8. Mitigation Measures

Introduction

Chapter 4 identified that the project would cause significant traffic impacts at 16 locations in the PM peak hour and at 10 location in the Saturday evening peak hour. During the PM peak hour, 7 of the significant impacts would be at locations where the resultant level of service will be LOS C and 5 will be at locations where the resultant level of service will be LOS D. At all these locations, traffic operations will be at an acceptable level with the project. A total of 3 impacts will occur at locations where the resultant LOS will be LOS E, and one will be at a location where LOS F will result with the project.

Background

The project is located in the downtown Los Angeles area, where most of the street system is fully built out and is already striped for maximum capacity and operational effectiveness within the available right-of-way. In most cases, street widenings are not feasible, because either right-of-way acquisition is not possible, or because it is not practical or desirable to reduce sidewalk widths due to high pedestrian flows on downtown sidewalks.

In the specific area of the project, some significant roadway improvements were implemented as part of the recently constructed STAPLES Center project, including an extension of Cherry Street from 11th Street to Olympic Boulevard, and intersection widenings at Georgia Street/Olympic Boulevard, Olympic Boulevard/Figueroa Street and 11th Street/Figueroa Street.

Also, recently the South Park Traffic Management Project was implemented, comprising significant improvements for the operation of the roadway system in the South Park area and including traffic signal system upgrades to ATCS, additional directional signage, changeable message signs (CMS), a Highway Advisory Radio (HAR) system, and a Traffic Operations Center and STAPLES Center events. The South Park Event Management Committee (consisting of representatives of the Convention Center, STAPLES Center, Los Angeles Police Department, and LADOT) meets regularly to plan and coordinate traffic management needs and strategies for the area.

With traffic signals in the area already a part of both the City's ATSAC (first generation) and ATCS (second generation) traffic signal control systems, and with the resources of the South Park Traffic Management System, the area surrounding the project has the most extensive and sophisticated system of traffic management and control anywhere in the City of Los Angeles.

Overall Mitigation Strategy

In the context of this background, the overall mitigation strategy for the project comprises the following elements:

- Implement specific roadway improvements where necessary, feasible and practical.

- Maintain a good balance between vehicular and pedestrian circulation, emphasizing adequate sidewalk widths and pedestrian safety.
- Encourage transit use and trip reduction measures.
- Provide off-site parking for the majority of employees.
- Participate in the South Park Event Management Committee to coordinate project traffic flows and circulation with that of Convention Center and STAPLES Center events.
- Ensure adjacent residential neighborhoods are protected from traffic and parking impacts.
- Identify and design mitigation measures to enhance pedestrian safety.

Specific Roadway Improvements

In order to address significant traffic impacts the feasibility of physical improvements was investigated. The following specific street mitigation measures are proposed.

Blaine Street/11th Street/SR-110 SB On-Ramp

The project would create a significant traffic impact in the PM peak hour at this location, changing the V/C ratio from 0.831, LOS D to 0.895, LOS D.

Lane re-striping or street widening of either 11th Street or Blaine Street is not possible at this location without taking additional right-of-way, which is not considered feasible. However, it is possible to improve the freeway on-ramp from its current one lane configuration to a two lane configuration. The ramp would be widened to two lanes, probably involving a retaining wall on the west side. This will increase storage capacity on the on-ramp and should benefit operation of the intersection, although the impact would remain significant.

Cherry Street & 11th Street

The project would cause a significant traffic impact at this location in the Saturday evening peak hour, changing the V/C ratio from 0.724, LOS C to 0.828, LOS D. This intersection was significantly improved as part of the STAPLES Center project, including the addition of Cherry Street to the north, lane re-striping, and addition of signage. No further feasible mitigation measure has been identified for this location. This would remain a significant impact, although LOS D would remain an acceptable operating condition.

Cherry Street & Pico Boulevard

The project would cause a significant impact at this location in both the PM peak hour and the Saturday evening peak hour. The proposed mitigation measure is to widen the northbound approach on Cherry Street at this intersection, which currently provides an exclusive left lane, one shared through/left lane, one shared through/right lane, and an exclusive right turn lane, and re-

stripe to provide two exclusive left turn lanes, two through lanes, and an exclusive right turn lane. This mitigation measure would eliminate the significant impact at this intersection in both the PM Peak hour and the Saturday evening peak hour.

Georgia Street & Olympic Boulevard

The project would cause a significant impact at this location in both the PM peak hour and the Saturday evening peak hour, although in both cases the level of service would remain LOS C with a V/C ratio of 0.762 in the PM peak hour, and 0.727 in the Saturday evening peak hour. The proposed improvement at this location is to add a westbound protected left turn phase on Olympic Boulevard, and to widen the northbound approach on Georgia Street to replace the existing configuration of one shared left/through lane and one shared through/right lane with one exclusive left turn lane, one through lane, and one exclusive right turn lane. While this would facilitate traffic movements at the intersection, the significant impacts would remain in both time periods.

Georgia Street & 11th Street

The project would cause a significant impact at this location in the Saturday evening peak hour, increasing the V/C ratio from 0.479, LOS A to 0.834, LOS D. Further street widening is not proposed as this would be contrary to the objective of enhancing the pedestrian environment. A potential mitigation measure to re-stripe the westbound approach to add a shared through/right lane was rejected due to the increased pedestrian conflicts that would be caused. This impact would therefore remain significant.

Francisco Street & 9th Street

The project would have a significant impact at this intersection in the PM peak hour, changing the V/C ratio of 0.791 and LOS C without the project to 0.818 and LOS D with the project, although LOS D would be an acceptable operating condition. While the analysis included the planned development of the adjacent Metropolis Project, it did not include the planned mitigation measure for that project to widen Francisco Street and reconfigure the southbound approach from the current one left turn lane to the planned two left turn lanes. With this improvement in place there would be no significant impact with the LAS&ED project. For this reason, no further mitigation was identified at this location.

Francisco Street & Olympic Boulevard

The project would cause significant impacts at this intersection in both the PM peak hour and the Saturday evening peak hour, although in both cases the level of service would be LOS C, which would remain an acceptable operating condition. The project proposes to install a new traffic signal at this location. With the project, the V/C ratio would be 0.704 in the PM peak hour, and 0.770 in the Saturday evening peak hour. The proposed mitigation measure is to widen Olympic Boulevard on the south side of the street and re-stripe the westbound approach to provide a dual left turn lane (into the project driveway). Also, to provide a four-lane project driveway, configured for two inbound lanes and two outbound lanes to the underground parking garage. The outbound lanes should be striped for a shared left/through/right turn lane and an exclusive right turn lane. Immediately to the west of the project driveway, provide a one lane southbound entry to the on-site surface driveway into the site. Also, re-stripe the southbound approach on

Francisco Street from the current single shared left/through/right lane to one exclusive left turn lane and a shared through/right lane. These measures, while improving traffic flow at the intersection, would not mitigate either time period. No further mitigation is proposed for two reasons. Firstly, LOS C would remain an acceptable operating condition. Secondly, while providing a wider exit driveway from the project (additional exit lane) would improve the LOS, it would degrade the pedestrian environment and so is not recommended.

Figueroa Street & Olympic Boulevard

The project would cause a significant impact at this intersection in both the PM peak hour and the Saturday evening peak hour. In the PM peak hour the V/C ratio would be increased from 0.820, LOS C to 0.993, LOS E, while in the Saturday evening peak hour it would increase from 0.604, LOS B to 0.778, LOS C. The proposed mitigation measure is to re-stripe the eastbound approach on Olympic Boulevard, which currently provides an exclusive left turn lane, three through lanes, and an exclusive right turn lane, to provide two exclusive left turn lanes, three through lanes, and an exclusive right turn lane.

Also, to widen the westbound approach on Olympic Boulevard and re-stripe the approach, which currently provides an exclusive left turn lane, two through lanes, and a shared through/right turn lane, to provide an exclusive left turn lane, three through lanes, and an exclusive right turn lane.

In addition, lengthen the existing northbound left turn on Figueroa Street.

These measures would fully mitigate the Saturday evening peak hour impact, reducing the V/C ratio from 0.778, LOS C to 0.656, LOS B. In the PM peak period, they would partially mitigate the impact and would reduce the V/C ratio from 0.993, LOS E, to 0.863, LOS D, although a significant impact would remain.

Figueroa Street & 11th Street

The project would cause a significant impact at this intersection in both the PM peak hour and the Saturday evening peak hour. The PM peak hour V/C ratio would increase from 0.792, LOS C to 0.906, LOS E, while the Saturday evening peak hour V/C ratio would increase from 0.619, LOS B to 0.818, LOS D.

Part of the project design intent is to provide for a pedestrian-oriented environment along 11th Street, between the project and STAPLES Center/Convention Center, to the maximum extent possible. Roadway widening would not be compatible with this goal as it would degrade the pedestrian environment (longer crosswalks, narrower sidewalks, etc.). Further, this intersection is currently striped for optimal lane configurations on each street approach, so no improvement can be gained through re-striping. For these reasons, no physical mitigation measures are recommended for this intersection. It is proposed that the project provide a signing program (both on the public street system and in the project parking garages) to encourage traffic to use Olympic Boulevard and Pico Boulevard rather than 11th Street. This would improve traffic operations at this intersection but would not necessarily mitigate the impacts, so for the EIR analysis it is assumed that a significant impact would remain at this location during both the PM peak hour and the Saturday evening peak hour.

Flower Street & Olympic Boulevard

The project would cause a significant impact at this intersection in both the PM peak hour and the Saturday evening peak hour. The PM peak hour V/C ratio would increase from 0.771, LOS C to 0.924, LOS E, while the Saturday evening peak hour V/C ratio would increase from 0.556, LOS A to 0.771, LOS C. Further street widening is not proposed as this would be contrary to the objective of enhancing the pedestrian environment. A potential mitigation measure to re-stripe the southbound approach to add a shared through/right lane was rejected due to the increased pedestrian conflicts that would be caused. This impact would therefore remain significant.

Grand Avenue & 11th Street

The project would cause a significant impact at this intersection in the PM peak hour, increasing the V/C ratio from 0.591, LOS A to 0.704, LOS C. The proposed mitigation measure is to re-stripe the westbound approach on 11th Street from one shared left/through lane and one exclusive through lane, to provide one exclusive left turn lane, and two through lanes. This measure would fully mitigate the impact at this location. This would require removing on-street parking on 11th Street between Grand Avenue and the alley east of the intersection (approx. 12 spaces). This would not be a significant impact due to the abundance of off-street parking in the immediate area.

Other Potential Improvements

Two other potential roadway improvements were evaluated as possible mitigation measures. These are concepts that other parties have raised in the past, and so were evaluated here. They comprise changes to the street system in the area as follows.

9th Street/SR-110 SB Off-Ramp/Georgia Street

This measure would close 9th Street just west of the freeway off-ramp and create a cul-de-sac on 9th Street, so it no longer connects east of the freeway underpass. Local easterly travel on 9th Street would be accomplished via Garland Avenue, 8th Street and back to 9th Street. The section of 9th Street between the confluence of the SR-110 southbound off-ramp and 8th Street eastbound and Georgia Street, would be re-striped in order to allow eastbound right turns at Georgia Street.

Figueroa Street between 9th Street & Olympic Boulevard

This measure would widen Figueroa Street on the west side by 6 feet. This would involve converting the existing 6 foot easements granted by property owners to 6 foot dedications, and the acquisition of 6 feet of right-of-way from the parking lot at the southwest corner of 9th Street and Figueroa Street. The existing northbound traffic lanes and striping would be maintained. A southbound traffic lane of 20 feet in width would be provided, including one moving traffic lane and one curbside parking/loading lane. A 12-foot sidewalk would also be provided, as currently exists.

The potential advantage of these projects would be to provide additional flexibility in the roadway network, such that traffic using 8th Street and the SR-110 southbound off-ramp could use Georgia and Figueroa Streets to access STAPLES Center, the Convention Center, and the project,

without having to circulate east on 9th Street, south on Flower Street, and west on Olympic Boulevard or 11th Street. The addition of a southbound lane on Figueroa Street between 9th Street and Olympic Boulevard would also facilitate bus loading/unloading for the hotels on that block, which currently has to occur adjacent to the westmost northbound traffic lane on Figueroa Street, rather than from the sidewalk.

These two potential projects were analyzed for conditions with project traffic and assuming that the other mitigation measures identified in this Chapter were in place. This analysis focused primarily on the effect these projects might have on future additional traffic on the system. While an attempt was made to determine how existing traffic may be re-routed because of these projects, this analysis may underestimate this effect because of the difficulty of assuming where existing traffic is bound/destined for.

These two projects would be unlikely to significantly change traffic conditions at intersections west of Figueroa Street. The analysis did indicate that changes could occur at three intersections along Figueroa Street and at three intersections along Flower Street. The results are summarized in Table 27. In general, these improvements would slightly worsen traffic conditions along Figueroa Street, although no new significant impacts would be created, and the intersection of Figueroa Street and 11th Street would improve from a V/C ratio 0.906, LOS E to 0.896, LOS D. These improvements would generally improve conditions along Flower Street, and would eliminate significant impacts at one location in the PM peak hour (at Flower and 9th Street), and would eliminate significant impacts at two locations in the Saturday evening peak hour (at Flower and 9th Street, and at Flower and 11th Street), although these are locations where even with the significant impact, traffic would operate at LOS C.

In conclusion, these two potential improvements would have both benefits and disadvantages. While both measures would add flexibility to the roadway network, neither measure appears to be effective in reducing overall impacts. The measure on Figueroa Street is also beyond the control of the project Applicant to implement because it would involve land acquisition from private parties. While these improvements are thus not included as mitigation measures, the project Applicant is prepared to commit to implementing these as voluntary improvements in conjunction with the City of Los Angeles, contingent upon the City of Los Angeles completing the cul-de-sac on 9th Street, and upon the City obtaining the necessary right-of-way along Figueroa Street, between 9th Street and Olympic Boulevard.

Other Intersections

The feasibility of physical mitigation measures was investigated for all other locations where it was determined there would be a significant impact with the project. At a number of locations, no feasible physical mitigation was found, usually because intersection approaches have already been striped and signalized to the maximum number of lanes available and/or to the optimal lane configuration, or because it was not considered desirable to change signal phasing/operations, to reduce sidewalk widths, or because right-of-way acquisition was not feasible. These locations are listed below, showing the LOS without the project and the LOS with the project.

Table 27. Analysis of 9th Street Closure and Figueroa Street 2-Way

Intersection	PM Peak Hour						Saturday Evening Peak Hour					
	Without 9th Street & Figueroa Projects			With 9th Street & Figueroa Projects			Without 9th Street & Figueroa Projects			With 9th Street & Figueroa Projects		
	V/C	LOS	Sign. Impact	V/C	LOS	Sign. Impact	V/C	LOS	Sign. Impact	V/C	LOS	Sign. Impact
Figueroa & 9th Street	0.813	D	Yes	0.883	D	Yes	0.538	A	No	0.606	B	No
Figueroa & Olympic Blvd.	0.871	D	Yes	0.871	D	Yes	0.656	B	No	0.742	C	No
Figueroa &11th Street	0.906	E	Yes	0.896	D	Yes	0.818	D	Yes	0.853	D	Yes
Flower & 9th Street	0.713	C	Yes	0.618	B	No	0.726	C	Yes	0.457	A	No
Flower & Olympic Blvd.	0.896	D	Yes	0.875	D	Yes	0.616	B	No	0.544	A	No
Flower & 11th Street	0.745	C	Yes	0.745	C	Yes	0.726	C	Yes	0.660	B	No

Note: All scenarios represent future with project, with mitigation program discussed in the text.

Intersection		LOS Without the Project	LOS With the Project
Cherry Street & 11th Street	(Sat)	LOS C	LOS D
Francisco Street & 9th Street	(PM)	LOS C	LOS D
Figueroa Street & 8th Street	(PM)	LOS C	LOS D
Figueroa Street & 9th Street	(PM)	LOS C	LOS D
Figueroa Street & 11th Street	(PM)	LOS C	LOS E
Figueroa Street & 11th Street	(Sat)	LOS B	LOS D
Figueroa Street & Pico Boulevard	(PM)	LOS C	LOS C
Flower Street & 9th Street	(PM)	LOS A	LOS C
Flower Street & 9th Street	(Sat)	LOS B	LOS C
Flower Street & 11th Street	(PM)	LOS B	LOS C
Flower Street & 11th Street	(Sat)	LOS A	LOS C
Flower Street & Pico Boulevard	(PM)	LOS D	LOS D
Flower Street & 7th Street	(PM)	LOS D	LOS D
Flower Street & 8th Street	(PM)	LOS C	LOS C

While no feasible mitigation could be identified at these locations, and therefore significant impacts would remain, it will be noted that the resultant LOS is in all cases LOS C or LOS D, which would still be acceptable operating conditions, and that in numerous instances the actual LOS would not change with the project.

Neighborhood Protection

Chapter 4 identified that no significant traffic or parking impacts are expected in the residential neighborhood to the west of the Harbor Freeway. However, because there remains the potential for such impacts to occur on an occasional basis, the project Applicant proposes certain actions to ensure the neighborhood is protected against such occurrences.

Firstly, many elements of the proposed mitigation program are designed to keep traffic on the major arterials and away from residential streets in the neighborhoods. There are a series of improvements to enhance capacity on Olympic Boulevard between Cherry Street and Flower Street, for example, adding turn lanes into the "front door" of the project. On the other hand, street widening and/or capacity enhancement measures are not recommended on 11th Street due to a desire to make this street a more pedestrian-oriented environment, and to discourage through traffic on 11th Street.

The Applicant will fund upto $100,000 for studies, evaluations, and implementation of a Neighborhood Traffic Management Plan, if necessary. Such actions would be carried out by or under the direction of LADOT, with the participation of the Applicant. The Applicant would post

a bond for the $100,000 and monies would be released as a plan or individual measures are agreed upon and implemented. After a period of three years from opening of the project, the bond would be terminated and/or any unused monies returned to the Applicant. This program would include both traffic management measures, as well as the implementation of any residential permit parking district programs requested by the neighborhoods and approved by LADOT.

General Mitigation Measures

In addition to the measures identified above that will directly mitigate and/or avoid significant impacts, the following general mitigation measures will be implemented, which will help traffic flow in the area and lessen the magnitude of unmitigated impacts:

- The Applicant will enhance connections and linkages to transit. This will particularly include physical linkages to the Metro Blue Line Station at Flower Street/Pico Boulevard, as well as directional signage to bus and rail lines, and the provision of landscaped bus stops with passenger amenities such as benches, shaded areas, and electronic real-time transit information.

- The Applicant will install six new bus shelters throughout the project area, at locations to be agreed between the Applicant, LADOT, and LACMTA. These will be City standard bus shelters at a minimum, although the Applicant may modify the design to fit in with the overall urban design/streetscape of the project with the approval of the City.

- The Applicant will provide up to two transit information kiosks on-site (one on the Olympic properties and one on the Figueroa properties) for the purpose of providing information about the available transit in the area, and of dispensing tickets/ passes, if feasible.

- The Applicant will install 30-foot wide crosswalks at Figueroa Street/Olympic Boulevard, Figueroa Street/Pico Boulevard, 12th Street/Flower Street, and Pico Boulevard/Flower Street, where and as feasible.

- The Applicant will initiate and maintain a transportation demand management program that will actively promote the use of transit and rideshare, including providing project employees and visitors with transit and rideshare information.

- The Applicant will provide off-site parking for employees (to the north, east, and south of the project) along with shuttle bus service from parking locations to the project.

- The Applicant will provide fixed signage on access/egress corridors to the project to help direct inbound traffic to parking facilities, and outbound traffic to arterials and freeway ramps, up to a total of $25,000.

- The Applicant will participate in providing up to three additional changeable message signs (CMS), if necessary, on the surface street system in the project area, that will be linked into the existing Traffic Operations Center (TOC), that will help direct traffic and

ensure smooth traffic flows during Convention Center and STAPLES Center events and during closures of 11th Street.

- The Applicant will participate with Caltrans to provide one additional changeable message sign (CMS) on the freeway mainline system, if Caltrans determines it to be necessary or desirable.

- The Applicant will coordinate with Caltrans and LADOT to develop fixed and changeable signage programs to direct traffic to utilize the various different freeway off-ramps in the project area, where necessary.

- The Applicant will participate in the existing South Park Event Parking & Circulation Management Plan, and the ongoing traffic management activities coordinated by the South Park Event Coordinating Committee.

Closure of 11th Street

In order to facilitate the closing of 11th Street between Georgia Street and Figueroa Street, on a regular basis outside the morning and evening peak periods a Traffic Control Plan will be developed, requiring LADOT approval prior to completion and public use of the plaza to the north of 11th Street. Among the potential measures that could be included in the plan are the following types of improvements which could be implemented by the project subject to the approval of LADOT:

- Implement temporary traffic barriers or pop-up bollards on 11th Street west of Figueroa Street and east of Georgia Street to prevent traffic entering 11th Street between Georgia and Figueroa during closure periods.

- Add electronic signs to signal poles and signal mast arms at the intersections of 11th Street/Figueroa Street and 11th Street/Georgia Street, to indicate "No Entry", "Turn Left", and "Turn Right" during street closures.

- Add changeable message signs at locations to be determined by LADOT, advising motorists of alternate routes to 11th Street during street closures. Such signs would be located in the immediate vicinity of the block of 11th Street to be closed, at the following intersections:

    - 11th Street & Figueroa Street
    - Olympic Boulevard & Figueroa Street
    - Olympic Boulevard & Georgia Street
    - 11th Street & Georgia Street

- Add similar signs on the street approaches to the block of 11th Street to be closed to give motorists advance warning and information of alternate routes, such as at the following locations:

    - 11th Street, east of Flower Street

- 11th Street, east of Olive Street
- Cherry Street, south of 12th Street

- If necessary, provide additional temporary measures, such as coning temporary traffic lanes, at the following locations:

  - Olympic Boulevard & Figueroa Street
  - Olympic Boulevard & Georgia Street
  - 11th Street & Georgia Street
  - 11th Street & Figueroa Street

Relationship to South Park Event Parking & Circulation Management Plan

The traffic and parking conditions in the project area are coordinated through the South Park Event Parking and Circulation Management Plan (PCMP). The PCMP was developed to manage and coordinate the varying traffic and parking conditions caused by the changes in activity levels at the STAPLES Center and the Los Angeles Convention Center.

As one of the visitor-generating venues in the South Park area, the project (LAS & ED) would participate in the PCMP in order to assist in accommodating both traffic and parking demand in the area.

The PCMP includes a number of components that would be important to the visitors of the LAS & ED:

South Park Event Coordinating Committee
South Park Traffic Management Center
    Closed Circuit Television Coverage
    Upgraded Traffic Signal Control
Visitor Information Program
    Freeway and Surface Street Changeable Message Signs
    Highway Advisory Radio
Traffic Control Staff
    LAPD Pedestrian Control
    LAPD Traffic Control
    LADOT Traffic Control Officers

The South Park Event Coordinating Committee is made up of representatives of the area venues and the agencies that have responsibility for the control of traffic in the area. The Committee meets weekly during the peak activity season and on an as-needed basis (biweekly or monthly) during the remainder of the year. The venue operators forecast activity levels for the upcoming period based on scheduled events and bookings, and the Committee then schedules an appropriate traffic/parking plan based on the projected activity level.

The LAS & ED would participate in the Committee meetings so that the variations in the traffic and parking demand at the LAS & ED can be factored into the mix. Ticket sales for the theater and scheduled activity at the hotel banquet facility will most likely be the LAS & ED components that would have the most influence on the Committee choice of plan levels.

The South Park Traffic Management Center is the control center for the implementation of the various traffic and parking management plans in the area. Based on the plan levels selected by the Committee, the Traffic Management Center is activated. At the present time, the Management Center is staffed for the more active event levels. It is not expected that the South Park Traffic Management Center would be activated and staffed based on the activity at the LAS & ED alone. However, the Management Center would assist in coordinating the traffic and parking for the venue as a part of the overall demand patterns in the area.

The Management Center has a number of tools at its disposal to assist visitors to the area. The PCMP includes a program to upgrade the traffic signals in the South Park district to make them more responsive to the varying traffic patterns generated by the event traffic in the area. The beneficial effects of the upgraded signal system will be available to the visitors to the LAS & ED whether the Management Center is open or not. Closed circuit television allows the Management Center to view the key approach routes to the area and to advise incoming motorists as to the best streets to use. This information can be disseminated to incoming visitors via the changeable message signs and/or the highway advisory radio.

As parking lots and structures in the area fill, the status of parking availability is relayed to the engineers in the Management Center and the information can be relayed to incoming visitors. The parking supply for the LAS & ED would be included in the managed supply in the area so that unused LAS & ED parking could be made available to the incoming area visitors.

Traffic control staff is deployed for the busier events in the South Park area. Again, it is not expected that traffic control staff (LAPD or LADOT staff) would be deployed for crowds at the LAS & ED only. However, traffic control staff deployed for activities at the STAPLES Center and/or the Los Angeles Convention Center would also control traffic and pedestrian activity generated by the LAS & ED visitors.

By joining the South Park Event Parking and Circulation Management Plan, the LAS & ED will add to the managed parking supply available to visitors to the area. The traffic generated by the project will be treated as part of an overall area wide managed program, taking advantage of infrastructure improvements and city-owned parking facilities that would not be available for visitor traffic in any other area of the City.

Effect of Physical Mitigation Measures

The effect of the mitigation measures identified in this Chapter are summarized in Table 28 for the PM peak hour. The impact analysis identified significant traffic impacts at 17 locations in the PM peak hour.

The physical mitigation measures identified would eliminate two of those impacts and reduce the impact at one further location. Significant impacts would remain at 15 locations, although only two locations would operate at LOS E. The remaining 13 locations would continue to operate at satisfactory conditions, with 6 locations operating at LOS C and seven locations operating at LOS D.

Table 28. Future With Project and With Mitigation Conditions - Intersection Level of Service - PM Peak

No.	Intersection	Future Without Project V/C	LOS	Future With Project V/C	LOS	Change in V/C	Significant Impact	Future With Project Mitigation V/C	LOS	Change in V/C	Significant Impact
1	Blaine & Olympic	0.742	C	0.770	C	0.028	No	0.770	C	0.028	No
2	Blaine & I-110 SB Off	0.340	A	0.362	A	0.022	No	0.362	A	0.022	No
3	Blaine & 11th	0.831	D	0.895	D	0.064	Yes	0.895	D	0.064	Yes
4	Cherry & Olympic	0.468	A	0.525	A	0.057	No	0.525	A	0.057	No
5	Cherry & I-110 NB On/11th	0.584	A	0.666	B	0.082	No	0.666	B	0.082	No
6	Cherry & Pico	0.992	E	1.059	F	0.067	Yes	0.903	E	-0.089	No
7	Georgia & 9th	0.508	A	0.618	B	0.110	No	0.618	B	0.110	No
8	Georgia & Olympic	0.668	B	0.762	C	0.094	Yes	0.781	C	0.113	Yes
9	Georgia & 11th	0.367	A	0.569	A	0.202	No	0.569	A	0.202	No
10	Francisco & 9th (East)	0.791	C	0.818	D	0.027	Yes	0.818	D	0.027	Yes
11	Francisco & Olympic	0.435	A	0.704	C	0.269	Yes	0.734	C	0.299	Yes
12	Figueroa & 8th	0.790	C	0.832	D	0.042	Yes	0.832	D	0.042	Yes
13	Figueroa & 9th	0.741	C	0.813	D	0.072	Yes	0.813	D	0.072	Yes
14	Figueroa & Olympic	0.820	D	0.993	E	0.173	Yes	0.863	D	0.043	Yes
15	Figueroa & 11th	0.792	C	0.906	E	0.114	Yes	0.906	E	0.114	Yes
16	Figueroa & 12th (North) [1]	0.460	A	N/A				N/A			
17	Figueroa & 12th (South)	0.432	A	0.608	B	0.176	No	0.608	B	0.176	No
18	Figueroa & Pico	0.739	C	0.795	C	0.056	Yes	0.795	C	0.056	Yes
19	Flower & 9th	0.581	A	0.713	C	0.132	Yes	0.713	C	0.132	Yes
20	Flower & Olympic	0.771	C	0.924	E	0.153	Yes	0.924	E	0.153	Yes
21	Flower & 11th	0.633	B	0.745	C	0.112	Yes	0.745	C	0.112	Yes
22	Flower & 12th	0.573	A	0.650	B	0.077	No	0.650	B	0.077	No
23	Flower & Pico	0.846	D	0.880	D	0.034	Yes	0.880	D	0.034	Yes
24	Hope & 11th	0.537	A	0.661	B	0.124	No	0.661	B	0.124	No
25	Hope & 12th	0.298	A	0.375	A	0.077	No	0.375	A	0.077	No
26	Hope & Pico	0.512	A	0.611	B	0.099	No	0.611	B	0.099	No
27	Grand & 17th	0.690	B	0.728	C	0.038	No	0.728	C	0.038	No
28	Grand & 18th	0.453	A	0.480	A	0.027	No	0.480	A	0.027	No
29	Los Angeles & I- 10 WB Off	0.615	B	0.648	B	0.033	No	0.648	B	0.033	No
30	Figueroa & 7th	0.750	C	0.784	C	0.034	No	0.784	C	0.034	No
31	Flower & 7th	0.806	D	0.856	D	0.050	Yes	0.856	D	0.050	Yes
32	Flower & 8th	0.710	C	0.756	C	0.046	Yes	0.756	C	0.046	Yes
33	Hope & 9th	0.481	A	0.510	A	0.029	No	0.510	A	0.029	No
34	Hope & Olympic	0.584	A	0.623	B	0.039	No	0.623	B	0.039	No
35	Grand & 9th	0.529	A	0.561	A	0.032	No	0.561	A	0.032	No
36	Grand & Olympic	0.609	B	0.629	B	0.020	No	0.629	B	0.020	No
37	Grand & 11th	0.591	A	0.704	C	0.113	Yes	0.655	B	0.064	No
38	Olive & 9th	0.499	A	0.533	A	0.034	No	0.533	A	0.034	No
39	Olive & Olympic	0.585	A	0.670	B	0.085	No	0.670	B	0.085	No
40	Olive & 11th	0.489	A	0.561	A	0.072	No	0.561	A	0.072	No

1. Eliminated by project with realignment of 12th Street to Figueroa & 12th Drive (South)

Significant impacts would remain at the following locations in the PM peak hour:

- Blaine Street & 11th Street (LOS D)
- Georgia Street & Olympic Boulevard (LOS C)
- Francisco Street & 9th Street (LOS D)
- Francisco Street & Olympic Boulevard (LOS C)
- Figueroa Street & 8th Street (LOS D)
- Figueroa Street & 9 Street (LOS D)
- Figueroa Street & Olympic Boulevard (LOS D)
- Figueroa Street & 11th Street (LOS E)
- Figueroa Street & Pico Boulevard (LOS C)
- Flower Street & 9th Street (LOS C)
- Flower Street & Olympic Boulevard (LOS E)
- Flower Street & 11th Street (LOS C)
- Flower Street & Pico Boulevard (LOS D)
- Flower Street & 7th Street (LOS D)
- Flower Street & 9th Street (LOS C)

Physical mitigation measures (such as roadway widening or re-striping for additional right turn lanes) would degrade the pedestrian walking and safety environment, and would enhance roadway capacity in an area where substantial roadway capacity already exists, as shown by the forecast LOS C and LOS D conditions at many locations. In addition, further roadway widening could encourage additional auto trips, less use of transit, and potentially could lead to traffic intrusion into the residential neighborhoods to the west of the Harbor Freeway.

During the Saturday evening peak hour, the impact analysis identified significant traffic impacts at ten locations. The effect of the mitigations identified in this Chapter are summarized in Table 29 for the Saturday evening peak hour. The physical mitigation measures identified would eliminate two of these impacts. Significant impacts would remain at 8 locations, which would all operate at satisfactory conditions (five locations at LOS C, and three locations at LOS D).

Significant impacts would remain at the following locations in the Saturday evening peak hour:

- Cherry Street & 11th Street (LOS D)
- Georgia Street & Olympic Boulevard (LOS C)
- Georgia Street & 11th Street (LOS D)
- Francisco Street & Olympic Boulevard (LOS C)
- Figueroa Street & 11th Street (LOS D)
- Flower Street & 9th Street (LOS C)
- Flower Street & Olympic Boulevard (LOS C)
- Flower Street & 11th Street (LOS C)

The additional mitigation measures identified should help improve traffic flow and operating conditions at those locations where feasible physical mitigations were not identified.

Table 29. Future With Project and With Mitigation Conditions - Intersection Level of Service - Saturday Evening Peak

No.	Intersection	Future Without Project V/C	LOS	Future With Project				Future With Project Mitigation			
				V/C	LOS	Change in V/C	Significant Impact	V/C	LOS	Change in V/C	Significant Impact
1	Blaine & Olympic	0.563	A	0.696	B	0.133	No	0.696	B	0.133	No
2	Blaine & I-110 SB Off	0.417	A	0.464	A	0.047	No	0.464	A	0.047	No
3	Blaine & 11th	0.617	B	0.665	B	0.048	No	0.665	B	0.048	No
4	Cherry & Olympic	0.330	A	0.375	A	0.045	No	0.375	A	0.045	No
5	Cherry & I-110 NB On/11th	0.724	C	0.828	D	0.104	Yes	0.828	D	0.104	Yes
6	Cherry & Pico	0.915	E	1.015	F	0.100	Yes	0.869	D	-0.046	No
7	Georgia & 9th	0.520	A	0.622	B	0.102	No	0.622	B	0.102	No
8	Georgia & Olympic	0.618	B	0.727	C	0.109	Yes	0.728	C	0.110	Yes
9	Georgia & 11th	0.479	A	0.834	D	0.355	Yes	0.834	D	0.355	Yes
10	Francisco & 9th (East)	0.447	A	0.521	A	0.074	No	0.521	A	0.074	No
11	Francisco & Olympic	0.598	A	0.770	C	0.172	Yes	0.775	C	0.177	Yes
12	Figueroa & 8th	0.377	A	0.510	A	0.133	No	0.510	A	0.133	No
13	Figueroa & 9th	0.466	A	0.538	A	0.072	No	0.538	A	0.072	No
14	Figueroa & Olympic	0.604	B	0.778	C	0.174	Yes	0.656	B	0.052	No
15	Figueroa & 11th	0.619	B	0.818	D	0.199	Yes	0.818	D	0.199	Yes
16	Figueroa & 12th (North) [1]	0.420	A	N/A				N/A			
17	Figueroa & 12th (South)	0.306	A	0.495	A	0.189	No	0.495	A	0.189	No
18	Figueroa & Pico	0.602	B	0.639	B	0.037	No	0.639	B	0.037	No
19	Flower & 9th	0.632	B	0.726	C	0.094	Yes	0.726	C	0.094	Yes
20	Flower & Olympic	0.556	A	0.771	C	0.215	Yes	0.771	C	0.215	Yes
21	Flower & 11th	0.572	A	0.726	C	0.154	Yes	0.726	C	0.154	Yes
22	Flower & 12th	0.291	A	0.352	A	0.061	No	0.352	A	0.061	No
23	Flower & Pico	0.521	A	0.547	A	0.026	No	0.547	A	0.026	No
24	Hope & 11th	0.302	A	0.501	A	0.199	No	0.501	A	0.199	No
25	Hope & 12th	0.172	A	0.232	A	0.060	No	0.232	A	0.060	No
26	Hope & Pico	0.345	A	0.367	A	0.022	No	0.367	A	0.022	No
27	Grand & 17th	0.427	A	0.462	A	0.035	No	0.462	A	0.035	No
28	Grand & 18th	0.451	A	0.507	A	0.056	No	0.507	A	0.056	No
29	Los Angeles & I- 10 WB Off	0.456	A	0.516	A	0.060	No	0.516	A	0.060	No
30	Figueroa & 7th	0.346	A	0.384	A	0.038	No	0.384	A	0.038	No
31	Flower & 7th	0.289	A	0.407	A	0.118	No	0.407	A	0.118	No
32	Flower & 8th	0.291	A	0.421	A	0.130	No	0.421	A	0.130	No
33	Hope & 9th	0.150	A	0.189	A	0.039	No	0.189	A	0.039	No
34	Hope & Olympic	0.245	A	0.336	A	0.091	No	0.336	A	0.091	No
35	Grand & 9th	0.149	A	0.264	A	0.115	No	0.264	A	0.115	No
36	Grand & Olympic	0.327	A	0.389	A	0.062	No	0.389	A	0.062	No
37	Grand & 11th	0.148	A	0.371	A	0.223	No	0.361	A	0.213	No
38	Olive & 9th	0.178	A	0.249	A	0.071	No	0.249	A	0.071	No
39	Olive & Olympic	0.311	A	0.420	A	0.109	No	0.420	A	0.109	No
40	Olive & 11th	0.126	A	0.272	A	0.146	No	0.272	A	0.146	No

1. Eliminated by project with realignment of 12th Street to Figueroa & 12th Drive (South)

Sequencing of Mitigation Measures

The project will be constructed in discrete stages over a period of time up to 2008. Mitigation measures will also be implemented in corresponding stages appropriate to construction. Mitigation measures on streets adjacent to the project site will be implemented when that block of the project is developed. Prior to commencement of any construction, a mitigation sequencing plan will be developed for review and approval by LADOT.