
4.10 - Transportation and Circulation

4.10.1 - Introduction

This section describes the existing setting regarding transportation and potential effects from project implementation on the site and its surrounding area. Descriptions and analysis in this section are based on information collected from the City Transportation Department.

4.10.2 - Environmental Setting

Roadway Network

The roadway network consists of a hierarchy of roadway classifications ranging from freeway to arterial to collector to local roadways. The main roadways in the project vicinity are shown in Exhibit 4.10-1. Several freeways serve regional and inter-city trips and are under the jurisdiction of Caltrans. In the general project area, the 110, 10, and 101/2 Freeways provide direct regional access in all directions to and from the project area.

Local traffic is accommodated by a network of arterials, collections, and local roadways. Arterials handle high traffic volumes, provide intra-city circulation and convey local traffic to major activity centers, highways, and freeways for regional access. In the project vicinity, Wilshire Boulevard is a major arterial, while W. 6th Street and Alvarado Street are classified as arterial roadways.

Collector streets are next in the hierarchy of street classifications. They carry less traffic than arterials and provide a higher level of access to local land uses. In the project vicinity, W. 7th Street is classified as a collector. Local roadways follow collector streets in the hierarchy of street classifications. Local streets carry the least amount of traffic but provide the highest level of local access. In the project vicinity, S. Park View Street and the streets that feed into 6th and 7th Streets are local streets. All of these perimeter streets have four travel lanes except S. Park View, which has two.

Existing Intersection Conditions

There are two main methods for calculating roadway and/or intersection congestion. The Highway Capacity Manual (HCM) uses seconds of delay experienced at each leg of a particular intersection. The HCM was last published in 2000 by the Transportation Research Board as Special Report 209. In the HCM method, the intersection with the greatest delay is the most limiting and determines the overall Level of Service (LOS) of that particular intersection. The volume-to-capacity (V/C) ratio method relates the total traffic volumes for critical opposing movements to the theoretical capacity for those movements. The V/C ratio method is commonly used in traffic studies but can only be used for roadway segments or signalized intersections, while unsignalized intersections (stop-controlled) can also be evaluated by measuring delay in seconds as described in the HCM method. Table 4.10-1 describes LOS class (A through F) based on both the volume-to-capacity ratio or seconds of delay with LOS A being the “best” (i.e., free flowing) and LOS F being the “worst” (i.e., totally congested).

Table 4.10-1: Intersection Level of Service Definitions

Level of Service (LOS)	Description of Traffic Movement	Intersection Type	
		Volume-to-Capacity Ratio (V/C)	HCM Delay in seconds/vehicle)
A	Free flow with no delays. Users are virtually unaffected by others in the traffic stream.	< 0.61	0–10
B	Stable traffic. Traffic flows smoothly with few delays.	0.61–0.70	> 10–15
C	Stable flow but the operation of individual users becomes affected by other vehicles. Modest delays.	0.71–0.80	> 15–25
D	Approaching unstable flow. Operation of individual users becomes significantly affected by other vehicles. Delays may be more than one cycle during peak hours.	0.81–0.90	> 25–35
E	Unstable flow with operating conditions at or near the capacity level. Long delays and vehicle queuing.	0.91–1.00	> 35–50
F	Forced or breakdown flow that causes reduced capacity. Stop and go traffic conditions. Excessive long delays and vehicle queuing.	> 1.00	> 50

Source: Highway Capacity Manual 2005.

Table 4.10-2: Projected Traffic Impacts on Offsite Roadways

Roadway/Designation	Existing* Traffic (ADT)	Lanes/ LOS	Project** Traffic (%/ADT)	Existing V/C Ratio	Percent Change from Project Traffic	Significant Change?
W. 6 th Street (arterial)	32,387	4/D	0.15%	0.81	<0.1%	No
Wilshire Boulevard (major arterial)	27,906	4/B	0.20%	0.69	<0.1%	No
W. 7 th Street (collector)	35,112	4/D	0.15%	0.88	<0.1%	No
Alvarado Street (arterial)	25,678	4/B	0.20%	0.64	<0.1%	No
S. Park View Drive (local)	10,420	2/A	0.45%	0.52	+0.1%	No

* Existing traffic data from General Plan Circulation Element and City Transportation Department.

A 4-lane arterial roadway is expected to carry up to 40,000 vehicles per day. LOS = V/C ratio (see Table 4.10-1)

** “Worst case” assumption that half the additional project traffic (max. 50 trips per day or peak hour) load on roadway

Source: Traffic data from City Transportation Department, WGM database 2007.

Public Transportation

Bus Service

Bus service for the Los Angeles area is managed by the Metropolitan Transportation Authority (MTA). At present, Routes 16, 18, 26, 66, 204, 352, 366, 603, and 754 provides service along the roadways bordering MacArthur Park. With one or more transfers, riders can reach most of the surrounding communities.

Metrolink

Metrolink currently provides regional commuter rail service to the Los Angeles area. The “Red Line” subway runs under MacArthur Park and there is a Metrolink station on the east side of Alvarado Street just east of the park and south of Wilshire Boulevard.

Bicycles

Bicycle access is generally categorized using the following classes of access facilities:

- Class I (bike path) provides exclusive right-of-way for bicyclists and pedestrians, with cross flows of motorists minimized.
- Class II (bike lane) provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles, with through travel by motor vehicles or pedestrians prohibited but with vehicle parking and cross flows by pedestrians and motorists permitted.
- Class III (bike route) provides a right-of-way, designated by signs or permanent markings that is shared by pedestrians and motorists.

Bicyclists make extensive use of the walkways and paths in the park. There are also bicycle racks at various locations throughout the park.

Pedestrians

The project area is highly urbanized and both residents and workers walk in and around the park at various times of the day. Some of the planned improvements will make the park more easily accessible to pedestrians, bicyclists, etc.

Transportation Demand Management

Transportation Demand Management (TDM) is a series of measures promoting alternatives to the single-occupant vehicle for reducing traffic congestion and improving air quality by maximizing the use of the existing transportation infrastructure. These measures include carpooling, vanpooling, transit, walking, bicycling, telecommuting, and compressed workweeks.

The City of Los Angeles currently encourages a number of TDM programs including ridesharing, vanpooling, priority parking for carpools, park and ride lots, etc. The primary goal of the City’s TDM efforts is to reduce traffic congestion and improve air quality through the reduction of work-related car trips.

Regulatory Framework

State

Caltrans' established performance standard for all state highway facilities is the transition between LOS C and D. If a state highway facility operates below the transition between LOS C and D, the Caltrans' threshold is to maintain the lower level of service.

City of Los Angeles

The Circulation Element of the City's General Plan contains goals and policies that attempt to minimize traffic and circulation impacts on City streets and intersections. For standard private development projects, the City typically requires traffic studies that use the V/C methodology. However, this is a park renovation project and the City does not typically require detailed traffic studies for these types of projects, mainly because the number of additional trips generated is so low and much of the traffic occurs during off-peak hours.

4.10.3 - Thresholds of Significance

The *L.A. CEQA Thresholds Guide* (Section L) states that a project would normally have a significant impact on traffic and circulation if it would:

- a.) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?
- b.) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?
- c.) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (Refer to Section 7, Effects Found Not To Be Significant.)
- d.) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- e.) Result in inadequate emergency access?
- f.) Result in inadequate parking capacity?
- g.) Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

4.10.4 - Project Impacts and Mitigation Measures

This section discusses potential impacts associated with the development of the project and provides mitigation measures where appropriate.

Short-Term Year Traffic Congestion

Impact TRANS-1: Trips associated with the Proposed Project would substantially degrade short-term roadway or intersection performance.

Impact Analysis

The planned improvements that are part of this project will not substantially increase use or uses on the site that would generate additional short-term traffic onto local streets. At most, it is estimated the various improvements would generate no more than 100 additional vehicular trips per day that would be mainly distributed onto Wilshire Boulevard and W. 6th Street, with secondary distribution onto Alvarado Street and W. 7th Street. Table 4.10-2 shows that this additional traffic would not create congestion or cause significantly lower LOS on local streets, even under potential “worst case” conditions (i.e., half the additional traffic loading onto one roadway). In actual operation, additional trips will load onto various roadways, and the overall increase in traffic will be minimal from the proposed park improvements.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No measures are needed.

Level of Significance After Mitigation

Less than significant impact.

Long-Term Traffic Congestion

Impact TRANS-2: Trips associated with the Proposed Project would substantially degrade long-term roadway or intersection performance.

Impact Analysis

Similar to the analysis in TRANS-1, the planned improvements of the project will not cause a substantial long-term increase in long-term traffic onto local streets. At most, it is estimated that the various improvements would generate no more than 100 additional daily vehicular trips that would be distributed mostly onto Wilshire Boulevard and W. 6th Street, with secondary distribution onto Alvarado Street and W. 7th Street. Table 4.10-2 shows that this additional traffic would not create congestion or cause significantly lower LOS on local streets, even under “worst case” assumptions.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No measures are needed.

Level of Significance After Mitigation

Less than significant impact.

Freeway Operations

Impact TRANS-3: The Proposed Project would contribute to deficient freeway operations.

Impact Analysis

As outlined in TRANS-1 and TRANS-2, the planned improvements of the project are not expected to cause significant traffic or congestion on local streets. A small proportion of this incremental amount of additional traffic would distribute onto the local freeways, but this small amount of traffic is not expected to create a significant impact on local freeway congestion.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No measures are needed.

Level of Significance After Mitigation

Less than significant impact.

Parking Capacity

Impact TRANS-4: The Proposed Project would not provide adequate parking in accordance with the requirements of the City Development Code.

Impact Analysis

The various planned improvements of the project are not expected to create a significant demand for additional parking. The renovation of the Boathouse and Signal buildings will only result in incremental increases in the square footages of these buildings. At most, the Boathouse would be replaced by an equivalent structure (max. 2,100 square feet), which would require no additional parking spaces. It is anticipated that most of the additional use of the park, including nighttime use of the soccer field, would utilize public transit or non-vehicular access.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No measures are needed.

Level of Significance After Mitigation

Less than significant impact.

Hazards

Impact TRANS-5: The Proposed Project may result in traffic hazards from the street layout or project design.

Impact Analysis

The Proposed Project does not propose changes to the overall park access routes or maintenance roads. In addition, the proposed uses will not substantially increase the use of the site, but will improve access and visibility in various areas of the park.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No measures are needed.

Level of Significance After Mitigation

Less than significant impact.

Emergency Access

Impact TRANS-6: The Proposed Project would not result in inadequate emergency access.

Impact Analysis

MacArthur Park currently has adequate access for emergency vehicles due to the network of onsite paths, trails, and maintenance access ways. The park also has good perimeter access and Wilshire Boulevard bisects the site, allowing additional access for emergency vehicles. The Proposed Project will not substantially change or degrade access in and around the park. In fact, one of the objectives of the Project is to improve safety and visibility in the park. For an analysis of the provision of police and fire services (as compared to access) see Section 4.9, Public Services. Based on this information, the Proposed Project will not result in inadequate access for police, fire, or other emergency vehicles.

Level of Significance Before Mitigation

Less than significant impact.

Mitigation Measures

No mitigation is necessary.

Level of Significance After Mitigation

Less than significant impact.

Public Transit, Bicycles, and Pedestrians

Impact TRANS-7: The Proposed Project would provide public transit, bicycle, and pedestrian opportunities and would not conflict with adopted policies, plans, or programs supporting alternative transportation.

Impact Analysis

MacArthur Park already has excellent access via public transit, via both buses on perimeter streets and via Red Line subway with a Metrolink station just east of the park. The Proposed Project will only incrementally increase use of the park, and many of the anticipated users will likely use public transit, walk, or use bicycles to access the park. The Proposed Project will also allow for the installation of additional paths for use by bicycles and pedestrians within the park.

Given the proximity of surrounding urban intensity land uses, it would be expected that many residents and workers would continue to walk or bike to the park instead of using a car. Therefore, pedestrian impacts would be less than significant once the planned network of paths and sidewalks has been upgraded.

Level of Significance Before Mitigation

Less than significant impact

Mitigation Measures

No measures are necessary.

Level of Significance After Mitigation

Less than significant impact.

Construction Impacts

Impact TRANS-8: The Proposed Project may create substantial short-term traffic, parking, and vehicular access impacts associated with construction activities.

Impact Analysis

Construction truck traffic would consist of trucks and heavy equipment, most of which will remain on the project site during grading and construction operations. Activities include construction of new infrastructure, movement of excavated material onsite (i.e., earthwork is expected to be balanced onsite), and on-haul of new construction materials. Most truck trips would be expected to use Wilshire Boulevard and W. 6th Street as main access routes, especially for vehicles that would use the freeway.

Daily construction truck traffic will vary by type of activity, but the maximum number of daily truck trips is estimated to be 100 round trips (average, 10 peak hour). Note that this estimate is consistent with the number of truck trips used in the construction air quality analysis in Section 4.2, Air Quality. Construction truck traffic has the potential to create congestion and delays, as well as hazards from trucks entering roadways and flying debris from uncovered loads.

Construction staging and vehicle parking would be provided onsite. Staging operations have the potential to obstruct onsite and possibly offsite roadways and parking lots. Some phases of the project would be labor intensive and may result in dozens of workers on the project site on certain days, especially for the soccer field renovation. There is adequate room onsite for construction activities, so there should be no spillover of construction parking onto surrounding streets.

Level of Significance Before Mitigation

Potentially significant impact.

Mitigation Measures

MM TRANS-8 Prior to the commencement of construction of the soccer field, the City Park staff shall prepare a Construction Traffic, Staging, and Parking Management Plan to minimize impacts on surrounding streets and parking areas. All construction contracts shall include a clause requiring compliance with the Construction Traffic, Staging, and Parking Management Plan and the developer shall be able to enforce the provisions of the plan through penalties, up to and including, termination of the contract. The plan shall include the following provisions:

- Construction truck traffic shall be limited to designated routes and construction truck traffic shall be prohibited on all other roadways, unless compelling circumstances warrant such movements (e.g., a major traffic accident).
- Signage shall be installed at construction truck ingress and egress points alerting motorists to such movements.
- Soil, debris, or other loose materials shall be covered with tarps or other restraining material during haul movements on roadways
- On-site and off-site construction staging and parking locations shall be identified, as well as any necessary shuttle service needed to transport workers from off-site locations. For safety reasons, off-site staging or parking shall be arranged as close as practical to the park site if it cannot be arranged onsite.
- A pre-construction conference shall be held advising all construction contractors of the requirements of the Construction Traffic, Staging, and Parking Management Plan.

Level of Significance After Mitigation

Less than significant impact.