

## **2. Existing Conditions**

A comprehensive data collection effort was undertaken to develop a detailed description of existing circulation and parking conditions within the study area. The assessment of conditions relevant to this study includes an inventory of the street system, the traffic volumes on these facilities, the circulation related to event centers adjacent to the project site, operating conditions of key intersections, existing transit services, existing parking conditions, and pedestrian activity.

### **Regional Roadway System**

The project site is served by an extensive freeway network. Primary regional access to the study area is provided by the Santa Monica (I-10) and Harbor (I-110/SR 110) freeways (see Figure 1). The Santa Monica Freeway runs in an east-west direction south of the proposed study site, while the Harbor Freeway runs north-south just west of the site. These two facilities also provide access to the Hollywood (US 101), Pasadena (SR 110) and Golden State (I-5) freeways to the north, to the San Bernardino (I-10) and Pomona (SR 60) freeways to the east, and to the Santa Ana (I-5) freeway to the south.

Being located within the Downtown Los Angeles area, there are numerous freeway ramps to and from the Santa Monica and Harbor freeways which provide access for the study area (see Figure 1). On-ramps to the Santa Monica Freeway are at Flower Street, Grand Avenue, and Los Angeles Street. Off-ramps from the Santa Monica Freeway are provided at Hoover Street, Pico Boulevard/Cherry Street, Grand Avenue, and Los Angeles Street. On-ramps to the Harbor Freeway are provided at 8<sup>th</sup> Street, Olympic Boulevard/11<sup>th</sup> Street, and Washington Boulevard. Harbor Freeway off-ramps are located at 9<sup>th</sup> Street/James Woods, Olympic Boulevard/Blaine Street/11<sup>th</sup> Street, Pico Boulevard/Cherry Street, and Adams Boulevard.

### **Local Roadway System**

The local roadway system in the vicinity of the project site forms a comprehensive grid system allowing for several options to access the area (see Figure 1). Several of the streets function as one-way couplets, while others provide for two-way travel. The major north/south streets serving the study area include Figueroa Street, Flower Street, Hope Street, and Grand Avenue. The major east-west streets are 9<sup>th</sup> Street, Olympic Boulevard, 11<sup>th</sup> Street, Pico Boulevard, Venice Boulevard, and Washington Boulevard.

The project site would be directly served by Olympic Boulevard on the north, Pico Boulevard on the south, Figueroa and Flower Streets on the east and Cherry Street on the west. Brief descriptions of these facilities are include below:

Olympic Boulevard – Olympic Boulevard is a two-way street, which travels in an east-west direction providing six travel lanes in the vicinity of the project. There are peak hour parking restrictions on both sides of the street.

11<sup>th</sup> Street – 11<sup>th</sup> Street travels in the east-west direction. It is a two-way street between Cherry Street and Flower Street. Between Cherry Street and Figueroa Street, 11<sup>th</sup> Street is a five-lane street with two lanes eastbound and three lanes westbound. Between Figueroa Street and Flower Street, 11<sup>th</sup> Street is a four-lane street with two travel lanes in each direction. East of Flower Street it is a one-way westbound street with three travel lanes.

Pico Boulevard – Pico Boulevard is an east-west street providing a total of five travel lanes west of Figueroa Street (two westbound and three eastbound). East of Figueroa Street, Pico Boulevard provides two travel lanes in both directions.

Figueroa Street – In the vicinity of the project site, Figueroa is a two-way street, providing two southbound lanes and four northbound lanes. North of Olympic Boulevard, Figueroa Street is a one-way northbound street providing a total of four travel lanes. North of 9<sup>th</sup> Street, Figueroa Street provides five northbound travel lanes. The northbound curb lane is a “bus only” lane during the morning peak period (6:00 AM – 9:00 AM).

Flower Street – Flower Street is a one-way southbound street, providing four travel lanes within the vicinity of the project site. A Blue Line station is located on Flower Street just north of Pico Boulevard.

Physical characteristics of the streets serving the study area, including the number of lanes, median type, and on-street parking restrictions, are presented in Table 2.

## **Los Angeles Convention Center Circulation**

The Los Angeles Convention Center is located adjacent to the project site. General access to the Convention Center is provided by the same freeway and roadway facilities discussed above.

The Convention Center provides parking in several off-street parking areas. Parking garages are located at the South Hall, West Hall, Cherry Street Garage and the Venice Garage, as shown in Figure 2. Access to the South Hall parking area is generally provided off of Venice Boulevard, while the West Hall is accessed via Cherry Street and 11<sup>th</sup> Street, as well as from Pico Boulevard. The Cherry Street Garage is accessed from Cherry Street and the Venice Garage from Venice Boulevard.

The Los Angeles Convention Center has a highly developed system to guide traffic circulation on the public streets around the Convention Center site. This system has two basic components, one of which relates to patrons traveling to the Center’s parking facilities in private automobiles and one oriented toward taxicabs and shuttle busses.

The circulation system established for patron vehicles is based on a clockwise rotation pattern around the site, which emphasizes right-hand turns into the parking facilities and discourages unsignalized left-hand turns.

Off-street access for taxicabs and shuttle busses occurs at Gilbert Lindsay Plaza (northwest corner of Figueroa Street and Pico Boulevard), and along the south side of Pico Boulevard (between Cherry and Figueroa Streets).

TABLE 2. EXISTING SURFACE STREET CHARACTERISTICS

SEGMENT	FROM	TO	LANE		MEDIAN TYPE	PARKING RESTRICTIONS		SPEED LIMIT	
			NB/EB	SB/WB		NB/EB	SB/WB		
WASHINGTON BLVD.	HILL STREET	OLIVE STREET	2	2	RM	NSAT	NSAT	30	
	OLIVE STREET	GRAND AVENUE	2	2	RM	NSAT	NSAT	30	
	GRAND AVENUE	HOPE STREET	2	2	RM	NSAT	NSAT	30	
	HOPE STREET	FLOWER STREET	2	2	RM	NSAT	NSAT	30	
	FLOWER STREET	FIGUEROA STREET	3	3	DSY	NSAT	NPAT	25	
	FIGUEROA STREET	GEORGIA	3	3	2LT	NSAT 7-9a, 3:30-7p, 1 HR PA 9a-3:30p	NSAT 4p-6p	35	
GEORGIA	CHERRY STREET	3	3	2LT	NSAT	NSAT	35		
GRAND AVENUE	WASHINGTON	18TH STREET	2	3	DSY	NSAT		30	
	9TH STREET	OLYMPIC BLVD.		5			1 HR PA 8a-6p	35	
	OLYMPIC	11TH STREET		4			2 HR PA 8a-6p	35	
	11TH STREET	12TH STREET		4			2 HR PA 8a-6p	35	
	12TH STREET	PICO BLVD.		4			2 HR PA 8a-6p	35	
	PICO BLVD.	VENICE BLVD.		4			2 HR PA 8a-6p, LZ	30	
	VENICE BLVD.	17TH STREET		4			NSAT	30	
	17TH STREET	18TH STREET		4			NSAT	30	
HOPE STREET	WASHINGTON BLVD.	18TH STREET	1	1	DSY	4 HR PA 6a-5p, NPAT 5p-6a	LZ, 1 HR PA 8a-6p	25	
	VENICE BLVD.	PICO BLVD.	2	2	DSY	2 HR PA 8a-6p, LZ	2 HR PA 8a-6p, LZ	30	
	PICO BLVD.	12TH STREET	2	2	DSY	1 HR PA 8a-6p	1 HR PA 8a-6p	30	
	12TH STREET	11TH STREET	2	2	DSY	1 HR PA 8a-6p	1 HR PA 8a-6p	30	
	11TH STREET	OLYMPIC BLVD.	2	2	DSY	NPAT, 1 HR PA 8a-6p	NSAT, 2 HR PA 8a-6p	30	
	OLYMPIC BLVD.	9TH STREET	2	2	DSY	NSAT	NSAT	30	
	9TH STREET	8TH STREET	2	2	DSY	1 HR PA 8a-6p	1 HR PA 8a-6p	30	
	8TH STREET	7TH STREET	2	2	DSY	1 HR PA 8a-6p	NSAT	30	
	FLOWER STREET	8TH STREET	9TH STREET		5			1 HR PA 8a-6p; NSAT	35
		9TH STREET	OLYMPIC BLVD.		5			1 HR PA 8a-6p; NS 7-9a, 3-8p, 1 HR PA 9a-3p	35
OLYMPIC BLVD.		11TH STREET		4			2 HR PA 8a-6p; NS 7-9a, 3-8p, 1 PA 9a-3p	35	
11TH STREET		12TH STREET		4			NSAT	35	
12TH STREET		PICO BLVD.		3			NSAT	30	
PICO BLVD.		VENICE BLVD.		3			NSAT; NS 4-6p, 1 HR PA 8a-4p	30	
VENICE BLVD.		18TH STREET		3			NSAT; NS 4-6p, 1 HR PA 8a-4p	30	
18TH STREET		WASHINGTON BLVD.		3			NSAT; NS 4-6p, 1 HR PA 8a-4p	30	
FIGUEROA STREET	WASHINGTON BLVD.	18TH STREET	4	2	2LT	NP 6a-10p	NP 7-9a, 3-6p, 1 HR PA 9a-3p	35	
	18TH STREET	VENICE BLVD.	4	2	2LT	NS 7-9a, 3-6p, 1 HR PA 9a-3p, NSAT	NP 7-9a, 3-7p, 1 HR PA 9a-3p	35	
	VENICE BLVD.	PICO BLVD.	4	2	2LT	NS 7-9a, 3-6p, 2 HR PA 9a-3p	NSAT	35	
	PICO BLVD.	12TH STREET	4	2	2LT	NSAT	NSAT	35	
	12TH STREET	OLYMPIC BLVD.	4	2	2LT	NSAT	NSAT	35	
	OLYMPIC BLVD.	9TH STREET	4	2	2LT	NS 7-9a, 3-7p, 1 HR PA 9a-3p		35	
	9TH STREET	8TH STREET	5	2	2LT	NS 7-9a, 3-7p, 1 HR PA 9a-3p, NSAT		35	
VENICE BLVD.	HILL STREET	OLIVE STREET	2	2	DSY	NPAT, NS 4-6p	NS 4-6p, NP 8a-4p	30	
	OLIVE STREET	GRAND AVENUE	2	2	DSY	NPAT	NS 4-6p, NPAT	30	
	GRAND AVENUE	HOPE STREET	2	2	DSY	NPAT	NS 4-6p, NP 8a-4p	20	
	HOPE STREET	FLOWER STREET	2	2	DSY	NSAT	NSAT	30	
	FLOWER STREET	FIGUEROA STREET	2	2	DSY	NSAT	NSAT, NS 7-9a, 4-6p, PA 9a-4p	35	
	FIGUEROA STREET	CONVENTION CENTER DR	2	2	DSY	NSAT	NSAT	30	
	CONVENTION CENTER DR	OAK STREET	2	2	2LT	1 HR PA 8a-6p, NSAT	NSAT	30	

TABLE 2 (CONTINUED) EXISTING SURFACE STREET CHARACTERISTICS

SEGMENT	FROM	TO	LANE		MEDIAN TYPE	PARKING RESTRICTIONS		SPEED LIMIT
			NB/EB	SB/WB		NB/EB	SB/WB	
MICO BLVD.	HILL STREET	OLIVE STREET	2	2	DSY	NS 7-9a, 4-6p, 1 HR PA 9a-4p	NS 7-9a, 4-6p, 1 HR PA 9a-4p	30
	OLIVE STREET	GRAND AVENUE	2	2	DSY	NS 7-9a, 4-6p, 1 HR PA 9a-4p	NS 7-9a, 4-6p, 1 HR PA 9a-4p	30
	GRAND AVENUE	HOPE STREET	2	2	DSY	NS 7-9a, 4-8p, 1 HR PA 9a-4p	NS 7-9a, 4-6p, 1 HR PA 9a-4p	30
	HOPE STREET	FLOWER STREET	2	2	DSY	NS 7-9a, 4-6p, 1 HR PA 9a-4p	NS 7-9a, 4-6p, 1 HR PA 9a-4p	30
	FLOWER STREET	FIGUEROA STREET	2	2	DSY	NS 7-9a, 4-8p	NSAT	30
	FIGUEROA STREET	CONVENTION CENTER DR	2	2	DSY	NSAT	NSAT	35
	CONVENTION CENTER DR	CHERRY STREET	3	3	RM	NSAT	NSAT	35
	CHERRY STREET	ALBANY	2	2	2LT	NSAT	NSAT	
12TH STREET	FIGUEROA STREET	FLOWER STREET	2	2	DSY	NSAT	NSAT	30
	FLOWER STREET	HOPE STREET	2			2 HR PA 8a-6p		30
	HOPE STREET	GRAND AVENUE	2			2 HR PA 8a-6p		30
	GRAND AVENUE	OLIVE STREET	2			2 HR PA 8a-6p		30
	OLIVE STREET	HILL STREET	2			2 HR PA 8a-6p; NSAT		30
11TH STREET	OLIVE STREET	GRAND AVENUE		2			1 HR PA 8a-3p; 1 HR PA 8a-6p	
	GRAND AVENUE	HOPE STREET		2			1 HR PA 8a-6p	
	HOPE STREET	FLOWER STREET		3			NSAT	
	FLOWER STREET	FIGUEROA STREET	2	2	DSY	NSAT	NSAT	
	FIGUEROA STREET	GEORGIA STREET	2	3	2LT	NSAT	NSAT	
	GEORGIA STREET	BYRAM STREET	2	3	DSY	5 MIN PAX LOADING	NSAT	
	BYRAM STREET	BLAINE STREET	2	2	DSY	NSAT	NSAT	
OLYMPIC BLVD.	HILL STREET	OLIVE STREET	3	3	DSY	NP 7-10a, 4-6p, 1 HR PA 10a-4p	NP 7-9a, 3-7p, 2 HR PA 9a-3p	
	OLIVE STREET	GRAND AVENUE	3	3	DSY	NP 7-10a, 4-6p, 2 HR PA 10a-4p	LZ, NSAT	
	GRAND AVENUE	HOPE STREET	3	3	DSY	NP 7-10a, 4-6p, 2 HR PA 10a-4p	NP 7-9a, 3-7p, 2 HR PA 9a-3p	
	HOPE STREET	FLOWER STREET	3	3	DSY	NP 7-10a, 4-6p, 2 HR PA 10a-4p	NP 7-10a, 3-7p, 2 HR PA 10a-3p	
	FLOWER STREET	FIGUEROA STREET	3	3	2LT	LZ	NP 7-9a, 3-7p, 2 HR PA 9a-3p	
	FIGUEROA STREET	GEORGIA STREET	3	3	2LT	NSAT	NP 7-9a, 3-8p, 2 HR PA 9a-3p, NSAT	
	GEORGIA STREET	CHERRY STREET	4	3	2LT	NSAT	NSAT	35
	CHERRY STREET	BLAINE STREET	5	3	2LT	NP 7-10a, 3-7p, 2 HR PA 10a-3p, NSAT	NP 7-9a, 3-7p, 2 HR PA 9a-3p	35
9TH STREET	GARLAND AVENUE	GEORGIA STREET	2			NSAT		30
	GEORGIA STREET	FRANCISCO STREET	3			NSAT		30
	FRANCISCO STREET	FIGUEROA STREET	4			NSAT		20
	FIGUEROA STREET	FLOWER STREET	5			NSAT		35
	FLOWER STREET	HOPE STREET	5			NS 7-9a, 3-7p, 1 HR PA 9a-3p; 1 HR PA 8a-6p		35
	HOPE STREET	GRAND AVENUE	5			NS 7-9a, 3-7p, 1 HR PA 9a-3p; 1 HR PA 8a-6p		35

Notes:

LANES:

# = Number of lanes  
 A/W = Off-Peak/Peak Number of lanes  
 \* = Not a through street during school hours

Parking: PA = Parking Allowed

NSAT = No Stopping Anytime  
 NS = No Stopping  
 LZ = Loading Zone

MEDIAN TYPE:

DSY = Double Solid Yellow Centerline  
 SDY = Single Dashed Yellow Centerline  
 2LT = Dual Left Turn Centerline  
 RM = Raised Median  
 UD = Undivided Lane

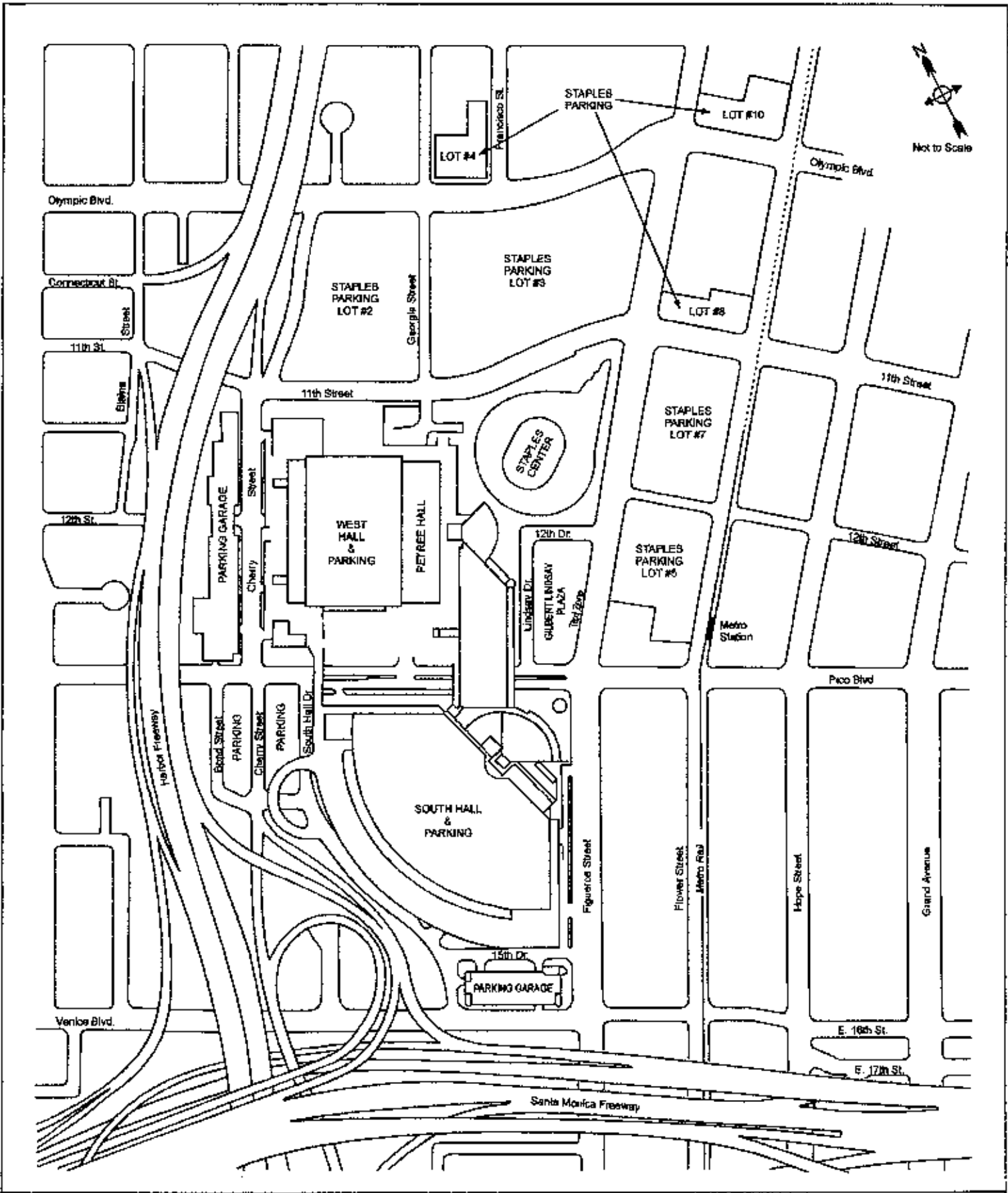


Figure 2  
Project Site - Current and Adjacent Uses

Los Angeles Entertainment District

The Mobility Group  
Transportation Strategies & Solutions

With **KAKU ASSOCIATES**

## **STAPLES Center Circulation**

The recently completed STAPLES Center is also located adjacent to the project site. General access to the STAPLES Center is also provided by the same freeway and roadway facilities discussed above.

During the first year of operations, the STAPLES Center provided off-street parking at 28 separate parking locations supplying approximately 6,000 spaces. Several of these lots are no longer provided due to them not having been used/needed. Currently STAPLES Center provides off-street parking at 16 separate lots supplying approximately 5,615 spaces. These include designated lots for season ticket holders, suite holders and premier seat holders, as well as parking for the general public. The primary parking areas closest to the STAPLES Center, and those that would be impacted by the proposed project, include Lots 2, 3, 4, 5, 7, 8, and 10. Figure 2 shows the location of these lots in relation to the STAPLES Center. Other STAPLES Center parking lots are located up to three or four blocks from the arena primarily to the north and east.

Access to Lots 2 and 3 is primarily provided off of Olympic Boulevard, while Lot 4 is served by Georgia Street. Lot 5 is accessed via 12<sup>th</sup> Street, and Lot 8 via 12<sup>th</sup> Street. Olympic Boulevard provides access to Lot 10. These six lots provide a total of approximately 3,020 spaces.

## **South Park Parking and Circulation Management Plan**

A South Park Event Parking and Circulation Management Plan (PCMP) has been developed and implemented to coordinate mobility and parking in the South Park district of downtown Los Angeles, which includes the Los Angeles Convention Center (LACC) and the new STAPLES Center, as well as other office, commercial and residential uses.

In addition to physical transportation improvements that were installed in the South Park area as part of the mitigation program for STAPLES Center, the City of Los Angeles has also installed certain traffic control improvements that will help to manage traffic flows in the area. Together, these improvements comprise the following:

- New and upgraded closed circuit television cameras, to help monitor traffic activity.
- Upgraded computerized traffic signal control, including LADOT's new Adaptive Traffic Control System (ATCS) which adjusts signal timing in response to actual traffic volumes on the roads and streets.
- Street widenings and conversion of key street segments to two-way operation to enhance access/egress.
- Installation of a number of Changeable Message Signs (CMS) to advise drivers of traffic conditions, alternate routes, and parking locations.
- Installation of inbound guide signs to direct motorists to parking locations.
- Installation of outbound guide signs to direct motorists back to the freeways.

- Installation of a Highway Advisory Radio System, to provide ongoing information on access/egress routes, parking, and traffic conditions to motorists.
- Provision of on-site traffic control staff for key events in the area, to keep traffic moving smoothly.
- Provisions of a South Park Traffic Management Center, to operate and coordinate the changeable message signs, highway advisory radio, traffic signal controls, and on-site traffic control staff.

As part of the PCMP expected activity levels at the Convention Center and STAPLES Center have been classified into five "Event Levels", ranging from Level 1 for the smallest crowd (at either STAPLES Center or the Convention Center) to Level 5 for the largest combined event crowds (concurrent events, such as a sold out STAPLES Center event and a major Convention Center event).

Detailed plans for traffic and parking management have been prepared and are being implemented for Activity Levels 3 – 5. The process includes monthly event management meetings between representatives from STAPLES Center, Convention Center, LADOT, and other public and private agencies to discuss and plan for upcoming events.

During the months, which the STAPLES Center has been in operation, these plans have worked well, and there have been no significant problems or issues with either traffic circulation or parking in the area.

### **Existing Traffic Volumes and Level of Service**

In conjunction with the City of Los Angeles Department of Transportation a total of 40 intersections were identified for analysis of traffic conditions. The locations of the analyzed intersections are shown on Figure 3, and correspond to the locations where traffic impacts from the proposed project are most likely. Figure 4 illustrates the existing lane configurations at each intersection.

At the direction of LADOT, traffic analysis has been conducted for the weekday PM peak hour (approximately 5:00 – 6:00 PM), and for the Saturday evening hour (7:00 – 8:00 PM). These two time periods were selected as being the most likely for highest total traffic conditions and thus a worst case for analysis. The weekday PM peak hour is typically the heaviest traffic time of all and includes the commuter traffic from downtown jobs. The Saturday evening peak hour was analyzed due to the entertainment element of the project and the fact that entertainment uses typically peak at that time.

The traffic analysis was conducted for days that included an event at both the STAPLES Center and at the Convention Center. Specifically, traffic counts were conducted to coincide with a "Level 4" event scenario as defined in the PCMP (a major event at both the STAPLES Center and the Convention Center). This ensured that the traffic analysis adequately reflected a high activity period in the study area.

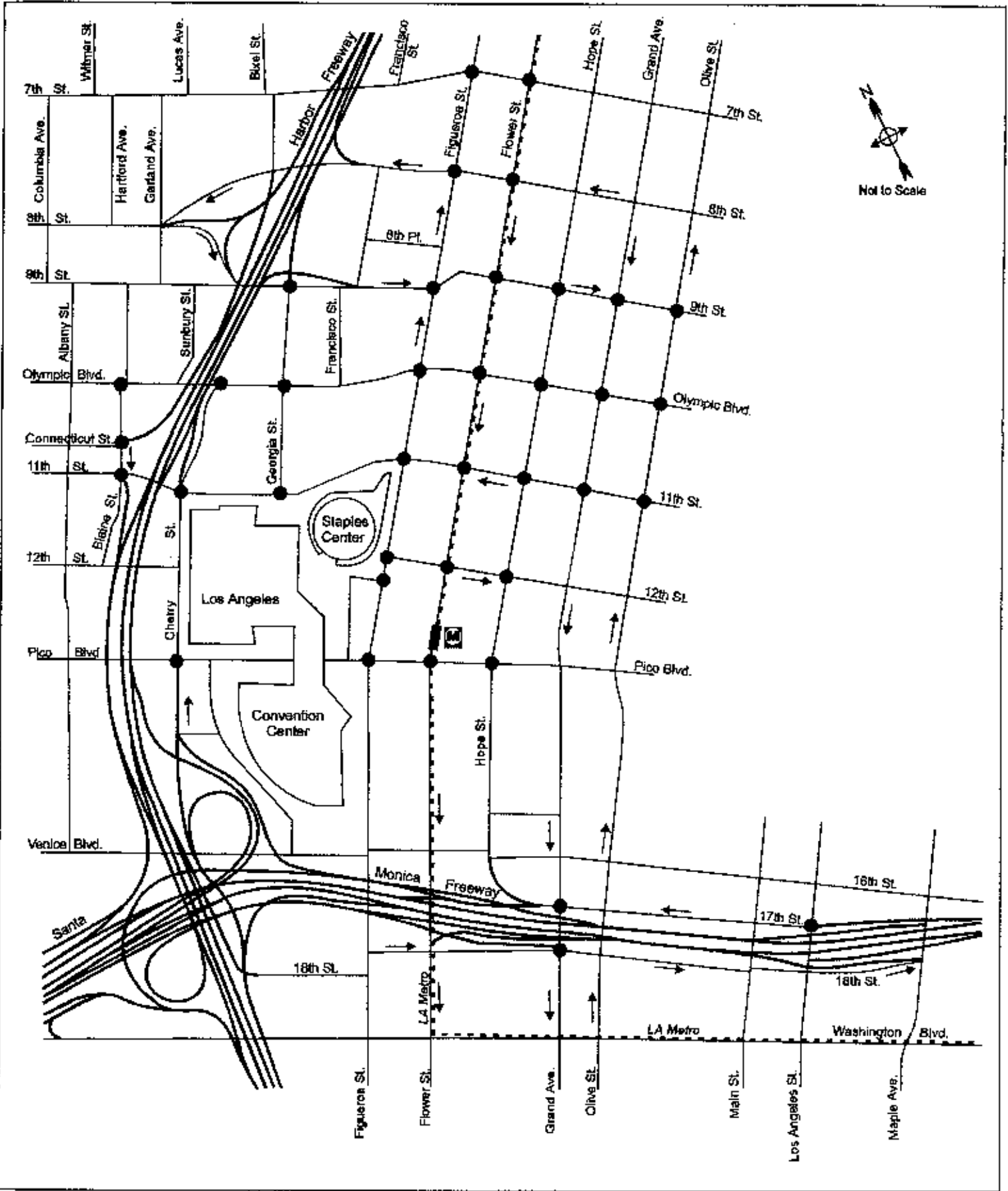


Figure 3  
Intersection Analysis Location

**The Mobility Group**  
Transportation Strategies & Solutions

**Los Angeles Entertainment District**

With **K&K ASSOCIATES**



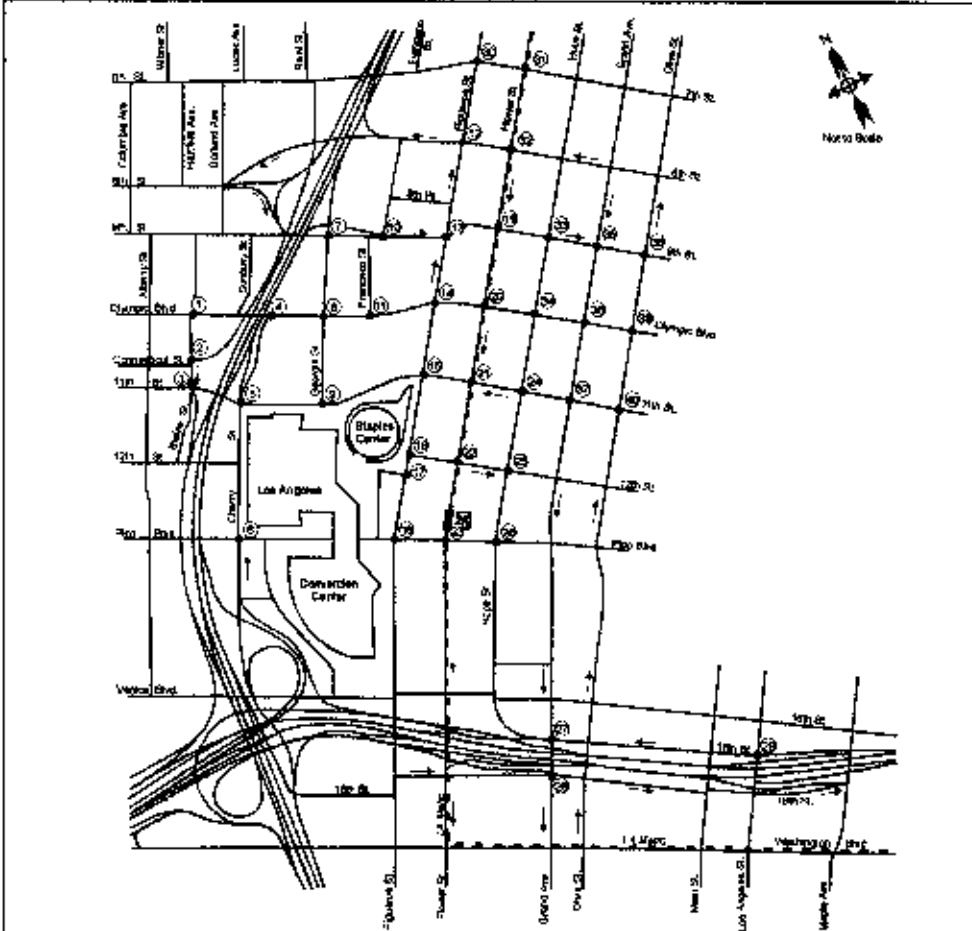
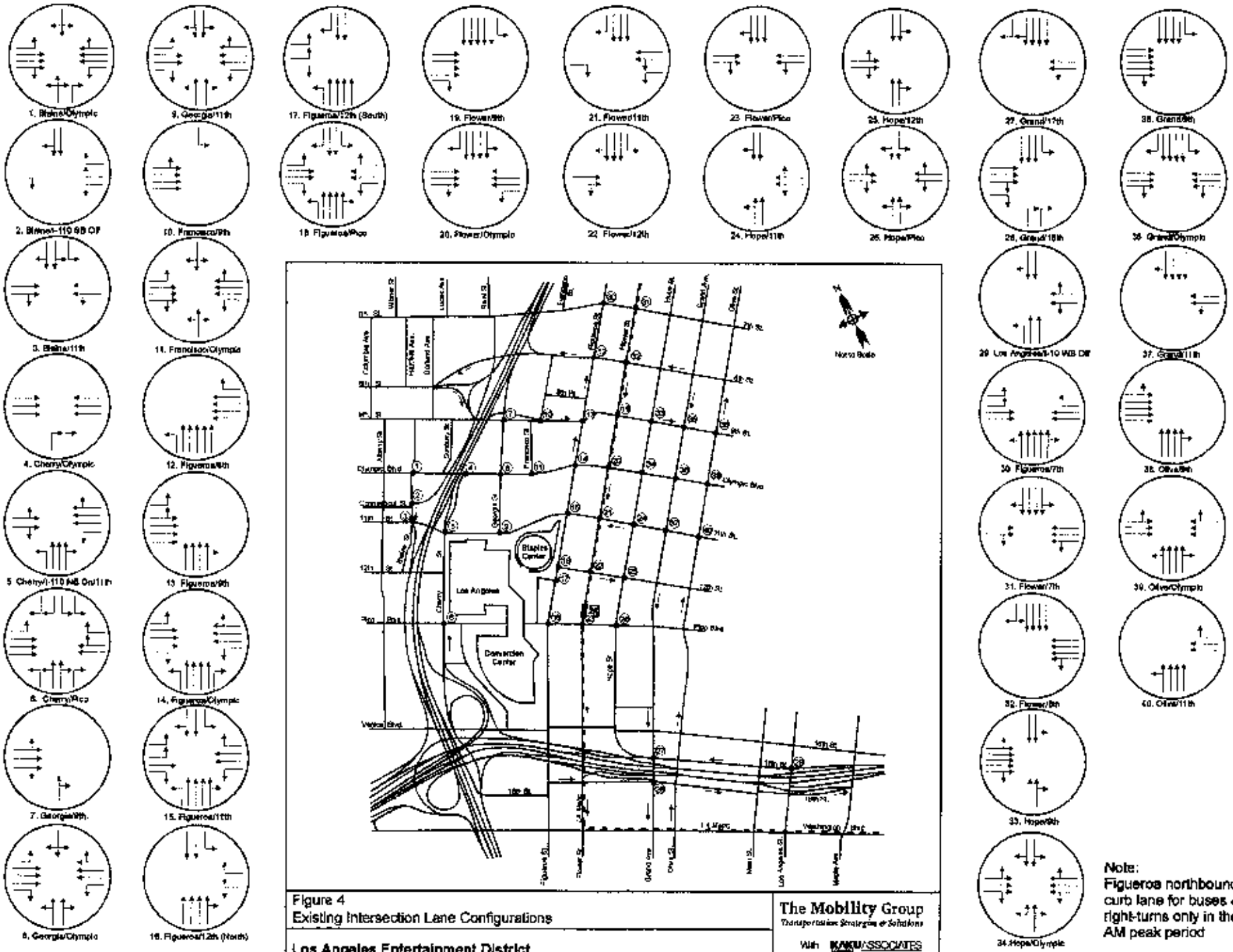
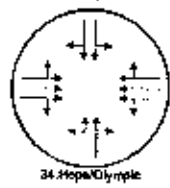


Figure 4  
Existing Intersection Lane Configurations  
Los Angeles Entertainment District

The Mobility Group  
Transportation Strategies & Solutions  
With K&M ASSOCIATES

Note:  
Figueroa northbound  
curb lane for buses &  
right-turns only in the  
AM peak period



### Existing Traffic Volumes

Weekday and Saturday peak period traffic counts were conducted at all 40 analyzed intersections shown on Figure 3. The weekday counts were conducted on Thursday, December 16<sup>th</sup>, 1999 from 4:00 – 7:00 PM. The Saturday peak period counts were conducted on Saturday, January 8<sup>th</sup>, 2000 from 5:00 – 8:00 PM. It should be noted that on both count days there was an event scheduled in both the STAPLES Center and Convention Center. The Thursday count included activity associated with a Bette Midler concert at STAPLES Center and a Cable TV Show (Trade Show) at the Convention Center. The Saturday count included the activity associated with the Greater Los Angeles Auto Show and a Los Angeles Clippers basketball game. Therefore, the existing counts include high activity levels at both the STAPLES Center and Convention Center.

The existing peak hour traffic volumes for weekday and Saturday conditions are illustrated in Figures 5 and 6 respectively, for each of the analyzed intersections.

### Level of Service Methodology

Level of Service (LOS) is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overloaded conditions at LOS F. LOS D is typically recognized as the satisfactory service level in urban areas.

The "Critical Movement Analysis – Planning" (Transportation Research Board, 1980) method of intersection capacity analysis was used to determine the intersection volume-to-capacity (V/C) ratio and corresponding level of service for the turning movements and intersection characteristics at the 29 analyzed intersections. Table 3 defines the ranges of V/C ratios and their corresponding levels of service for signalized intersections.

With the exception of two intersections (Cherry Street/Olympic Boulevard, and Francisco Avenue/Olympic Boulevard), all the analysis intersections are signalized. For purposes of analysis all intersections were treated as signalized intersections. All signalized intersections being studied are incorporated in both the ATSAC and ATCS signal systems covering the study area. In accordance with LADOT procedures, capacity values at intersections included in the ATSAC and ATCS systems were increased by a total of 10% to reflect the estimated beneficial effect of ATSAC and ATCS on the transportation system.

### Existing Peak Hour Levels of Service

Table 4 summarizes the existing weekday and Saturday peak hour V/C ratios and corresponding levels of service at the analyzed intersections (Figure 7 also illustrates level of service conditions). As shown in Table 4, all of the analyzed intersections are currently operating at satisfactory levels of service (i.e., LOS D or better) during the weekday PM peak hour and during the Saturday peak hour. Many intersections are operating at LOS A or LOS B in both peak hours, indicating no traffic congestion or problems.

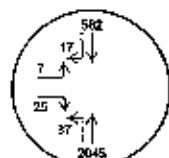
The only intersection operating at LOS D is at Cherry Street and Pico Boulevard, which operates at LOS D in both the weekday and Saturday peak hour.



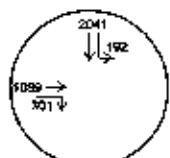
1. Blaine/Olympic



6. Georgia/11th



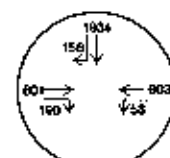
17. Figueroa/12th (South)



18. Flower/10th



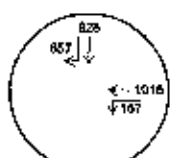
21. Flower/11th



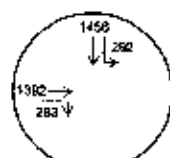
23. Flower/Pico



25. Hope/12th



27. Grand/17th



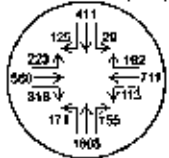
35. Grand/Sch



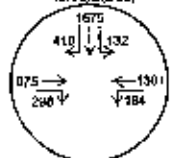
2. Reyes/10 SB OF



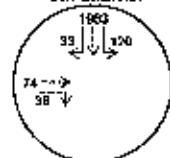
10. Francisco/8th



16. Figueroa/Pico



20. Flower/Olympic



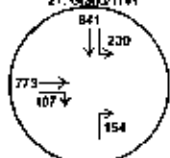
22. Flower/12th



24. Hope/11th



28. Hope/Pico



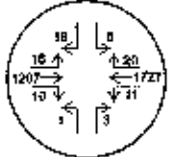
26. Grand/18th



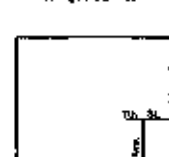
36. Grand/Olympic



3. Blaine/11th



11. Francisco/Olympic



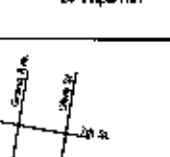
19. Figueroa/10th



20. Flower/Olympic



22. Flower/12th



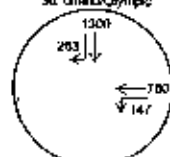
24. Hope/11th



28. Hope/Pico



29. Los Angeles/10 WB OF



37. Grand/11th



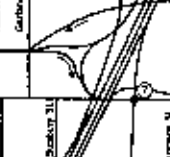
4. Cherry/Olympic



12. Figueroa/8th



19. Figueroa/10th



20. Flower/Olympic



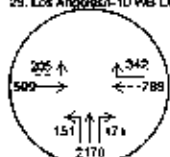
22. Flower/12th



24. Hope/11th



30. Figueroa/7th



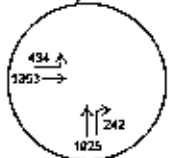
31. Flower/7th



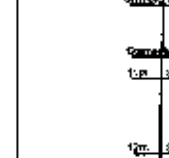
38. Olive/8th



5. Cherry/110 NB/11th



13. Figueroa/8th



19. Figueroa/10th



20. Flower/Olympic



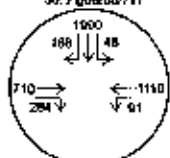
22. Flower/12th



24. Hope/11th



31. Flower/7th



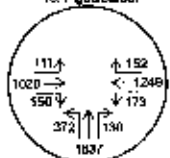
34. Olive/Olympic



39. Olive/Olympic



8. Cherry/Pico



14. Figueroa/Olympic



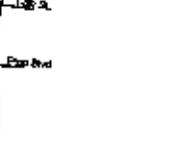
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20. Flower/Olympic



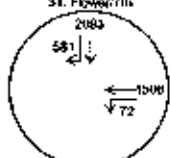
22. Flower/12th



24. Hope/11th



32. Flower/8th



33. Hope/5th



40. Olive/11th



7. Georgia/8th



15. Figueroa/11th



19. Figueroa/10th



20. Flower/Olympic



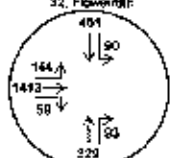
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24. Hope/11th



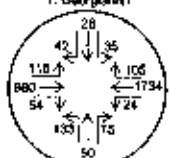
33. Hope/5th



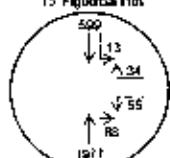
34. Hope/Olympic



40. Olive/11th



8. Georgia/Olympic



16. Figueroa/12th (North)

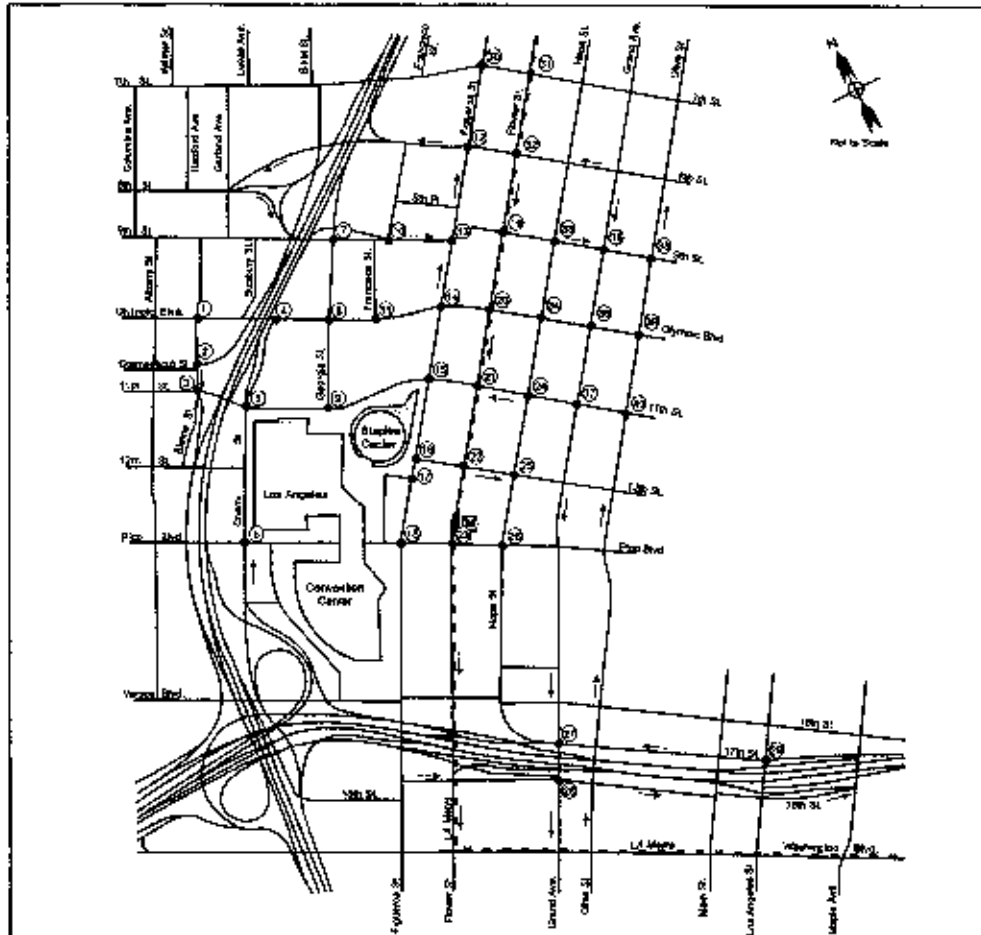


Figure 5 Existing Weekday PM Peak Hour Traffic Volumes

Los Angeles Entertainment District

The Mobility Group  
Transportation Strategies & Solutions

with KAC ASSOCIATES

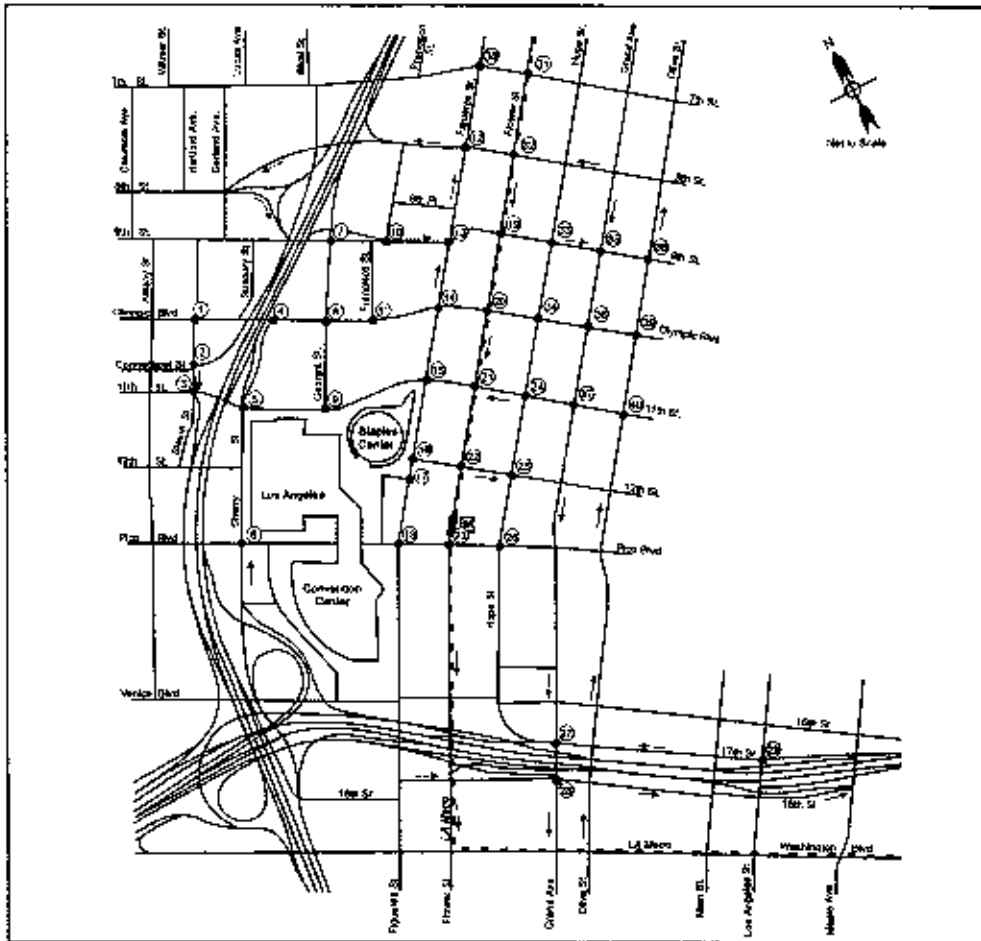
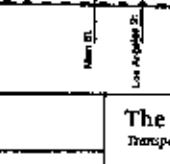
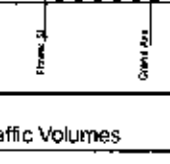
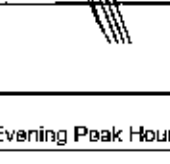
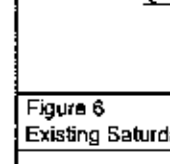
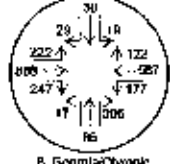
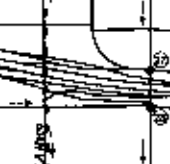
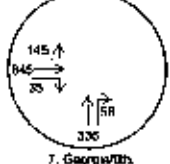
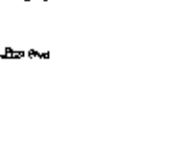
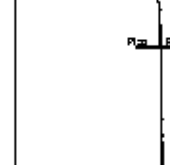
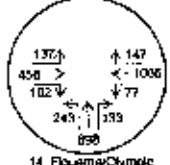
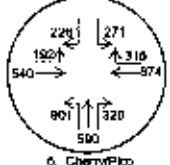
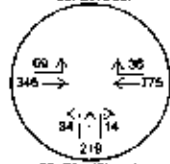
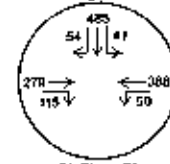
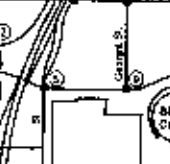
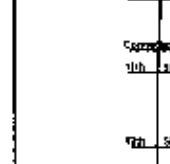
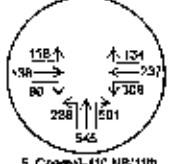
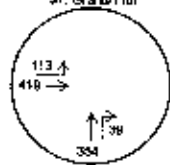
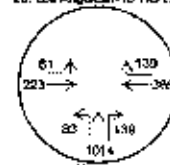
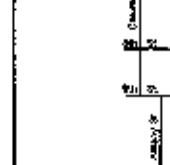
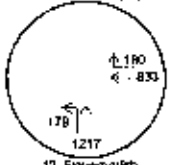
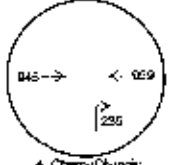
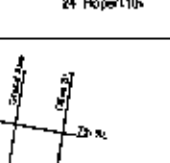
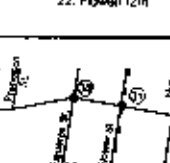
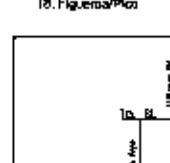
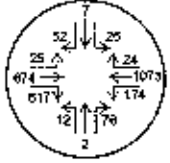
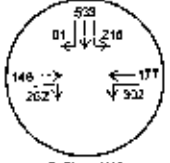
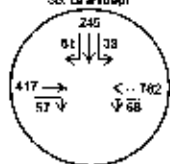
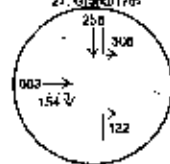
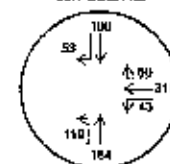
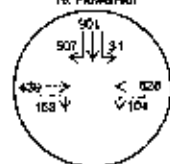
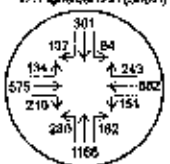
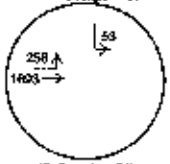
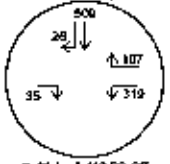
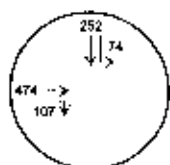
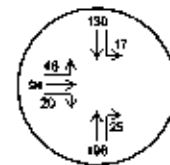
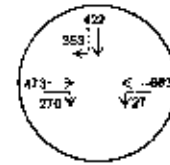
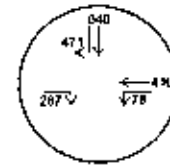
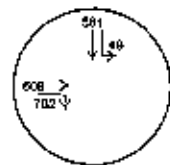
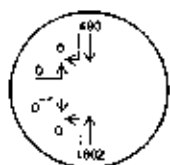
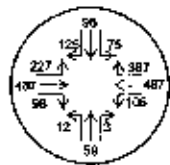
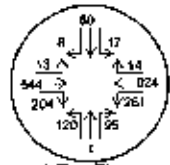


Figure 6  
Existing Saturday Evening Peak Hour Traffic Volumes  
Los Angeles Entertainment District

The Mobility Group  
Transportation Strategists & Solutions  
with KACUM ASSOCIATES

**Table 3. Level of Service Definitions for Signalized Intersections**

Level of Service	Description	Volume to Capacity Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	< 0.600
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.601-700
C	Good operation. Occasionally drivers may have to wait for more than 60 seconds, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.701-800
D	Fair operation. Cars are sometimes required to wait for more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.801-900
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.901-1.000
F	Forced flow. Represents jammed conditions. Backups from locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop-and-go type traffic flow.	Over 1.001

Source: *Highway Capacity Manual*, Special Report 209, Transportation Research Board, Washington, D.C., 1985 and *Interim Materials on Highway Capacity*, MCHRP Circular 212, 1982.

**Table 4. Existing Conditions – Intersection Level of Service**

N <sup>o</sup>	Intersection	PM Peak Hour		Saturday Peak Hour	
		V/C	LOS	V/C	LOS
1.	Blaine Street and Olympic Boulevard	0.683	B	0.490	A
2.	Blaine Street and I-110 SB off-ramp	0.294	A	0.377	A
3.	Blaine Street and 11 <sup>th</sup> Street	0.739	C	0.551	A
4.	Cherry Street and Olympic Boulevard	0.405	A	0.272	A
5.	Cherry Street and I-110 NB on-ramp/11 <sup>th</sup> Street	0.458	A	0.650	B
6.	Cherry Street and Pico Boulevard	0.864	D	0.811	D
7.	Georgia Street and 9 <sup>th</sup> Street	0.401	A	0.446	A
8.	Georgia Street and Olympic Boulevard	0.586	A	0.549	A
9.	Georgia Street and 11 <sup>th</sup> Street	0.330	A	0.440	A
10.	Francisco Street and 9 <sup>th</sup> Street (East)	0.382	A	0.269	A
11.	Francisco Street and Olympic Boulevard	0.377	A	0.550	A
12.	Figueroa Street and 8 <sup>th</sup> Street	0.618	B	0.273	A
13.	Figueroa Street and 9 <sup>th</sup> Street	0.551	A	0.364	A
14.	Figueroa Street and Olympic Boulevard	0.662	B	0.500	A
15.	Figueroa Street and 11 <sup>th</sup> Street	0.692	B	0.556	A
16.	Figueroa Street and 12 <sup>th</sup> Street (North)	0.378	A	0.368	A
17.	Figueroa Street and 12 <sup>th</sup> Street (South)	0.355	A	0.265	A
18.	Figueroa Street and Pico Boulevard	0.628	B	0.522	A
19.	Flower Street and 9 <sup>th</sup> Street	0.430	A	0.532	A
20.	Flower Street and Olympic Boulevard	0.642	B	0.490	A
21.	Flower Street and 11 <sup>th</sup> Street	0.527	A	0.499	A
22.	Flower Street and 12 <sup>th</sup> Street	0.437	A	0.232	A
23.	Flower Street and Pico Boulevard	0.697	B	0.457	A
24.	Hope Street and 11 <sup>th</sup> Street	0.473	A	0.267	A
25.	Hope Street and 12 <sup>th</sup> Street	0.204	A	0.127	A
26.	Hope Street and Pico Boulevard	0.428	A	0.299	A
27.	Grand Avenue and 17 <sup>th</sup> Street	0.578	A	0.368	A
28.	Grand Avenue and 18 <sup>th</sup> Street	0.365	A	0.379	A
29.	Los Angeles Street and I-10 WB off-ramp	0.520	A	0.378	A
30.	Figueroa Street and 7 <sup>th</sup> Street	0.641	B	0.296	A
31.	Flower Street and 7 <sup>th</sup> Street	0.694	B	0.238	A
32.	Flower Street and 8 <sup>th</sup> Street	0.570	A	0.221	A
33.	Hope Street and 9 <sup>th</sup> Street	0.378	A	0.102	A
34.	Hope Street and Olympic Boulevard	0.468	A	0.208	A
35.	Grand Avenue and 9 <sup>th</sup> Street	0.424	A	0.115	A
36.	Grand Avenue and Olympic Boulevard	0.533	A	0.280	A
37.	Grand Avenue and 11 <sup>th</sup> Street	0.512	A	0.118	A
38.	Olive Street and 9 <sup>th</sup> Street	0.388	A	0.128	A
39.	Olive Street and Olympic Boulevard	0.473	A	0.246	A
40.	Olive Street and 11 <sup>th</sup> Street	0.421	A	0.096	A

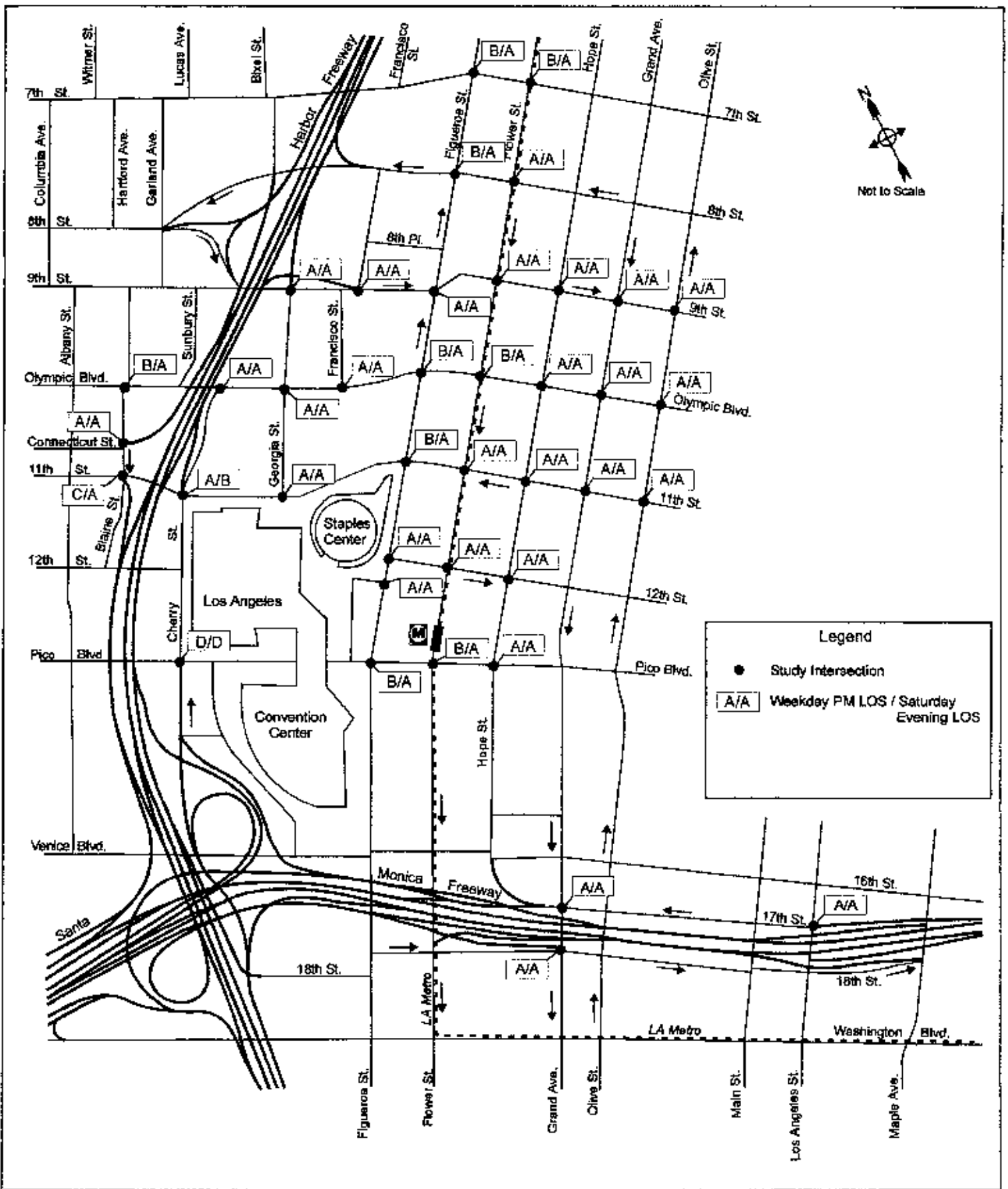


Figure 7  
Existing Intersection Levels of Service

Los Angeles Entertainment District

The Mobility Group  
Transportation Strategies & Solutions

With **KAKU ASSOCIATES**

## **Existing Transit Service**

The traffic analysis study area is currently served by a number of local and inter-city transit operations, including the DASH downtown shuttle operated by LADOT, local buses operated by the Los Angeles County Metropolitan Transportation Authority (LACMTA) and others, and the Metro Blue Line rail transit system, also operated by LACMTA. In addition, taxi service is available throughout this study area. The transit service is described below:

### MTA Bus Service

The traffic analysis study area's major streets provide transit access between downtown Los Angeles and surrounding areas. Frequent peak hour transit service reaches a variety of destinations both within and outside this study area. LACMTA operates 38 local and limited stop Metro Bus routes within about three-quarters mile of the project site. In the afternoon peak hour, approximately 307 runs are made. Most routes have average service intervals of 5 – 20 minutes.

### MTA Blue Line

In addition to the bus service, the MTA also operates the Metro Blue Line rail system, which travels between downtown Los Angeles and downtown Long Beach. The Blue Line travels at-grade for the majority of its alignment, transitioning to subterranean between 11<sup>th</sup> and 12<sup>th</sup> Street and continuing underground into the CBD. Transfer to the Metro Red Line is also available at the 7<sup>th</sup> Street Station. In the vicinity of the proposed project, there is an at-grade Blue Line station on Flower Street north of Pico Boulevard (the Pico/Convention Center Station). The Pico Station is also served by Metro Bus lines 30, 31, 56, 70, 81, 427, 434, 436, 439, 442, 444, 445, 446, 447, and DASH Route A.

The Blue Line provides service seven days a week operating from approximately 4:00 AM to 12:00 midnight on the weekdays. Service is provided in 5 to 20 minute intervals. Between 4:00 and 6:30 PM the Blue Line operates every 5 to 8 minutes on weekdays. After 8:00 PM service is provided every 20 minutes. On weekend, the Blue Line operates every 12 to 20 minutes. The last Blue Line train to leave the Pico station in the northbound direction is at 11:34 PM and at 11:47 PM in the southbound direction.

### DASH Bus System

The City of Los Angeles runs a downtown DASH service that presently serves the Figueroa and Flower Street Corridor. The two DASH lines that service the project area are Route A and Route F. The DASH system primarily operates during the weekday, however, there is a weekend service which covers the majority of the downtown area.

Route A extends from Little Tokyo and the Civic Center area to Pico Boulevard via 1<sup>st</sup> Street and the Figueroa/Flower Street Corridor. Service is provided on that route every 5 minutes from 6:30 AM to 6:30 PM. Near the project site, Route A has stops at Figueroa Street/Olympic Boulevard (northbound), Flower Street/Olympic Boulevard (southbound), Figueroa Street/12<sup>th</sup> Street (northbound), Flower Street/12<sup>th</sup> Street (southbound), Figueroa Street/Pico Boulevard (northbound), and Flower Street/Pico Boulevard (southbound).



Route F is a new line that runs between the western portion of the Financial District and the Exposition Park area near the University of Southern California. This route is also focused in the Figueroa/Flower Corridor, and provides service every 15 minutes from 6:30 AM to 6:30 PM. Route F also operates on weekends. Stops on Route F are located at Figueroa Street/Olympic Boulevard (northbound), Flower Street/Olympic Boulevard (southbound), Figueroa Street/12<sup>th</sup> Street (both northbound and southbound), Figueroa Street/Pico Boulevard (both northbound and southbound), and Figueroa Street/Venice Boulevard (both northbound and southbound).

#### Other Shuttle Buses

In addition to the DASH Bus System, other shuttle buses that are privately operated also connect certain downtown businesses and restaurants to the STAPLES Center, enabling these customers to park at their office or dinner destinations and then take the shuttle buses to the STAPLES Center (in a similar manner as to the Music Center, for example).

### **Existing Parking Conditions**

The study area is currently served by a large number of parking facilities including those operated by the Convention Center and STAPLES Center, as well as a large number of other public and private parking lots. The Convention Center provides approximately 5,100 on-site parking spaces. These spaces are divided into four major areas: the West Hall which provides approximately 1,900 spaces, the South Hall (1,200 spaces), the Cherry Street Garage (870 spaces), and the Venice Boulevard Garage (1,120 spaces). The locations of these parking areas were previously shown in Figure 2. For the majority of events held at the Convention Center, the on-site parking supply provided is sufficient to meet the parking demand created by the event. Under very large events (e.g. the Auto Show) off-site parking occurs, utilizing many of the off-street lots in the area as well as the Grand Avenue Garage at Grand Avenue and 17<sup>th</sup> Street (which also operates a shuttle connection).

Code required parking for STAPLES Center is 2,198 spaces. The STAPLES Center currently owns or leases approximately 8,900 parking spaces in total. These spaces are independent from the Convention Center spaces and specifically serve the STAPLES Center events. The lots closest to the STAPLES Center are reserved parking for suite holders and premier seat holders. Other lots located between 2-3 blocks from the STAPLES Center are used for other season ticket holders and the general public.

In addition to the Convention Center and STAPLES Center, there are several privately owned off-street parking facilities within the area that provided additional supply. Also, there are several on-street curb spaces. Many of these curb spaces are limited to restrictions during the day (as shown in Table 2). However, at night (e.g., during an event) some of these on-street spaces are available.

Even during concurrent events, the existing parking supply in the vicinity of the project is generally more than adequate. During times when there are not any events, there is a large unused parking supply.

## Existing Pedestrian Activity

During events at the STAPLES Center and the Los Angeles Convention Center there is often high pedestrian activity in the study area. Based on the location of the parking facilities there are a number of key pedestrian crossing locations. These are shown in Figure 8 and include Figueroa Street/11<sup>th</sup> Street, Figueroa Street/12<sup>th</sup> Street, and Figueroa Street/Pico Boulevard.

The South Park PCMP, discussed previously, identified several locations of high pedestrian activity throughout the study area. As part of the implementation of the PCMP, some of the crosswalks close to the site have been widened. In addition, during an evening event at the STAPLES Center, 11<sup>th</sup> Street is typically closed to vehicular traffic between Figueroa Street and Georgia Street at about 9:00 PM in order to facilitate exiting pedestrian flows. Also, traffic control officers are often utilized to assist in the safe movement of pedestrians during events. During very large events, Los Angeles Police Department personnel are on duty to help manage pedestrian flow.

## Existing Transportation Plans

The SCAG Regional Transportation Plan (RTP) sets out the long-range transportation policy and infrastructure improvement program for the Southern California region. It was adopted in 1998 and is currently being updated although no new draft plan has yet been released. The RTP identifies long-range improvements for all transportation modes, including highway, transit, HOV and truck facilities. No major infrastructure improvements are identified in the specific area of the project. No major mixed flow, arterial, HOV/HOT facility improvements are planned in the general area of the project. A number of planned transit corridors will enhance transit service to the downtown area, including increases in Metrolink commute rail service, the Blue Line LRT to Pasadena, the East Los Angeles Rail Corridor, and the Wilshire Corridor and Exposition Corridor Busways. The Alameda Corridor project (currently under construction) will significantly enhance rail freight travel from the Los Angeles/Long Beach ports to southeast of downtown. One of the RTP policies most relevant to this project is the goal of Livable Communities to reduce auto travel, and to support pedestrian and transit-oriented mixed use development, which the design of this project will accomplish.

The City of Los Angeles General Plan Transportation Element (GPTE) defines the long-range transportation plan for the City. In the area of the project, the GPTE identifies Figueroa Street, Olympic Boulevard, and Grand Avenue as Major Highways (Class II), and Flower Street, Hope Street, Olive Street, Pico Boulevard, Venice Boulevard, 8<sup>th</sup> Street, 9<sup>th</sup> Street, and parts of Albany Street and Blaine Street as Secondary Highways. A commuter bikeway is shown on the GPTE for Pico Boulevard and Olympic Boulevard is designated as a Transit Priority Street in the area of the project. Relevant transportation policies in the GPTE include an increase in transit service and facilities; the promotion of TDM/non-auto programs; the implementation of TSM (Transportation System Management) strategies; and supporting development in regional centers (such as downtown), and along mixed land use boulevards (such as Olympic Boulevard and Figueroa Boulevard).

The Central City Community Plan is currently being revised and is in Draft Review. The Plan defines a broad range of transportation policies and long term potential transportation

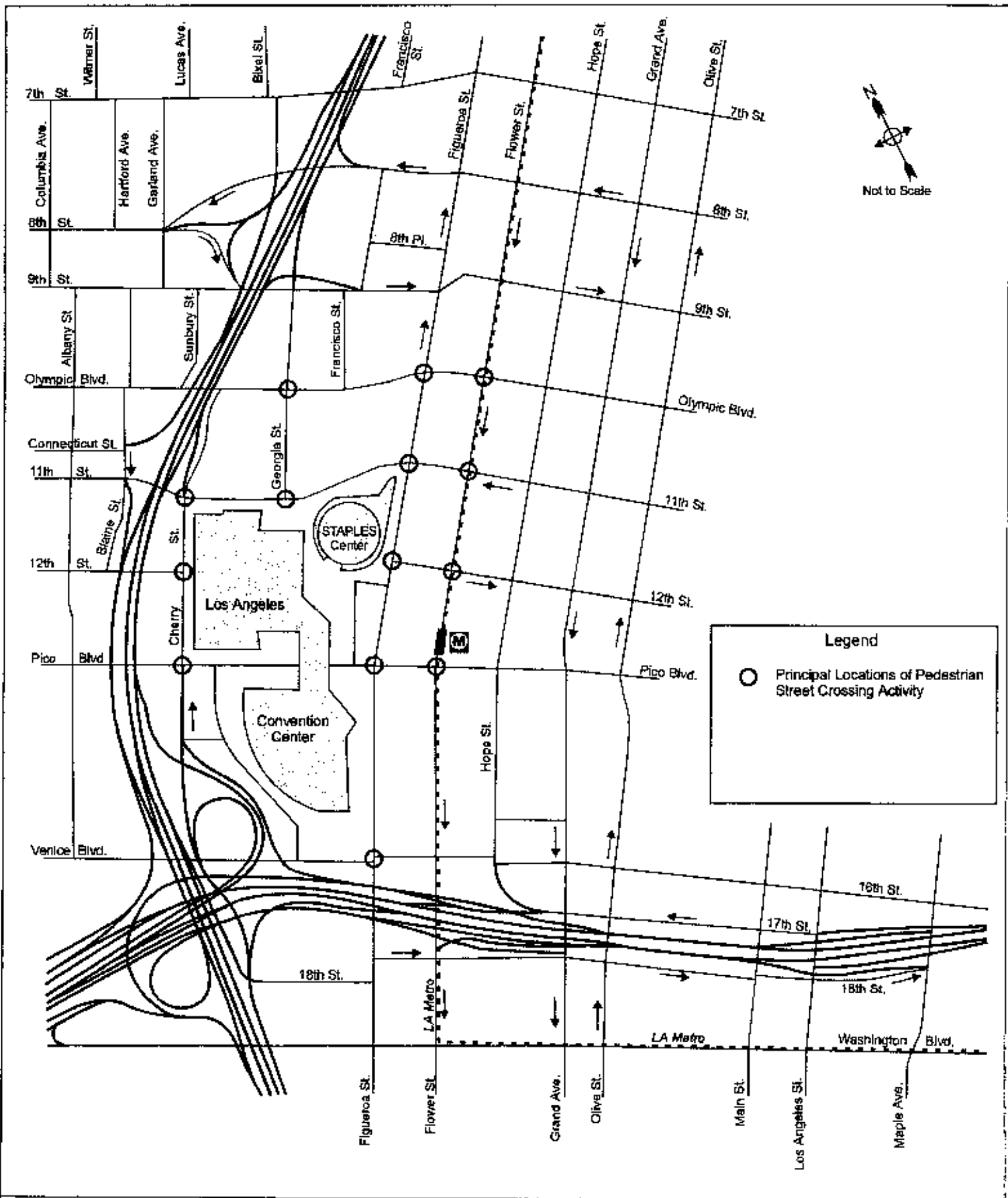


Figure 8  
Principal Locations of Pedestrian Street Crossing Activity

Los Angeles Entertainment District

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improvements for the Downtown. Few of the improvements are specific to the area of the Project, although some that could affect it are as follows. The Plan identifies some general arterial corridor improvements, including: (a) "improving the capacity of key arterial streets between the Hollywood Freeway and the Santa Monica Freeway, with compatible traffic management technologies", and (b) "add HOV lanes in arterial access corridors to the CBD or arterials within the CBD. Potential candidates include 8<sup>th</sup>/9<sup>th</sup> Streets, and Olive Street/Grand Avenue" (in the vicinity of the project). The Plan calls for an internal transit circulation system, as per the DSP, and enhancements to pedestrian circulation. The Plan identifies the Convention Center/Arena sphere of influence as a Special Study Area with the "potential for the Arena to positively impact development in the area serviced by mass transit that would be able to encourage pedestrian orientation and multiple trip entertainment and restaurant uses associated with the Convention Center and STAPLES Center." The Plan also proposes continuing to limit on-site parking for office buildings greater than 100,000 square feet in the Traffic Impact Zone (north of Olympic Boulevard in the area of the project), to a maximum of 0.6 parking spaces/1,000 square feet with 0.4 spaces/1,000 square feet either being provided off-site or substituted by a TDM program.

The Downtown Los Angeles Strategic Plan (DSP), completed in 1995, lays out a long range plan for the downtown area. A number of specific transportation recommendations are made in the area of the project, including the following. The DSP identifies Figueroa Street, Flower Street, Grand Avenue, Olympic Boulevard, 11<sup>th</sup> Street, and Pico Boulevard as Mixed Flow Streets. It identifies Transit Priority Streets on 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> Streets and Olive Street, and Regional Bus Access Streets on Figueroa Street, 8<sup>th</sup> Street, 9<sup>th</sup> Street, and Wilshire Boulevard. It further identifies Olympic Boulevard, 11<sup>th</sup> Street, and Olive Street as Avenidas in the Plan. The DSP also recommended an internal transit circulator system, utilizing buses, to connect the Convention Center area to the Financial District, Broadway, the Civic Center, Union Station and Chinatown. In the area of the project, the routes proposed for this circulator service included Figueroa Street, Olympic Boulevard, Pico Boulevard, and Grand Avenue.