L Sch	XING N/L Ped	XING N/L Sch
7 - 8	115	457	0	572	727	N/A	N/A	N/A	N/A
8 - 9	105	407	0	512	698	N/A	N/A	N/A	N/A
4 - 5	217	671	0	888	1,020	N/A	N/A	N/A	N/A
5 - 6	186	558	0	744	895	N/A	N/A	N/A	N/A
TOTAL	623	2,093	0	2,716	3,340	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	708	101	809
8 - 9	0	1,029	99	1,128
4 - 5	0	639	131	770
5 - 6	0	522	146	668
TOTAL	0	2,898	477	3,375

WESTBOUND Approach

Hours	Lt	Th	Rt	Total	TOTAL E-W	XING W/L Ped	XING W/L Sch	XING E/L Ped	XING E/L Sch
7 - 8	0	0	0	0	809	N/A	N/A	N/A	N/A
8 - 9	0	0	0	0	1,128	N/A	N/A	N/A	N/A
4 - 5	0	0	0	0	770	N/A	N/A	N/A	N/A
5 - 6	0	0	0	0	668	N/A	N/A	N/A	N/A
TOTAL	0	0	0	0	3,375	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South LOS ANGELES STREET

East/West 17TH STREET / I-10 WB OFF RAMP

Day: AM WEDNESDAY **Date:** DECEMBER 15, 2004 **Weather:** CLEAR
PM WEDNESDAY DECEMBER 15, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	80	8:00	92	8:30	0	7:00	317	8:30
PM PK 15 MIN	68	5:00	276	5:45	0	3:00	215	4:30
AM PK HOUR	293	7:45	312	7:45	0	7:00	1,173	7:45
PM PK HOUR	230	4:45	990	5:00	0	3:00	796	4:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	31	185	0	216
8 - 9	30	251	0	281
4 - 5	19	178	0	197
5 - 6	39	187	0	226
TOTAL	119	801	0	920

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	209	42	251
8 - 9	0	260	50	310
4 - 5	0	600	155	755
5 - 6	0	760	230	990
TOTAL	0	1,829	477	2,306

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
467	N/A	N/A	N/A	N/A
591	N/A	N/A	N/A	N/A
952	N/A	N/A	N/A	N/A
1,216	N/A	N/A	N/A	N/A
3,226	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	86	660	106	852
8 - 9	132	824	205	1,161
4 - 5	124	534	138	796
5 - 6	91	386	62	539
TOTAL	433	2,404	511	3,348

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
852	N/A	N/A	N/A	N/A
1,161	N/A	N/A	N/A	N/A
796	N/A	N/A	N/A	N/A
539	N/A	N/A	N/A	N/A
3,348	N/A	N/A	N/A	N/A

TRAFFIC COUNT SUMMARY

City of Los Angeles
Department of Transportation
Count by Crain & Associates

STREET:
North/South LOS ANGELES STREET

East/West 18TH STREET / I-10 EB ON-RAMP

Day: AM WEDNESDAY **Date:** DECEMBER 15, 2004 **Weather:** CLEAR
PM WEDNESDAY DECEMBER 15, 2004
Hours: 7-9 AM 4-6 PM

School Day: YES **District:** LOS ANGELES

	N/B	S/B	E/B	W/B
DUAL-WHEELED	N/A	N/A	N/A	N/A
BIKES	N/A	N/A	N/A	N/A
BUSES	N/A	N/A	N/A	N/A

	N/B	TIME	S/B	TIME	E/B	TIME	W/B	TIME
AM PK 15 MIN	134	7:45	84	8:15	159	8:15	0	7:00
PM PK 15 MIN	169	4:45	134	5:45	322	5:30	0	3:00
AM PK HOUR	477	7:30	301	8:00	540	7:30	0	7:00
PM PK HOUR	584	4:45	482	5:00	1,184	5:00	0	3:00

NORTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	385	18	403
8 - 9	0	393	19	412
4 - 5	0	517	9	526
5 - 6	0	521	12	533
TOTAL	0	1,816	58	1,874

SOUTHBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	16	191	0	207
8 - 9	36	265	0	301
4 - 5	18	383	0	401
5 - 6	17	465	0	482
TOTAL	87	1,304	0	1,391

TOTAL	XING S/L		XING N/L	
N-S	Ped	Sch	Ped	Sch
610	N/A	N/A	N/A	N/A
713	N/A	N/A	N/A	N/A
927	N/A	N/A	N/A	N/A
1,015	N/A	N/A	N/A	N/A
3,265	N/A	N/A	N/A	N/A

EASTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	417	60	29	506
8 - 9	409	46	18	473
4 - 5	768	290	92	1,150
5 - 6	724	340	120	1,184
TOTAL	2,318	736	259	3,313

WESTBOUND Approach

Hours	Lt	Th	Rt	Total
7 - 8	0	0	0	0
8 - 9	0	0	0	0
4 - 5	0	0	0	0
5 - 6	0	0	0	0
TOTAL	0	0	0	0

TOTAL	XING W/L		XING E/L	
E-W	Ped	Sch	Ped	Sch
506	N/A	N/A	N/A	N/A
473	N/A	N/A	N/A	N/A
1,150	N/A	N/A	N/A	N/A
1,184	N/A	N/A	N/A	N/A
3,313	N/A	N/A	N/A	N/A

APPENDIX B

RELATED PROJECT TRIP GENERATION RATES AND EQUATIONS

Appendix B
Related Projects Trip Generation Rates and Equations

Mini-Warehouse (trips per 1,000 sq. ft.) – LU 151
Daily: T = 2.50 (A)
AM Peak Hour: T = 0.15 (A); I/B = 59%, O/B = 41%
PM Peak Hour: T = 0.26 (A); I/B = 51%, O/B = 49%

Apartment (trips per dwelling unit) – LU 220
Daily: T = 6.72 (U)
AM Peak Hour: T = 0.51 (U); I/B = 20%; O/B = 80%
PM Peak Hour: T = 0.62 (U); I/B = 65%; O/B = 35%

High-Rise Apartment (trips per dwelling unit) – LU 222
Daily: T = 4.20 (U)
AM Peak Hour: T = 0.30 (U); I/B = 25%; O/B = 75%
PM Peak Hour: T = 0.35 (U); I/B = 61%; O/B = 39%

Residential Condominium/Townhouse (trips per dwelling unit) – LU 230
Daily: T = 5.86 (U)
AM Peak Hour: T = 0.44 (U); I/B = 17%; O/B = 83%
PM Peak Hour: T = 0.52 (U); I/B = 67%; O/B = 33%

Hotel (trips per room) – LU 310
Daily: T = 8.17 (R)
AM Peak Hour: T = 0.56 (R); I/B = 61%, O/B = 39%
PM Peak Hour: T = 0.59 (R); I/B = 53%, O/B = 47%

Live Theater (trips per seat) – LU 443
Daily: T = 1.76 (St)
AM Peak Hour[1]: T = 0.01 (St); I/B = 80%, O/B = 20%
PM Peak Hour: T = 0.32 (St); I/B = 94%, O/B = 6%

Movie Theater without Matinee (trips per 1,000 sq. ft.) – LU 443
Daily: T = 78.06 (A)
AM Peak Hour[1]: T = 0.22 (A); I/B = 80%, O/B = 20%
PM Peak Hour: T = 6.16 (A); I/B = 94%, O/B = 6%

Health/Fitness Club (trips per 1,000 sq. ft.) – LU 492
Daily: T = 32.93 (A)
AM Peak Hour: T = 1.21 (A); I/B = 42%, O/B = 58%
PM Peak Hour: T = 4.05 (A); I/B = 51%, O/B = 49%

High School (trips per student) – LU 530
Daily: T = 1.71 (S)
AM Peak Hour: T = 0.41 (S); I/B = 69%, O/B = 31%
PM Peak Hour: T = 0.14 (S); I/B = 47%, O/B = 53%

Appendix B (continued)
Related Projects Trip Generation Rates and Equations

General Office Building (trips per 1,000 sq. ft.) – LU 710

Daily:	Ln (T) = 0.77 Ln (A) + 3.65
AM Peak Hour:	Ln (T) = 0.80 Ln (A) + 1.55; I/B = 88%, O/B = 12%
PM Peak Hour:	T = 1.12 (A) + 78.81; I/B = 17%, O/B = 83%

Medical-Dental Office Building (trips per 1,000 sq. ft.) – LU 720

Daily:	T = 36.13 (A)
AM Peak Hour:	T = 2.48 (A); I/B = 79%, O/B = 21%
PM Peak Hour:	T = 3.72 (A); I/B = 27%, O/B = 73%

Shopping Center (trips per 1,000 sq. ft.) – LU 820

Daily:	Ln (T) = 0.65 Ln (A) + 5.83
AM Peak Hour:	Ln (T) = 0.60 Ln (A) + 2.29; I/B = 61%, O/B = 39%
PM Peak Hour:	Ln (T) = 0.66 Ln (A) + 3.40; I/B = 48%, O/B = 52%

Quality Restaurant (trips per 1,000 sq. ft.) – LU 931

Daily:	T = 89.95 (A)
AM Peak Hour:	T = 0.81 (A); I/B = 82%, O/B = 18%
PM Peak Hour:	T = 7.49 (A); I/B = 67%, O/B = 33%

Fast-Food Restaurant with Drive-Through Window (trips per 1,000 sq. ft.) – LU 934

Daily:	T = 496.12 (A)
AM Peak Hour:	T = 53.11 (A); I/B = 51%, O/B = 49%
PM Peak Hour:	T = 34.64 (A); I/B = 52%, O/B = 48%

Drinking Place (trips per 1,000 sq. ft.) – LU 936

Daily[2]:	T = 89.95 (A)
AM Peak Hour[2]:	T = 0.81 (A); I/B = 82%, O/B = 18%
PM Peak Hour:	T = 11.34 (A); I/B = 66%, O/B = 34%

Where:

T	= trip ends	A	= building area in 1,000's of square feet
I/B	= inbound	U	= dwelling unit
O/B	= outbound	R	= room
		S	= student
		St	= seat

Notes:

[1] AM peak hour inbound and outbound percentages not available; assumed 80% inbound and 20% outbound percentages.
[2] Daily and AM peak hour rates not available; assumed quality restaurant rates.

Source:

Trip Generation, 7th Edition, Institute of Transportation Engineers, Washington D.C., 2003.

DRAFT

APPENDIX C

CRITICAL MOVEMENT ANALYSIS WORKSHEETS

TRAFFIC ANALYSIS FOR
THE HERALD EXAMINER MIXED-USE PROJECT
CITY OF LOS ANGELES

Prepared for:

URBAN PARTNERS, LLC

Prepared by:

Crain & Associates
2007 Sawtelle Boulevard, Suite 4
Los Angeles, California 90025
(310) 473-6508

December 2005

APPENDIX C

CMA CALCULATION WORKSHEETS

Existing (2005)

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:1, OLYMPIC BOULEVARD & HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	45	535	55	0
EASTBOUND	26	968	86	0
NORTHBOUND	6	18	4	0
SOUTHBOUND	58	451	18	73

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	2	0	1	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	84	276	276	N/A	N/A
EASTBOUND	N/A	326	377	377	N/A	N/A
NORTHBOUND	6	N/A	11	11	N/A	N/A
SOUTHBOUND	58	N/A	226	N/A	18	N/A

EAST-WEST CRITICAL VOLUMES 422
NORTH-SOUTH CRITICAL VOLUMES 232

THE SUM OF CRITICAL VOLUMES 654

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.388

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:2, OLYMPIC BOULEVARD & BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	18	662	39	0
EASTBOUND	33	911	33	0
NORTHBOUND	82	745	38	0
SOUTHBOUND	52	390	93	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	195	262	262	N/A	N/A
EASTBOUND	N/A	270	353	353	N/A	N/A
NORTHBOUND	82	N/A	392	392	N/A	N/A
SOUTHBOUND	52	N/A	242	242	N/A	N/A

EAST-WEST CRITICAL VOLUMES 371
NORTH-SOUTH CRITICAL VOLUMES 444

THE SUM OF CRITICAL VOLUMES 815

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.504

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:3, US-110 SB OFF-RAMP AND BLAINE STREET/CONNECTICUT STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	120	0	268	93
EASTBOUND	0	0	24	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	354	19	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	2	0	3
EASTBOUND	0	0	0	0	1	0	1
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	120	N/A	N/A	134	N/A
EASTBOUND	N/A	N/A	N/A	N/A	24	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	186	186	N/A	N/A

EAST-WEST CRITICAL VOLUMES 144
NORTH-SOUTH CRITICAL VOLUMES 186

THE SUM OF CRITICAL VOLUMES 330

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.185

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:4, 11TH STREET AND BLAINE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	31	139	0	0
EASTBOUND	0	129	265	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	76	343	72	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	0	0	0	2
EASTBOUND	0	0	1	0	1	0	2
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	1	1	0	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	85	85	N/A	N/A	N/A
EASTBOUND	N/A	N/A	129	N/A	265	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	76	N/A	208	208	N/A	N/A

EAST-WEST CRITICAL VOLUMES 350
NORTH-SOUTH CRITICAL VOLUMES 208

THE SUM OF CRITICAL VOLUMES 558

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.331

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.
Eastbound and Westbound approaches have opposed signal phases.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:5, 11TH STREET/CHICK HEARN COURT AND CHERRY STREET/US-110 NB ON-RAMP
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	74	76	49	0
EASTBOUND	95	53	48	0
NORTHBOUND	136	664	102	37
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	2	0	1	0	4
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	2	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	74	N/A	38	N/A	49	N/A
EASTBOUND	N/A	98	N/A	98	N/A	N/A
NORTHBOUND	136	N/A	664	N/A	51	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 172
NORTH-SOUTH CRITICAL VOLUMES 664
THE SUM OF CRITICAL VOLUMES 836

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.519

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:6, 11TH STREET AND OLIVE AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	224	86	0
EASTBOUND	0	0	0	0
NORTHBOUND	76	1414	0	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	2	0	1	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	1	3	0	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	112	N/A	86	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	372	372	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 112
NORTH-SOUTH CRITICAL VOLUMES 372

THE SUM OF CRITICAL VOLUMES 484

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.287

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:7, 11TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	42	278	93	0
EASTBOUND	0	0	0	0
NORTHBOUND	4	19	0	0
SOUTHBOUND	0	477	47	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	42	N/A	186	186	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	4	N/A	10	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	262	262	N/A	N/A

EAST-WEST CRITICAL VOLUMES 186
NORTH-SOUTH CRITICAL VOLUMES 266

THE SUM OF CRITICAL VOLUMES 452

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.268

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:8, 11TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	51	270	28	0
EASTBOUND	0	0	0	0
NORTHBOUND	167	871	0	0
SOUTHBOUND	0	357	26	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	116	116	116	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	167	N/A	436	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	192	192	N/A	N/A

EAST-WEST CRITICAL VOLUMES 116
NORTH-SOUTH CRITICAL VOLUMES 436
THE SUM OF CRITICAL VOLUMES 552

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.327

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:9, 11TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	31	228	53	0
EASTBOUND	0	0	0	0
NORTHBOUND	54	798	0	0
SOUTHBOUND	0	439	63	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	156	N/A	156	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	54	N/A	399	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	251	251	N/A	N/A

EAST-WEST CRITICAL VOLUMES 156
NORTH-SOUTH CRITICAL VOLUMES 399

THE SUM OF CRITICAL VOLUMES 555

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.329

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:10, 12TH STREET AND OLIVE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	76	223	0	0
NORTHBOUND	0	1513	25	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	3	1	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	150	N/A	150	N/A	N/A
NORTHBOUND	N/A	N/A	384	384	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 150
NORTH-SOUTH CRITICAL VOLUMES 384

THE SUM OF CRITICAL VOLUMES 534

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.316

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, 12TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	203	33	0
NORTHBOUND	0	20	173	0
SOUTHBOUND	86	458	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	0	0	1	0	1	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	118	118	N/A	N/A
NORTHBOUND	N/A	N/A	20	N/A	173	N/A
SOUTHBOUND	86	N/A	229	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 118
NORTH-SOUTH CRITICAL VOLUMES 259

THE SUM OF CRITICAL VOLUMES 377

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.223

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:12, 12TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	128	263	35	0
NORTHBOUND	0	884	43	0
SOUTHBOUND	33	325	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	213	N/A	213	N/A	N/A
NORTHBOUND	N/A	N/A	464	464	N/A	N/A
SOUTHBOUND	33	N/A	162	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 213
NORTH-SOUTH CRITICAL VOLUMES 497

THE SUM OF CRITICAL VOLUMES 710

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.426

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:13, 12TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	31	230	34	0
NORTHBOUND	0	747	42	0
SOUTHBOUND	61	401	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	98	98	98	N/A	N/A
NORTHBOUND	N/A	N/A	394	394	N/A	N/A
SOUTHBOUND	61	N/A	200	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 98
NORTH-SOUTH CRITICAL VOLUMES 455

THE SUM OF CRITICAL VOLUMES 553

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.328

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, 12TH STREET AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	40	218	30	0
NORTHBOUND	0	412	51	0
SOUTHBOUND	85	298	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	2	1	0	0	4
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	0	1	1	0	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	72	72	72	N/A	N/A
NORTHBOUND	N/A	N/A	232	232	N/A	N/A
SOUTHBOUND	N/A	136	248	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 72
NORTH-SOUTH CRITICAL VOLUMES 317

THE SUM OF CRITICAL VOLUMES 389

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.231

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:15, PICO BOULEVARD AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	17	313	19	0
EASTBOUND	23	329	35	0
NORTHBOUND	92	205	63	8
SOUTHBOUND	38	433	86	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	1	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	168	N/A	182	N/A	N/A
EASTBOUND	N/A	186	N/A	201	N/A	N/A
NORTHBOUND	92	N/A	205	N/A	63	N/A
SOUTHBOUND	38	N/A	260	260	N/A	N/A

EAST-WEST CRITICAL VOLUMES 218
NORTH-SOUTH CRITICAL VOLUMES 352
THE SUM OF CRITICAL VOLUMES 570

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.304

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:16, PICO BOULEVARD AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	22	180	39	0
EASTBOUND	71	247	0	19
NORTHBOUND	57	813	22	0
SOUTHBOUND	27	275	38	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	0	1	0	0	2
EASTBOUND	1	0	1	0	1	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	22	N/A	N/A	219	N/A	N/A
EASTBOUND	71	N/A	247	N/A	0	N/A
NORTHBOUND	57	N/A	418	418	N/A	N/A
SOUTHBOUND	27	N/A	156	156	N/A	N/A

EAST-WEST CRITICAL VOLUMES 290
NORTH-SOUTH CRITICAL VOLUMES 445

THE SUM OF CRITICAL VOLUMES 735

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.392

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:17, 17TH STREET/I-10 WB ON-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	187	450	0	0
EASTBOUND	0	0	0	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	421	124	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	3	1	1	0	5

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	318	N/A	318	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	109	109	109	N/A

EAST-WEST CRITICAL VOLUMES 318
NORTH-SOUTH CRITICAL VOLUMES 109

THE SUM OF CRITICAL VOLUMES 427

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.228

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:18, 18TH STREET/I-10 EB OFF-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	1028	70	37
NORTHBOUND	0	0	189	0
SOUTHBOUND	121	422	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	3	0	1	0	4
NORTHBOUND	0	0	0	0	2	0	2
SOUTHBOUND	1	0	3	0	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	343	N/A	70	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	94	N/A
SOUTHBOUND	121	N/A	141	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 343
NORTH-SOUTH CRITICAL VOLUMES 215

THE SUM OF CRITICAL VOLUMES 558

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.313

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:19, 17TH STREET/I-10 WB OFF-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	134	860	191	0
EASTBOUND	0	0	0	0
NORTHBOUND	35	261	0	0
SOUTHBOUND	0	268	47	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	592	N/A	592	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	35	N/A	130	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	158	158	N/A	N/A

EAST-WEST CRITICAL VOLUMES 592
NORTH-SOUTH CRITICAL VOLUMES 193

THE SUM OF CRITICAL VOLUMES 785

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.423

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:20, 18TH STREET/I-10 EB ON-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	470	55	21	0
NORTHBOUND	0	462	20	0
SOUTHBOUND	30	250	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	470	N/A	38	38	N/A	N/A
NORTHBOUND	N/A	N/A	241	241	N/A	N/A
SOUTHBOUND	30	N/A	125	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 470
NORTH-SOUTH CRITICAL VOLUMES 271

THE SUM OF CRITICAL VOLUMES 741

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.395

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:1, OLYMPIC BOULEVARD & HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	49	995	79	0
EASTBOUND	7	776	67	0
NORTHBOUND	38	172	27	0
SOUTHBOUND	36	707	138	4

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	2	0	1	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	269	427	427	N/A	N/A
EASTBOUND	N/A	263	294	294	N/A	N/A
NORTHBOUND	38	N/A	100	100	N/A	N/A
SOUTHBOUND	36	N/A	354	N/A	138	N/A

EAST-WEST CRITICAL VOLUMES 434
NORTH-SOUTH CRITICAL VOLUMES 392
THE SUM OF CRITICAL VOLUMES 826

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.512

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:2, OLYMPIC BOULEVARD & BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	25	932	84	0
EASTBOUND	81	683	30	0
NORTHBOUND	108	666	88	0
SOUTHBOUND	29	674	89	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	304	368	368	N/A	N/A
EASTBOUND	81	N/A	356	356	N/A	N/A
NORTHBOUND	108	N/A	377	377	N/A	N/A
SOUTHBOUND	29	N/A	382	382	N/A	N/A

EAST-WEST CRITICAL VOLUMES 449
NORTH-SOUTH CRITICAL VOLUMES 490

THE SUM OF CRITICAL VOLUMES 939

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.596

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:3, US-110 SB OFF-RAMP AND BLAINE STREET/CONNECTICUT STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	68	0	0	72
EASTBOUND	0	0	30	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	497	35	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	2	0	3
EASTBOUND	0	0	0	0	1	0	1
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	68	N/A	N/A	0	N/A
EASTBOUND	N/A	N/A	N/A	N/A	30	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	266	266	N/A	N/A

EAST-WEST CRITICAL VOLUMES 98
NORTH-SOUTH CRITICAL VOLUMES 266

THE SUM OF CRITICAL VOLUMES 364

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.204

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:4, 11TH STREET AND BLAINE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	250	348	0	0
EASTBOUND	0	77	286	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	25	509	42	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	0	0	0	2
EASTBOUND	0	0	1	0	1	0	2
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	1	1	0	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	299	299	N/A	N/A	N/A
EASTBOUND	N/A	N/A	77	N/A	286	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	25	N/A	276	276	N/A	N/A

EAST-WEST CRITICAL VOLUMES 585
NORTH-SOUTH CRITICAL VOLUMES 276

THE SUM OF CRITICAL VOLUMES 861

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.538

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.
Eastbound and Westbound approaches have opposed signal phases.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:5, 11TH STREET/CHICK HEARN COURT AND CHERRY STREET/US-110 NB ON-RAMP
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	25	759	150	0
EASTBOUND	44	47	6	0
NORTHBOUND	224	380	0	74
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	2	0	1	0	4
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	2	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	25	N/A	380	N/A	150	N/A
EASTBOUND	44	N/A	N/A	53	N/A	N/A
NORTHBOUND	224	N/A	380	N/A	0	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 424
NORTH-SOUTH CRITICAL VOLUMES 380

THE SUM OF CRITICAL VOLUMES 804

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.496

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:6, 11TH STREET AND OLIVE AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	517	89	0
EASTBOUND	0	0	0	0
NORTHBOUND	111	942	0	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	2	0	1	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	1	3	0	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	258	N/A	89	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	263	263	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 258
NORTH-SOUTH CRITICAL VOLUMES 263

THE SUM OF CRITICAL VOLUMES 521

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.309

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:7, 11TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	98	482	116	0
EASTBOUND	0	0	0	0
NORTHBOUND	5	112	0	0
SOUTHBOUND	0	700	99	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	98	N/A	299	299	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	5	N/A	56	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	400	400	N/A	N/A

EAST-WEST CRITICAL VOLUMES 299
NORTH-SOUTH CRITICAL VOLUMES 405

THE SUM OF CRITICAL VOLUMES 704

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.421

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:8, 11TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	80	509	72	0
EASTBOUND	0	0	0	0
NORTHBOUND	142	804	0	0
SOUTHBOUND	0	700	61	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	220	220	220	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	142	N/A	402	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	380	380	N/A	N/A

EAST-WEST CRITICAL VOLUMES 220
NORTH-SOUTH CRITICAL VOLUMES 522

THE SUM OF CRITICAL VOLUMES 742

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.450

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:9, 11TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	99	392	89	0
EASTBOUND	0	0	0	0
NORTHBOUND	91	885	0	0
SOUTHBOUND	0	841	192	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	290	N/A	290	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	91	N/A	442	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	516	516	N/A	N/A

EAST-WEST CRITICAL VOLUMES 290
NORTH-SOUTH CRITICAL VOLUMES 607

THE SUM OF CRITICAL VOLUMES 897

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.564

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:10, 12TH STREET AND OLIVE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	67	179	0	0
NORTHBOUND	0	935	37	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	3	1	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	123	N/A	123	N/A	N/A
NORTHBOUND	N/A	N/A	243	243	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 123
NORTH-SOUTH CRITICAL VOLUMES 243

THE SUM OF CRITICAL VOLUMES 366

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.217

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, 12TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	126	52	0
NORTHBOUND	0	102	220	0
SOUTHBOUND	89	732	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	0	0	1	0	1	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	89	89	N/A	N/A
NORTHBOUND	N/A	N/A	102	N/A	220	N/A
SOUTHBOUND	89	N/A	366	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 89
NORTH-SOUTH CRITICAL VOLUMES 366
THE SUM OF CRITICAL VOLUMES 455

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.270

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:12, 12TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	137	265	65	0
NORTHBOUND	0	806	41	0
SOUTHBOUND	23	709	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	234	N/A	234	N/A	N/A
NORTHBOUND	N/A	N/A	424	424	N/A	N/A
SOUTHBOUND	23	N/A	354	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 234
NORTH-SOUTH CRITICAL VOLUMES 447

THE SUM OF CRITICAL VOLUMES 681

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.404

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:13, 12TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	88	210	58	0
NORTHBOUND	0	884	78	0
SOUTHBOUND	67	867	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	119	119	119	N/A	N/A
NORTHBOUND	N/A	N/A	481	481	N/A	N/A
SOUTHBOUND	67	N/A	434	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 119
NORTH-SOUTH CRITICAL VOLUMES 548

THE SUM OF CRITICAL VOLUMES 667

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.395

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, 12TH STREET AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	64	203	78	0
NORTHBOUND	0	537	82	0
SOUTHBOUND	111	602	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	2	1	0	0	4
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	0	1	1	0	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	86	86	86	N/A	N/A
NORTHBOUND	N/A	N/A	310	310	N/A	N/A
SOUTHBOUND	N/A	240	473	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 86
NORTH-SOUTH CRITICAL VOLUMES 473

THE SUM OF CRITICAL VOLUMES 559

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.331

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:15, PICO BOULEVARD AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	36	421	25	0
EASTBOUND	30	295	52	0
NORTHBOUND	73	183	57	38
SOUTHBOUND	16	708	67	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	1	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	228	N/A	254	N/A	N/A
EASTBOUND	N/A	170	N/A	207	N/A	N/A
NORTHBOUND	73	N/A	183	N/A	57	N/A
SOUTHBOUND	16	N/A	388	388	N/A	N/A

EAST-WEST CRITICAL VOLUMES 284
NORTH-SOUTH CRITICAL VOLUMES 461

THE SUM OF CRITICAL VOLUMES 745

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.397

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:16, PICO BOULEVARD AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	59	379	56	0
EASTBOUND	96	315	23	31
NORTHBOUND	62	651	31	0
SOUTHBOUND	41	697	60	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	0	1	0	0	2
EASTBOUND	1	0	1	0	1	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	59	N/A	N/A	435	N/A	N/A
EASTBOUND	96	N/A	315	N/A	23	N/A
NORTHBOUND	62	N/A	341	341	N/A	N/A
SOUTHBOUND	41	N/A	378	378	N/A	N/A

EAST-WEST CRITICAL VOLUMES 531
NORTH-SOUTH CRITICAL VOLUMES 440

THE SUM OF CRITICAL VOLUMES 971

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.547

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:17, 17TH STREET/I-10 WB ON-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	115	978	0	0
EASTBOUND	0	0	0	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	880	717	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	3	1	1	0	5

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	546	N/A	546	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	293	N/A	358	N/A

EAST-WEST CRITICAL VOLUMES 546
NORTH-SOUTH CRITICAL VOLUMES 358

THE SUM OF CRITICAL VOLUMES 904

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.503

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:18, 18TH STREET/I-10 EB OFF-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	628	101	39
NORTHBOUND	0	0	151	0
SOUTHBOUND	224	666	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	3	0	1	0	4
NORTHBOUND	0	0	0	0	2	0	2
SOUTHBOUND	1	0	3	0	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	209	N/A	101	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	76	N/A
SOUTHBOUND	224	N/A	222	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 209
NORTH-SOUTH CRITICAL VOLUMES 300

THE SUM OF CRITICAL VOLUMES 509

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.286

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:19, 17TH STREET/I-10 WB OFF-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	118	515	115	0
EASTBOUND	0	0	0	0
NORTHBOUND	19	199	0	0
SOUTHBOUND	0	663	176	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	374	N/A	374	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	19	N/A	100	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	420	420	N/A	N/A

EAST-WEST CRITICAL VOLUMES 374
NORTH-SOUTH CRITICAL VOLUMES 439

THE SUM OF CRITICAL VOLUMES 813

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.442

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:20, 18TH STREET/I-10 EB ON-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: EXISTING (2005)

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	730	347	110	0
NORTHBOUND	0	580	10	0
SOUTHBOUND	17	445	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	730	N/A	228	228	N/A	N/A
NORTHBOUND	N/A	N/A	295	295	N/A	N/A
SOUTHBOUND	17	N/A	222	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 730
NORTH-SOUTH CRITICAL VOLUMES 312

THE SUM OF CRITICAL VOLUMES 1042

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.595

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Future (2010) Without Project

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:1, OLYMPIC BOULEVARD & HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	47	792	61	0
EASTBOUND	29	1176	123	0
NORTHBOUND	8	37	4	0
SOUTHBOUND	63	511	26	72

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	2	0	1	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	143	378	378	N/A	N/A
EASTBOUND	N/A	379	474	474	N/A	N/A
NORTHBOUND	8	N/A	20	20	N/A	N/A
SOUTHBOUND	63	N/A	256	N/A	26	N/A

EAST-WEST CRITICAL VOLUMES 521
NORTH-SOUTH CRITICAL VOLUMES 264

THE SUM OF CRITICAL VOLUMES 785

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.481

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:2, OLYMPIC BOULEVARD & BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	19	909	43	0
EASTBOUND	43	1102	41	0
NORTHBOUND	89	811	42	0
SOUTHBOUND	58	501	111	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	264	354	354	N/A	N/A
EASTBOUND	N/A	287	449	449	N/A	N/A
NORTHBOUND	89	N/A	426	426	N/A	N/A
SOUTHBOUND	58	N/A	306	306	N/A	N/A

EAST-WEST CRITICAL VOLUMES 468
NORTH-SOUTH CRITICAL VOLUMES 484
THE SUM OF CRITICAL VOLUMES 952

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.605

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:3, US-110 SB OFF-RAMP AND BLAINE STREET/CONNECTICUT STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	265	0	328	98
EASTBOUND	0	0	25	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	373	20	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	2	0	3
EASTBOUND	0	0	0	0	1	0	1
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	265	N/A	N/A	164	N/A
EASTBOUND	N/A	N/A	N/A	N/A	25	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	196	196	N/A	N/A

EAST-WEST CRITICAL VOLUMES 290
NORTH-SOUTH CRITICAL VOLUMES 196

THE SUM OF CRITICAL VOLUMES 486

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.273

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:4, 11TH STREET AND BLAINE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	389	146	0	0
EASTBOUND	0	139	279	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	220	360	76	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	0	0	0	2
EASTBOUND	0	0	1	0	1	0	2
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	1	1	0	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	389	N/A	146	N/A	N/A	N/A
EASTBOUND	N/A	N/A	139	N/A	279	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	219	219	N/A	219	N/A	N/A

EAST-WEST CRITICAL VOLUMES 668
NORTH-SOUTH CRITICAL VOLUMES 219

THE SUM OF CRITICAL VOLUMES 887

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.557

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.
Eastbound and Westbound approaches have opposed signal phases.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:5, 11TH STREET/CHICK HEARN COURT AND CHERRY STREET/US-110 NB ON-RAMP
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	78	436	328	0
EASTBOUND	100	198	50	0
NORTHBOUND	143	698	214	90
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	2	0	1	0	4
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	2	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	78	N/A	218	N/A	328	N/A
EASTBOUND	100	N/A	N/A	248	N/A	N/A
NORTHBOUND	143	N/A	698	N/A	107	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 428
NORTH-SOUTH CRITICAL VOLUMES 698

THE SUM OF CRITICAL VOLUMES 1126

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.734

LEVEL OF SERVICE C

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:6, 11TH STREET AND OLIVE AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	319	90	0
EASTBOUND	0	0	0	0
NORTHBOUND	100	1533	0	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	2	0	1	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	1	3	0	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	160	N/A	90	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	408	408	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 160
NORTH-SOUTH CRITICAL VOLUMES 408

THE SUM OF CRITICAL VOLUMES 568

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.337

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:7, 11TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	55	367	104	0
EASTBOUND	0	0	0	0
NORTHBOUND	4	35	0	0
SOUTHBOUND	0	560	58	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	55	N/A	236	236	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	4	N/A	18	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	309	309	N/A	N/A

EAST-WEST CRITICAL VOLUMES 236
NORTH-SOUTH CRITICAL VOLUMES 313

THE SUM OF CRITICAL VOLUMES 549

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.325

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:8, 11TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	55	319	29	0
EASTBOUND	0	0	0	0
NORTHBOUND	192	948	0	0
SOUTHBOUND	0	447	53	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	134	134	134	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	192	N/A	474	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	250	250	N/A	N/A

EAST-WEST CRITICAL VOLUMES 134
NORTH-SOUTH CRITICAL VOLUMES 474

THE SUM OF CRITICAL VOLUMES 608

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.360

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:9, 11TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	39	258	62	0
EASTBOUND	0	0	0	0
NORTHBOUND	57	923	0	0
SOUTHBOUND	0	575	84	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	180	N/A	180	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	57	N/A	462	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	330	330	N/A	N/A

EAST-WEST CRITICAL VOLUMES 180
NORTH-SOUTH CRITICAL VOLUMES 462

THE SUM OF CRITICAL VOLUMES 642

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.380

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:10, 12TH STREET AND OLIVE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	80	244	0	0
NORTHBOUND	0	1657	26	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	3	1	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	162	N/A	162	N/A	N/A
NORTHBOUND	N/A	N/A	421	421	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 162
NORTH-SOUTH CRITICAL VOLUMES 421

THE SUM OF CRITICAL VOLUMES 583

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.345

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, 12TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	223	35	0
NORTHBOUND	0	36	182	0
SOUTHBOUND	99	540	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	0	0	1	0	1	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	129	129	N/A	N/A
NORTHBOUND	N/A	N/A	36	N/A	182	N/A
SOUTHBOUND	99	N/A	270	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 129
NORTH-SOUTH CRITICAL VOLUMES 281

THE SUM OF CRITICAL VOLUMES 410

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.243

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:12, 12TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	143	283	40	0
NORTHBOUND	0	962	45	0
SOUTHBOUND	35	414	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	233	N/A	233	N/A	N/A
NORTHBOUND	N/A	N/A	504	504	N/A	N/A
SOUTHBOUND	35	N/A	207	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 233
NORTH-SOUTH CRITICAL VOLUMES 539

THE SUM OF CRITICAL VOLUMES 772

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.472

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:13, 12TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	36	245	37	0
NORTHBOUND	0	866	44	0
SOUTHBOUND	64	531	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	106	106	106	N/A	N/A
NORTHBOUND	N/A	N/A	455	455	N/A	N/A
SOUTHBOUND	64	N/A	266	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 106
NORTH-SOUTH CRITICAL VOLUMES 519

THE SUM OF CRITICAL VOLUMES 625

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.370

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, 12TH STREET AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	42	232	32	0
NORTHBOUND	0	440	54	0
SOUTHBOUND	89	330	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	2	1	0	0	4
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	0	1	1	0	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	76	76	76	N/A	N/A
NORTHBOUND	N/A	N/A	247	247	N/A	N/A
SOUTHBOUND	N/A	144	275	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 76
NORTH-SOUTH CRITICAL VOLUMES 336

THE SUM OF CRITICAL VOLUMES 412

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.244

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:15, PICO BOULEVARD AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	18	344	20	0
EASTBOUND	24	368	39	0
NORTHBOUND	98	230	66	9
SOUTHBOUND	40	510	94	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	1	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	182	N/A	200	N/A	N/A
EASTBOUND	N/A	206	N/A	226	N/A	N/A
NORTHBOUND	98	N/A	230	N/A	66	N/A
SOUTHBOUND	40	N/A	302	302	N/A	N/A

EAST-WEST CRITICAL VOLUMES 244
NORTH-SOUTH CRITICAL VOLUMES 400

THE SUM OF CRITICAL VOLUMES 644

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.343

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:16, PICO BOULEVARD AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	23	198	41	0
EASTBOUND	77	278	0	21
NORTHBOUND	60	879	23	0
SOUTHBOUND	28	358	46	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	0	1	0	0	2
EASTBOUND	1	0	1	0	1	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	23	N/A	N/A	239	N/A	N/A
EASTBOUND	77	N/A	278	N/A	0	N/A
NORTHBOUND	60	N/A	451	451	N/A	N/A
SOUTHBOUND	28	N/A	202	202	N/A	N/A

EAST-WEST CRITICAL VOLUMES 316
NORTH-SOUTH CRITICAL VOLUMES 479

THE SUM OF CRITICAL VOLUMES 795

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.430

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:17, 17TH STREET/I-10 WB ON-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	197	495	0	0
EASTBOUND	0	0	0	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	443	237	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	3	1	1	0	5

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	346	N/A	346	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	136	136	136	N/A

EAST-WEST CRITICAL VOLUMES 346
NORTH-SOUTH CRITICAL VOLUMES 136

THE SUM OF CRITICAL VOLUMES 482

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.257

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:18, 18TH STREET/I-10 EB OFF-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	1088	72	40
NORTHBOUND	0	0	199	0
SOUTHBOUND	127	445	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	3	0	1	0	4
NORTHBOUND	0	0	0	0	2	0	2
SOUTHBOUND	1	0	3	0	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	363	N/A	72	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	100	N/A
SOUTHBOUND	127	N/A	148	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 363
NORTH-SOUTH CRITICAL VOLUMES 227

THE SUM OF CRITICAL VOLUMES 590

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.331

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:19, 17TH STREET/I-10 WB OFF-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	166	920	203	0
EASTBOUND	0	0	0	0
NORTHBOUND	37	274	0	0
SOUTHBOUND	0	292	49	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	644	N/A	644	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	37	N/A	137	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	170	170	N/A	N/A

EAST-WEST CRITICAL VOLUMES 644
NORTH-SOUTH CRITICAL VOLUMES 207

THE SUM OF CRITICAL VOLUMES 851

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.467

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:20, 18TH STREET/I-10 EB ON-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	542	58	22	0
NORTHBOUND	0	505	21	0
SOUTHBOUND	32	290	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	542	N/A	40	40	N/A	N/A
NORTHBOUND	N/A	N/A	263	263	N/A	N/A
SOUTHBOUND	32	N/A	145	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 542
NORTH-SOUTH CRITICAL VOLUMES 295

THE SUM OF CRITICAL VOLUMES 837

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.458

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:1, OLYMPIC BOULEVARD & HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	57	1305	139	0
EASTBOUND	9	1088	118	0
NORTHBOUND	43	196	28	0
SOUTHBOUND	44	854	148	4

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	2	0	1	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	310	595	595	N/A	N/A
EASTBOUND	N/A	375	420	420	N/A	N/A
NORTHBOUND	43	N/A	112	112	N/A	N/A
SOUTHBOUND	44	N/A	427	N/A	148	N/A

EAST-WEST CRITICAL VOLUMES 604
NORTH-SOUTH CRITICAL VOLUMES 470
THE SUM OF CRITICAL VOLUMES 1074

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.696

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:2, OLYMPIC BOULEVARD & BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	26	1227	96	0
EASTBOUND	109	969	36	0
NORTHBOUND	121	777	96	0
SOUTHBOUND	37	770	111	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	380	485	485	N/A	N/A
EASTBOUND	109	N/A	502	502	N/A	N/A
NORTHBOUND	121	N/A	436	436	N/A	N/A
SOUTHBOUND	37	N/A	440	440	N/A	N/A

EAST-WEST CRITICAL VOLUMES 594
NORTH-SOUTH CRITICAL VOLUMES 561

THE SUM OF CRITICAL VOLUMES 1155

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.756

LEVEL OF SERVICE C

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:3, US-110 SB OFF-RAMP AND BLAINE STREET/CONNECTICUT STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	221	0	89	140
EASTBOUND	0	0	32	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	523	37	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	2	0	3
EASTBOUND	0	0	0	0	1	0	1
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	221	N/A	N/A	44	N/A
EASTBOUND	N/A	N/A	N/A	N/A	32	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	280	280	N/A	N/A

EAST-WEST CRITICAL VOLUMES 253
NORTH-SOUTH CRITICAL VOLUMES 280

THE SUM OF CRITICAL VOLUMES 533

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.299

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:4, 11TH STREET AND BLAINE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	489	366	0	0
EASTBOUND	0	85	301	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	177	535	44	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	0	0	0	2
EASTBOUND	0	0	1	0	1	0	2
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	1	1	0	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	489	N/A	366	N/A	N/A	N/A
EASTBOUND	N/A	N/A	85	N/A	301	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	177	N/A	290	290	N/A	N/A

EAST-WEST CRITICAL VOLUMES 790
NORTH-SOUTH CRITICAL VOLUMES 290

THE SUM OF CRITICAL VOLUMES 1080

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.700

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.
Eastbound and Westbound approaches have opposed signal phases.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:5, 11TH STREET/CHICK HEARN COURT AND CHERRY STREET/US-110 NB ON-RAMP
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	26	1024	563	0
EASTBOUND	46	203	6	0
NORTHBOUND	235	399	50	200
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	2	0	1	0	4
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	2	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	26	N/A	512	N/A	563	N/A
EASTBOUND	46	N/A	N/A	209	N/A	N/A
NORTHBOUND	235	N/A	399	N/A	25	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 609
NORTH-SOUTH CRITICAL VOLUMES 399

THE SUM OF CRITICAL VOLUMES 1008

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.647

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:6, 11TH STREET AND OLIVE AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	682	94	0
EASTBOUND	0	0	0	0
NORTHBOUND	162	1051	0	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	2	0	1	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	1	3	0	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	341	N/A	94	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	303	303	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 341
NORTH-SOUTH CRITICAL VOLUMES 303

THE SUM OF CRITICAL VOLUMES 644

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.382

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:7, 11TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	109	630	170	0
EASTBOUND	0	0	0	0
NORTHBOUND	5	145	0	0
SOUTHBOUND	0	806	120	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	109	N/A	400	400	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	5	N/A	72	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	463	463	N/A	N/A

EAST-WEST CRITICAL VOLUMES 400
NORTH-SOUTH CRITICAL VOLUMES 468

THE SUM OF CRITICAL VOLUMES 868

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.543

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:8, 11TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	89	636	76	0
EASTBOUND	0	0	0	0
NORTHBOUND	204	933	0	0
SOUTHBOUND	0	789	82	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	267	267	267	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	204	N/A	466	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	436	436	N/A	N/A

EAST-WEST CRITICAL VOLUMES 267
NORTH-SOUTH CRITICAL VOLUMES 640

THE SUM OF CRITICAL VOLUMES 907

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.572

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:9, 11TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	132	498	124	0
EASTBOUND	0	0	0	0
NORTHBOUND	101	1094	0	0
SOUTHBOUND	0	1012	217	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	377	N/A	377	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	101	N/A	547	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	614	614	N/A	N/A

EAST-WEST CRITICAL VOLUMES 377
NORTH-SOUTH CRITICAL VOLUMES 715
THE SUM OF CRITICAL VOLUMES 1092

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.709

LEVEL OF SERVICE C

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:10, 12TH STREET AND OLIVE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	70	199	0	0
NORTHBOUND	0	1089	39	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	3	1	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	134	N/A	134	N/A	N/A
NORTHBOUND	N/A	N/A	282	282	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 134
NORTH-SOUTH CRITICAL VOLUMES 282
THE SUM OF CRITICAL VOLUMES 416

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.247

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, 12TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	143	55	0
NORTHBOUND	0	134	232	0
SOUTHBOUND	99	830	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	0	0	1	0	1	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	99	99	N/A	N/A
NORTHBOUND	N/A	N/A	134	N/A	232	N/A
SOUTHBOUND	99	N/A	415	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 99
NORTH-SOUTH CRITICAL VOLUMES 415
THE SUM OF CRITICAL VOLUMES 514

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.305

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:12, 12TH STREET AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	153	284	69	0
NORTHBOUND	0	985	43	0
SOUTHBOUND	24	798	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	253	N/A	253	N/A	N/A
NORTHBOUND	N/A	N/A	514	514	N/A	N/A
SOUTHBOUND	24	N/A	399	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 253
NORTH-SOUTH CRITICAL VOLUMES 538

THE SUM OF CRITICAL VOLUMES 791

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.486

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

File: I:\Herald Examiner Site 11-16-05.xls, Worksheet: Formula Total, Row: 73
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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:13, 12TH STREET AND MAIN STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	95	223	62	0
NORTHBOUND	0	1094	82	0
SOUTHBOUND	70	1023	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	127	127	127	N/A	N/A
NORTHBOUND	N/A	N/A	588	588	N/A	N/A
SOUTHBOUND	70	N/A	512	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 127
NORTH-SOUTH CRITICAL VOLUMES 658

THE SUM OF CRITICAL VOLUMES 785

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.481

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, 12TH STREET AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	67	215	82	0
NORTHBOUND	0	588	86	0
SOUTHBOUND	117	650	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	2	1	0	0	4
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	0	1	1	0	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	91	91	91	N/A	N/A
NORTHBOUND	N/A	N/A	337	337	N/A	N/A
SOUTHBOUND	N/A	245	522	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 91
NORTH-SOUTH CRITICAL VOLUMES 522

THE SUM OF CRITICAL VOLUMES 613

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.363

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:15, PICO BOULEVARD AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	38	469	26	0
EASTBOUND	46	350	57	0
NORTHBOUND	80	206	64	36
SOUTHBOUND	17	797	78	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	1	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	247	N/A	286	N/A	N/A
EASTBOUND	N/A	193	N/A	260	N/A	N/A
NORTHBOUND	80	N/A	206	N/A	64	N/A
SOUTHBOUND	17	N/A	438	438	N/A	N/A

EAST-WEST CRITICAL VOLUMES 332
NORTH-SOUTH CRITICAL VOLUMES 518

THE SUM OF CRITICAL VOLUMES 850

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.467

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:16, PICO BOULEVARD AND BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	62	418	59	0
EASTBOUND	111	360	24	34
NORTHBOUND	67	798	33	0
SOUTHBOUND	43	781	68	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	0	1	0	0	2
EASTBOUND	1	0	1	0	1	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	62	N/A	N/A	477	N/A	N/A
EASTBOUND	111	N/A	360	N/A	24	N/A
NORTHBOUND	67	N/A	416	416	N/A	N/A
SOUTHBOUND	43	N/A	424	424	N/A	N/A

EAST-WEST CRITICAL VOLUMES 588
NORTH-SOUTH CRITICAL VOLUMES 491

THE SUM OF CRITICAL VOLUMES 1079

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.619

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:17, 17TH STREET/I-10 WB ON-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	121	1043	0	0
EASTBOUND	0	0	0	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	929	930	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	3	1	1	0	5

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	582	N/A	582	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	310	N/A	465	N/A

EAST-WEST CRITICAL VOLUMES 582
NORTH-SOUTH CRITICAL VOLUMES 465

THE SUM OF CRITICAL VOLUMES 1047

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.598

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:18, 18TH STREET/I-10 EB OFF-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	705	107	40
NORTHBOUND	0	0	159	0
SOUTHBOUND	235	704	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	3	0	1	0	4
NORTHBOUND	0	0	0	0	2	0	2
SOUTHBOUND	1	0	3	0	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	235	N/A	107	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	80	N/A
SOUTHBOUND	235	N/A	235	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 235
NORTH-SOUTH CRITICAL VOLUMES 315

THE SUM OF CRITICAL VOLUMES 550

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.309

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:19, 17TH STREET/I-10 WB OFF-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	131	601	129	0
EASTBOUND	0	0	0	0
NORTHBOUND	20	211	0	0
SOUTHBOUND	0	702	185	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	430	N/A	430	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	20	N/A	106	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	444	444	N/A	N/A

EAST-WEST CRITICAL VOLUMES 430
NORTH-SOUTH CRITICAL VOLUMES 464

THE SUM OF CRITICAL VOLUMES 894

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.496

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:20, 18TH STREET/I-10 EB ON-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITHOUT PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	808	365	116	0
NORTHBOUND	0	620	11	0
SOUTHBOUND	18	476	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	808	N/A	240	240	N/A	N/A
NORTHBOUND	N/A	N/A	316	316	N/A	N/A
SOUTHBOUND	18	N/A	238	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 808
NORTH-SOUTH CRITICAL VOLUMES 334

THE SUM OF CRITICAL VOLUMES 1142

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.661

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

Future (2010) With Project

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:1, OLYMPIC BOULEVARD & HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	47	802	61	0
EASTBOUND	29	1176	137	0
NORTHBOUND	8	37	4	0
SOUTHBOUND	63	518	26	72

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	2	0	1	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	147	382	382	N/A	N/A
EASTBOUND	N/A	383	479	479	N/A	N/A
NORTHBOUND	8	N/A	20	20	N/A	N/A
SOUTHBOUND	63	N/A	259	N/A	26	N/A

EAST-WEST CRITICAL VOLUMES 526
NORTH-SOUTH CRITICAL VOLUMES 267
THE SUM OF CRITICAL VOLUMES 793

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.487

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:2, OLYMPIC BOULEVARD & BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	26	911	43	0
EASTBOUND	43	1102	41	0
NORTHBOUND	97	811	47	0
SOUTHBOUND	58	501	111	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	245	368	368	N/A	N/A
EASTBOUND	N/A	287	449	449	N/A	N/A
NORTHBOUND	97	N/A	429	429	N/A	N/A
SOUTHBOUND	58	N/A	306	306	N/A	N/A

EAST-WEST CRITICAL VOLUMES 475
NORTH-SOUTH CRITICAL VOLUMES 487

THE SUM OF CRITICAL VOLUMES 962

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.613

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:3, US-110 SB OFF-RAMP AND BLAINE STREET/CONNECTICUT STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	285	0	328	98
EASTBOUND	0	0	25	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	373	20	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	2	0	3
EASTBOUND	0	0	0	0	1	0	1
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	285	N/A	N/A	164	N/A
EASTBOUND	N/A	N/A	N/A	N/A	25	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	196	196	N/A	N/A

EAST-WEST CRITICAL VOLUMES 310
NORTH-SOUTH CRITICAL VOLUMES 196

THE SUM OF CRITICAL VOLUMES 506

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.284

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:4, 11TH STREET AND BLAINE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	389	146	0	0
EASTBOUND	0	139	279	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	240	360	76	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	0	0	0	2
EASTBOUND	0	0	1	0	1	0	2
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	1	1	0	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	389	N/A	146	N/A	N/A	N/A
EASTBOUND	N/A	N/A	139	N/A	279	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	225	225	N/A	225	N/A	N/A

EAST-WEST CRITICAL VOLUMES 668
NORTH-SOUTH CRITICAL VOLUMES 225

THE SUM OF CRITICAL VOLUMES 893

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.561

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.
Eastbound and Westbound approaches have opposed signal phases.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:5, 11TH STREET/CHICK HEARN COURT AND CHERRY STREET/US-101 NB ON-RAMP
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	78	436	370	0
EASTBOUND	100	218	50	0
NORTHBOUND	143	698	203	101
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	2	0	1	0	4
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	2	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	78	N/A	218	N/A	370	N/A
EASTBOUND	100	N/A	N/A	268	N/A	N/A
NORTHBOUND	143	N/A	698	N/A	102	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 470
NORTH-SOUTH CRITICAL VOLUMES 698

THE SUM OF CRITICAL VOLUMES 1168

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.765

LEVEL OF SERVICE C

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:6, 11TH STREET AND OLIVE AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	361	97	0
EASTBOUND	0	0	0	0
NORTHBOUND	100	1536	0	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	2	0	1	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	1	3	0	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	180	N/A	97	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	409	409	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 180
NORTH-SOUTH CRITICAL VOLUMES 409

THE SUM OF CRITICAL VOLUMES 589

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.349

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:7, 11TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	55	420	104	0
EASTBOUND	0	0	0	0
NORTHBOUND	4	35	0	0
SOUTHBOUND	0	584	58	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	55	N/A	262	262	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	4	N/A	18	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	321	321	N/A	N/A

EAST-WEST CRITICAL VOLUMES 262
NORTH-SOUTH CRITICAL VOLUMES 325

THE SUM OF CRITICAL VOLUMES 587

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.348

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:8, 11TH STREET AND BROADWAY
DATE: 11/27/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	72	322	29	0
EASTBOUND	0	0	0	0
NORTHBOUND	242	963	0	0
SOUTHBOUND	0	455	53	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	141	141	141	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	242	N/A	482	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	254	254	N/A	N/A

EAST-WEST CRITICAL VOLUMES 141
NORTH-SOUTH CRITICAL VOLUMES 496

THE SUM OF CRITICAL VOLUMES 637

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.377

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:9, 11TH STREET AND MAIN STREET
DATE: 11/27/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	40	261	62	0
EASTBOUND	0	0	0	0
NORTHBOUND	67	952	0	0
SOUTHBOUND	0	578	85	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	182	N/A	182	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	67	N/A	476	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	332	332	N/A	N/A

EAST-WEST CRITICAL VOLUMES 182
NORTH-SOUTH CRITICAL VOLUMES 476

THE SUM OF CRITICAL VOLUMES 658

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.390

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:10, 12TH STREET AND OLIVE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	80	264	0	0
NORTHBOUND	0	1660	26	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	3	1	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	172	N/A	172	N/A	N/A
NORTHBOUND	N/A	N/A	422	422	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 172
NORTH-SOUTH CRITICAL VOLUMES 422

THE SUM OF CRITICAL VOLUMES 594

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.352

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, 12TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	247	35	0
NORTHBOUND	0	36	182	0
SOUTHBOUND	103	582	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	0	0	1	0	1	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	141	141	N/A	N/A
NORTHBOUND	N/A	N/A	36	N/A	182	N/A
SOUTHBOUND	103	N/A	291	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 141
NORTH-SOUTH CRITICAL VOLUMES 291

THE SUM OF CRITICAL VOLUMES 432

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.256

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:12, 12TH STREET AND BROADWAY
DATE: 11/27/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	163	283	51	0
NORTHBOUND	0	1055	45	0
SOUTHBOUND	51	436	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	248	N/A	248	N/A	N/A
NORTHBOUND	N/A	N/A	550	550	N/A	N/A
SOUTHBOUND	51	N/A	218	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 248
NORTH-SOUTH CRITICAL VOLUMES 601
THE SUM OF CRITICAL VOLUMES 849

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.529

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:13, 12TH STREET AND MAIN STREET
DATE: 11/27/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	47	248	37	0
NORTHBOUND	0	888	47	0
SOUTHBOUND	64	536	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	111	111	111	N/A	N/A
NORTHBOUND	N/A	N/A	468	468	N/A	N/A
SOUTHBOUND	64	N/A	268	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 111
NORTH-SOUTH CRITICAL VOLUMES 532

THE SUM OF CRITICAL VOLUMES 643

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.381

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, 12TH STREET AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	42	238	32	0
NORTHBOUND	0	440	54	0
SOUTHBOUND	89	330	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	2	1	0	0	4
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	0	1	1	0	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	78	78	78	N/A	N/A
NORTHBOUND	N/A	N/A	247	247	N/A	N/A
SOUTHBOUND	N/A	144	275	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 78
NORTH-SOUTH CRITICAL VOLUMES 336

THE SUM OF CRITICAL VOLUMES 414

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.245

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:15, PICO BOULEVARD AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	18	358	20	0
EASTBOUND	24	388	39	0
NORTHBOUND	98	230	66	9
SOUTHBOUND	40	537	105	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	1	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	188	N/A	208	N/A	N/A
EASTBOUND	N/A	215	N/A	236	N/A	N/A
NORTHBOUND	98	N/A	230	N/A	66	N/A
SOUTHBOUND	40	N/A	321	321	N/A	N/A

EAST-WEST CRITICAL VOLUMES 254
NORTH-SOUTH CRITICAL VOLUMES 419

THE SUM OF CRITICAL VOLUMES 673

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.359

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:16, PICO BOULEVARD AND BROADWAY
DATE: 11/27/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	23	198	49	0
EASTBOUND	98	278	0	21
NORTHBOUND	60	920	23	0
SOUTHBOUND	30	399	60	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	0	1	0	0	2
EASTBOUND	1	0	1	0	1	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	23	N/A	N/A	247	N/A	N/A
EASTBOUND	98	N/A	278	N/A	0	N/A
NORTHBOUND	60	N/A	472	472	N/A	N/A
SOUTHBOUND	30	N/A	230	230	N/A	N/A

EAST-WEST CRITICAL VOLUMES 345
NORTH-SOUTH CRITICAL VOLUMES 502

THE SUM OF CRITICAL VOLUMES 847

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.465

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:17, 17TH STREET/I-10 WB ON-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	197	548	0	0
EASTBOUND	0	0	0	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	443	237	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	3	1	1	0	5

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	372	N/A	372	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	136	136	136	N/A

EAST-WEST CRITICAL VOLUMES 372
NORTH-SOUTH CRITICAL VOLUMES 136

THE SUM OF CRITICAL VOLUMES 508

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.271

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:18, 18TH STREET/I-10 EB OFF-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	1109	72	40
NORTHBOUND	0	0	199	0
SOUTHBOUND	127	445	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	3	0	1	0	4
NORTHBOUND	0	0	0	0	2	0	2
SOUTHBOUND	1	0	3	0	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	370	N/A	72	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	100	N/A
SOUTHBOUND	127	N/A	148	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 370
NORTH-SOUTH CRITICAL VOLUMES 227

THE SUM OF CRITICAL VOLUMES 597

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.335

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:19, 17TH STREET/I-10 WB OFF-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	166	934	203	0
EASTBOUND	0	0	0	0
NORTHBOUND	37	274	0	0
SOUTHBOUND	0	314	49	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	652	N/A	652	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	37	N/A	137	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	182	182	N/A	N/A

EAST-WEST CRITICAL VOLUMES 652
NORTH-SOUTH CRITICAL VOLUMES 219

THE SUM OF CRITICAL VOLUMES 871

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.481

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:20, 18TH STREET/I-10 EB ON-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: AM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	542	58	22	0
NORTHBOUND	0	505	21	0
SOUTHBOUND	32	290	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	542	N/A	40	40	N/A	N/A
NORTHBOUND	N/A	N/A	263	263	N/A	N/A
SOUTHBOUND	32	N/A	145	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 542
NORTH-SOUTH CRITICAL VOLUMES 295

THE SUM OF CRITICAL VOLUMES 837

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.458

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:1, OLYMPIC BOULEVARD & HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	57	1319	139	0
EASTBOUND	9	1088	146	0
NORTHBOUND	43	196	28	0
SOUTHBOUND	44	868	148	4

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	2	0	1	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	315	600	600	N/A	N/A
EASTBOUND	N/A	384	429	429	N/A	N/A
NORTHBOUND	43	N/A	112	112	N/A	N/A
SOUTHBOUND	44	N/A	434	N/A	148	N/A

EAST-WEST CRITICAL VOLUMES 609
NORTH-SOUTH CRITICAL VOLUMES 477

THE SUM OF CRITICAL VOLUMES 1086

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.704

LEVEL OF SERVICE C

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:2, OLYMPIC BOULEVARD & BROADWAY
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	36	1228	96	0
EASTBOUND	109	969	36	0
NORTHBOUND	134	777	106	0
SOUTHBOUND	37	770	111	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	357	502	502	N/A	N/A
EASTBOUND	109	N/A	502	502	N/A	N/A
NORTHBOUND	134	N/A	442	442	N/A	N/A
SOUTHBOUND	37	N/A	440	440	N/A	N/A

EAST-WEST CRITICAL VOLUMES 611
NORTH-SOUTH CRITICAL VOLUMES 574

THE SUM OF CRITICAL VOLUMES 1185

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.778

LEVEL OF SERVICE C

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:3, US-110 SB OFF-RAMP AND BLAINE STREET/CONNECTICUT STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	264	0	89	140
EASTBOUND	0	0	32	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	523	37	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	0	2	0	3
EASTBOUND	0	0	0	0	1	0	1
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	264	N/A	N/A	44	N/A
EASTBOUND	N/A	N/A	N/A	N/A	32	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	280	280	N/A	N/A

EAST-WEST CRITICAL VOLUMES	296
NORTH-SOUTH CRITICAL VOLUMES	280
THE SUM OF CRITICAL VOLUMES	576
NUMBER OF CRITICAL CLEARANCE INTERVALS	3*
CMA VALUE	0.323
LEVEL OF SERVICE	A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:4, 11TH STREET AND BLAINE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	489	366	0	0
EASTBOUND	0	85	301	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	220	535	44	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	0	0	0	2
EASTBOUND	0	0	1	0	1	0	2
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	1	1	0	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	489	N/A	366	N/A	N/A	N/A
EASTBOUND	N/A	N/A	85	N/A	301	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	220	N/A	290	290	N/A	N/A

EAST-WEST CRITICAL VOLUMES 790
NORTH-SOUTH CRITICAL VOLUMES 290

THE SUM OF CRITICAL VOLUMES 1080

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.700

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.
Eastbound and Westbound approaches have opposed signal phases.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:5, 11TH STREET/CHICK HEARN COURT AND CHERRY STREET/US-110 NB ON-RAMP
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS ** MIN ON GREEN	MAX ON RED
WESTBOUND	26	1024	616	0
EASTBOUND	46	246	6	0
NORTHBOUND	235	399	45	205
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	2	0	1	0	4
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	2	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	26	N/A	512	N/A	616	N/A
EASTBOUND	46	N/A	N/A	252	N/A	N/A
NORTHBOUND	235	N/A	399	N/A	22	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 662
NORTH-SOUTH CRITICAL VOLUMES 399

THE SUM OF CRITICAL VOLUMES 1061

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.686

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:6, 11TH STREET AND OLIVE AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	735	105	0
EASTBOUND	0	0	0	0
NORTHBOUND	162	1053	0	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	2	0	1	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	1	3	0	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	368	N/A	105	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	304	304	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 368
NORTH-SOUTH CRITICAL VOLUMES 304
THE SUM OF CRITICAL VOLUMES 672

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.398

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:7, 11TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	109	712	170	0
EASTBOUND	0	0	0	0
NORTHBOUND	5	145	0	0
SOUTHBOUND	0	858	120	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	109	N/A	441	441	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	5	N/A	72	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	489	489	N/A	N/A

EAST-WEST CRITICAL VOLUMES 441
NORTH-SOUTH CRITICAL VOLUMES 494
THE SUM OF CRITICAL VOLUMES 935

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.593

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:8, 11TH STREET AND BROADWAY
DATE: 11/27/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	120	638	76	0
EASTBOUND	0	0	0	0
NORTHBOUND	284	963	0	0
SOUTHBOUND	0	802	82	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	1	1	0	0	3
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	278	278	278	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	284	N/A	482	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	442	442	N/A	N/A

EAST-WEST CRITICAL VOLUMES 278
NORTH-SOUTH CRITICAL VOLUMES 726

THE SUM OF CRITICAL VOLUMES 1004

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.644

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:9, 11TH STREET AND MAIN STREET
DATE: 11/27/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	134	504	124	0
EASTBOUND	0	0	0	0
NORTHBOUND	103	1126	0	0
SOUTHBOUND	0	1027	233	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	381	N/A	381	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	103	N/A	563	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	630	630	N/A	N/A

EAST-WEST CRITICAL VOLUMES 381
NORTH-SOUTH CRITICAL VOLUMES 733
THE SUM OF CRITICAL VOLUMES 1114

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.725

LEVEL OF SERVICE C

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:10, 12TH STREET AND OLIVE STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	70	242	0	0
NORTHBOUND	0	1091	39	0
SOUTHBOUND	0	0	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	3	1	0	0	4
SOUTHBOUND	0	0	0	0	0	0	0

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	156	N/A	156	N/A	N/A
NORTHBOUND	N/A	N/A	282	282	N/A	N/A
SOUTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 156
NORTH-SOUTH CRITICAL VOLUMES 282

THE SUM OF CRITICAL VOLUMES 438

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.260

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:11, 12TH STREET AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	195	55	0
NORTHBOUND	0	134	232	0
SOUTHBOUND	117	924	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	1	1	0	0	2
NORTHBOUND	0	0	1	0	1	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	125	125	N/A	N/A
NORTHBOUND	N/A	N/A	134	N/A	232	N/A
SOUTHBOUND	117	N/A	462	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 125
NORTH-SOUTH CRITICAL VOLUMES 462
THE SUM OF CRITICAL VOLUMES 587

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.348

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:12, 12TH STREET AND BROADWAY
DATE: 11/27/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	187	284	111	0
NORTHBOUND	0	1124	43	0
SOUTHBOUND	59	847	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	291	N/A	291	N/A	N/A
NORTHBOUND	N/A	N/A	584	584	N/A	N/A
SOUTHBOUND	59	N/A	424	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 291
NORTH-SOUTH CRITICAL VOLUMES 643
THE SUM OF CRITICAL VOLUMES 934

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.592

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

File: I:\Herald Examiner Site 11-16-05.xls, Worksheet: Formula Total, Row: 113
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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:13, 12TH STREET AND MAIN STREET
DATE: 11/27/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	115	229	62	0
NORTHBOUND	0	1113	85	0
SOUTHBOUND	70	1044	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	135	135	135	N/A	N/A
NORTHBOUND	N/A	N/A	599	599	N/A	N/A
SOUTHBOUND	70	N/A	522	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 135
NORTH-SOUTH CRITICAL VOLUMES 669
THE SUM OF CRITICAL VOLUMES 804

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.496

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:14, 12TH STREET AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	67	223	82	0
NORTHBOUND	0	588	86	0
SOUTHBOUND	117	650	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	1	2	1	0	0	4
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	0	1	1	0	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	93	93	93	N/A	N/A
NORTHBOUND	N/A	N/A	337	337	N/A	N/A
SOUTHBOUND	N/A	245	522	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 93
NORTH-SOUTH CRITICAL VOLUMES 522

THE SUM OF CRITICAL VOLUMES 615

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.364

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

Capacity used = 1350.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:15, PICO BOULEVARD AND HILL STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	38	478	26	0
EASTBOUND	46	393	57	0
NORTHBOUND	80	206	71	29
SOUTHBOUND	17	846	98	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	1	0	1	0	0	2
NORTHBOUND	1	0	1	0	1	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	247	N/A	295	N/A	N/A
EASTBOUND	N/A	213	N/A	283	N/A	N/A
NORTHBOUND	80	N/A	206	N/A	71	N/A
SOUTHBOUND	17	N/A	472	472	N/A	N/A

EAST-WEST CRITICAL VOLUMES 341
NORTH-SOUTH CRITICAL VOLUMES 552

THE SUM OF CRITICAL VOLUMES 893

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.495

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:16, PICO BOULEVARD AND BROADWAY
DATE: 11/27/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	62	418	70	0
EASTBOUND	157	360	24	34
NORTHBOUND	67	875	33	0
SOUTHBOUND	47	833	80	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	1	0	0	1	0	0	2
EASTBOUND	1	0	1	0	1	0	3
NORTHBOUND	1	0	1	1	0	0	3
SOUTHBOUND	1	0	1	1	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	62	N/A	N/A	488	N/A	N/A
EASTBOUND	157	N/A	360	N/A	24	N/A
NORTHBOUND	67	N/A	454	454	N/A	N/A
SOUTHBOUND	47	N/A	456	456	N/A	N/A

EAST-WEST CRITICAL VOLUMES 645
NORTH-SOUTH CRITICAL VOLUMES 523

THE SUM OF CRITICAL VOLUMES 1168

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.679

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

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CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:17, 17TH STREET/I-10 WB ON-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	121	1110	0	0
EASTBOUND	0	0	0	0
NORTHBOUND	0	0	0	0
SOUTHBOUND	0	929	930	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	0	0	0	0	0	0	0
SOUTHBOUND	0	0	3	1	1	0	5

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	616	N/A	616	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	310	N/A	465	N/A

EAST-WEST CRITICAL VOLUMES 616
NORTH-SOUTH CRITICAL VOLUMES 465

THE SUM OF CRITICAL VOLUMES 1081

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.621

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:18, 18TH STREET/I-10 EB OFF-RAMP AND GRAND AVENUE
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	0	747	107	40
NORTHBOUND	0	0	159	0
SOUTHBOUND	235	704	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	0	0	3	0	1	0	4
NORTHBOUND	0	0	0	0	2	0	2
SOUTHBOUND	1	0	3	0	0	0	4

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	N/A	N/A	249	N/A	107	N/A
NORTHBOUND	N/A	N/A	N/A	N/A	80	N/A
SOUTHBOUND	235	N/A	235	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 249
NORTH-SOUTH CRITICAL VOLUMES 315

THE SUM OF CRITICAL VOLUMES 564

NUMBER OF CRITICAL CLEARANCE INTERVALS 3*

CMA VALUE 0.317

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:19, 17TH STREET/I-10 WB OFF-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH			** RIGHT TURNS	**
	LEFT	THROUGH	MIN ON GREEN	MAX ON RED
WESTBOUND	131	629	129	0
EASTBOUND	0	0	0	0
NORTHBOUND	20	211	0	0
SOUTHBOUND	0	729	185	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	1	0	1	0	0	2
EASTBOUND	0	0	0	0	0	0	0
NORTHBOUND	1	0	2	0	0	0	3
SOUTHBOUND	0	0	1	1	0	0	2

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	444	N/A	444	N/A	N/A
EASTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
NORTHBOUND	20	N/A	106	N/A	N/A	N/A
SOUTHBOUND	N/A	N/A	457	457	N/A	N/A

EAST-WEST CRITICAL VOLUMES 444
NORTH-SOUTH CRITICAL VOLUMES 477

THE SUM OF CRITICAL VOLUMES 921

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.514

LEVEL OF SERVICE ..... A

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* Includes CMA value decreased due to ATCS Implementation.

CRAIN & ASSOCIATES
CMA CALCULATIONS

INTERSECTION:20, 18TH STREET/I-10 EB ON-RAMP AND LOS ANGELES STREET
DATE: 11/16/2005 INITIALS: RF PERIOD: PM PEAK HOUR
CASE: FUTURE (2010) WITH PROJECT

** INPUT VOLUMES **

APPROACH	LEFT	THROUGH	** RIGHT TURNS MIN ON GREEN	MAX ON RED **
WESTBOUND	0	0	0	0
EASTBOUND	808	365	116	0
NORTHBOUND	0	620	11	0
SOUTHBOUND	18	476	0	0

** NUMBER OF LANES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED	TOTAL LANES
WESTBOUND	0	0	0	0	0	0	0
EASTBOUND	1	0	1	1	0	0	3
NORTHBOUND	0	0	1	1	0	0	2
SOUTHBOUND	1	0	2	0	0	0	3

** ASSIGNED LANE VOLUMES **

APPROACH	LEFT ONLY	LEFT SHARED	THROUGH ONLY	RIGHT SHARED	RIGHT ONLY	L/T/R SHARED
WESTBOUND	N/A	N/A	N/A	N/A	N/A	N/A
EASTBOUND	808	N/A	240	240	N/A	N/A
NORTHBOUND	N/A	N/A	316	316	N/A	N/A
SOUTHBOUND	18	N/A	238	N/A	N/A	N/A

EAST-WEST CRITICAL VOLUMES 808
NORTH-SOUTH CRITICAL VOLUMES 334

THE SUM OF CRITICAL VOLUMES 1142

NUMBER OF CRITICAL CLEARANCE INTERVALS 2*

CMA VALUE 0.661

LEVEL OF SERVICE ..... B

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* Includes CMA value decreased due to ATCS Implementation.