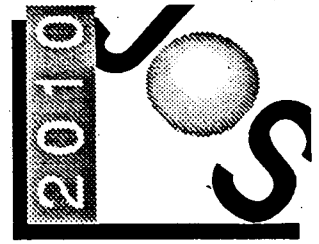


Chapter 7
Transportation



Chapter 7. Transportation

INTRODUCTION

This chapter describes the potential transportation impacts associated with implementation of the 2010 Plan. A description of the regional and local setting is presented, followed by an explanation of the methodology and assumptions used in this impact analysis and identification of the impacts associated with each of the project alternatives. Existing roadway characteristics and operating conditions were compiled using information from Caltrans, SCAG, and the City of Carson.

As described in Chapter 1, "Introduction", this EIR provides project-specific CEQA compliance for full secondary treatment and solids processing at the JWPCP. Other elements of the 2010 Plan are analyzed on a program level when site-specific information is unavailable or locations of sites are not identified.

SETTING

Level of Service Concepts

The quality of traffic service provided at a location is measured by its level of service (LOS). This method uses a letter to describe the peak-period driving conditions for a particular intersection or roadway segment. The letters A through F represent the best to worst driving conditions, respectively. LOS A indicates free-flow operation with little or no delay; LOS F denotes jammed flow with substantial delay. Table 7-1 describes volume-to-capacity (V/C) ranges and the general characteristics of traffic flow associated with each LOS.

Regional Setting

Los Angeles County is served by a multifaceted transportation system, consisting of a highly developed network of streets and highways and a wide range of transit modes. A highly integrated freeway system provides regional access throughout Los Angeles County, supporting interregional and intraregional trips (Figure 7-1).

Table 7-1 Level of Service Definitions

Level of Service	V/C Ratio	Flow Conditions
A	0.0-0.60	Free flow accompanied by low volumes and high speeds. Minimal interruption. Driver able to influence movement.
B	0.61-0.70	Stable flow with somewhat restricted conditions. Driver has reasonable influence over movement.
C	0.71-0.80	Stable flow with satisfactory speed, but constrained maneuverability because of higher traffic volumes.
D	0.81-0.90	Approaching unstable flow with tolerable, but variable, operating speeds. Driver has little influence over conditions. LOS D conditions generally tolerable for only short periods of time.
E	0.90 - 1.00	Low tolerance of operational conditions. Speeds typically constrained to 30 mph. Flow unstable with periods of momentary stoppage. Traffic volumes near roadway capacity levels.
F	1.00 and over	Forced flow conditions with low speeds and frequent stops queuing. Volumes exceed capacity levels.

Source: Southern California Association of Governments 1994a.

Major facilities in the JOS service area include the Pacific Coast Highway (SR 1), the Santa Ana Freeway (I-5), the Santa Monica Freeway (I-10), the Orange Freeway (SR 57), the Pomona Freeway (SR 60), the Artesia Freeway (SR 91), the Glenn Anderson Freeway (I-105), the Harbor Freeway (I-110), the Foothill Freeway (I-210), the San Diego Freeway (I-405), the San Gabriel River Freeway (I-605), and the Long Beach Freeway (I-710).

Many of the region's freeways and highways are currently highly congested, especially during the morning and evening peak commuting periods. This congestion results from the inability of the freeway system to serve the travel demand. Approximately 1,977 freeway-lane miles operated at LOS E or F in 1990 within the SCAG region, indicating high levels of congestion with demands near or exceeding capacity on portions of most freeways. (Southern California Association of Governments 1994a).

The 1990 daily vehicle miles traveled (VMT) for all trips in the SCAG region was estimated to be 283.8 million, resulting from 34.3 million vehicle trips. The vehicle occupancy rates for all trips was 1.42 persons per vehicle (Southern California Association of Governments 1994a). Transportation demand management (TDM) measures are being implemented in the region to reduce the number of single-occupant vehicles. High-occupancy vehicle (HOV) facilities have opened on segments of I-10, I-105, I-210, and I-405 in Los Angeles County. Several hundred miles of HOV lanes are also currently under construction.

Rail and bus transit service is provided in the region, but transit ridership only constituted about 5.6% of the total of 1990 home-to-work trips (Southern California Association of Governments 1994a). Most of the region's aviation demand is served by five metropolitan commercial airports: the Los Angeles International, Ontario International, Burbank-Glendale-Pasadena, John Wayne, and Long Beach Airports. The Los Angeles area is served by the Atchison, Topeka, and Santa Fe; Southern Pacific; and Union Pacific railroad lines. Figure 7-2 shows the rail network in the Los Angeles area.

Joint Water Pollution Control Plant

Regional access to the JWPCP is provided by I-110. Local access is provided by Sepulveda Boulevard, Figueroa Street, and Lomita Boulevard. These facilities are described below and are shown in Figure 2-4.

I-110 is a north-south facility connecting the JWPCP to San Pedro and harbor areas to the south and the cities of Los Angeles and Pasadena to the north. Near the plant, I-110 is eight lanes wide and has interchanges at Sepulveda Boulevard and SR 1.

The existing annual average daily traffic (AADT) on the segment of this freeway located north of the plant between the Sepulveda Boulevard interchange and the Carson Street interchange is 160,000 vehicles per day with a peak-hour volume of 11,200 vehicles per hour (California Department of Transportation 1993). The operating LOS for this segment was estimated to be LOS E in 1990, indicating heavy congestion and volumes near the freeway capacity (Southern California Association of Governments 1994b). The existing AADT on the segment of this freeway adjacent to the plant between the Sepulveda Boulevard interchange and the SR 1 interchange is 127,000 vehicles per day with a peak-hour volume of 8,900 vehicles per hour (California Department of Transportation 1993). LOS information was not available for this section of the freeway.

Sepulveda Boulevard is a major arterial roadway generally paralleling I-405. This road is a four-lane divided roadway east of its intersection with Figueroa Street and widens to six lanes west of this intersection. The posted speed limit on Sepulveda Boulevard is 40 mph.

Sepulveda Boulevard has a partial cloverleaf interchange with I-110. The northbound on-ramps of this interchange are metered during the peak periods. An HOV bypass lane is provided on the on-ramp from the westbound approach of Sepulveda Boulevard to northbound I-110. The intersections of Sepulveda Boulevard with the I-110 northbound and southbound off-ramps, in addition to its intersection with Figueroa Street, are controlled by traffic signals.

Figueroa Street extends from north of I-10 to south of SR 1, closely paralleling I-110. Near the JWPCP, Figueroa Street is a four-lane undivided roadway with a continuous center left-turn lane. The posted speed limit on this road is 40 mph.

The Atchison, Topeka, and Santa Fe railroad line crosses Figueroa Street at grade, about one-quarter mile south of Sepulveda Boulevard. This crossing is controlled by a pair of automatic gates combined with post-mounted flashing signals and bells.

Lomita Boulevard is a four-lane divided road with left-turn lanes at major intersections. The posted speed limit on this road is 40 mph. The intersection of Lomita Boulevard with Figueroa Street is signalized.

The main employee access to the JWPCP is by Figueroa Street. Truck access is by Sepulveda Boulevard and Figueroa Street. All trucks travel from either Sepulveda Boulevard or Figueroa Street to the Sepulveda Boulevard interchange with I-110 and travel northbound on this freeway. On the average, 73 trucks per weekday and 32 trucks per weekend day leave the JWPCP.

Figure 7-3 shows the 1992 AADT volumes on the roadways surrounding the JWPCP. Figure 7-4 shows the morning and evening peak-hour turning movement counts at the intersection of Sepulveda Boulevard and Figueroa Street. These counts were collected in May 1994.

Rail Lines. The Atchison, Topeka, and Santa Fe Harbor Branch rail line goes through the JWPCP. East of the JWPCP, the Atchison, Topeka, and Santa Fe line connects with a Union Pacific line that serves Terminal Island to the south. West of the JWPCP, the Atchison, Topeka, and Santa Fe extends northwesterly to El Segundo, at which point the alignment curves in an easterly direction to San Bernardino. From San Bernardino, Atchison, Topeka, and Santa Fe has a main line that extends to Colton, Barstow, and Daggett. From Daggett, a Union Pacific main line extends northeast to Nevada and Utah. There is also an Atchison, Topeka, and Santa Fe main line from Barstow that extends west through Mojave to Bakersfield and east through Cadiz to Needles. From Cadiz, there is an Atchison, Topeka, and Santa Fe branch line to Blythe.

From Colton, a Southern Pacific main line extends to Lancaster, Mojave, and Trona. From the Southern Pacific main line that runs along the eastern edge of the Salton Sea, a branch line extends from Ferrum to Eagle Mountain.

Los Coyotes Water Reclamation Plant

Regional access to the Los Coyotes WRP is provided by I-605. Local access is provided by Alondra Boulevard and Piuma Avenue (Figure 2-5).

I-605 is a north-south facility extending north from I-405 to I-210 near Duarte. Near the plant, I-605 is eight lanes wide and has interchanges at SR 91 and Alondra Boulevard. The AADT on the segment of this freeway between the SR 91 interchange and the Alondra Boulevard interchange is 247,000 vehicles per day, with a peak-hour volume of 18,500

vehicles per hour (California Department of Transportation 1993). This segment was estimated to operate at LOS F in 1990, signifying a highly congested freeway with volumes exceeding its capacity (Southern California Association of Governments 1994b).

Pioma Avenue provides the only access to the Los Coyotes WRP. This road is two lanes wide and has a posted speed limit of 35 mph. Approximately 500 feet before reaching the plant access, Pioma Avenue narrows to about 20 feet of pavement without shoulders or sidewalks.

San Jose Creek Water Reclamation Plant

Regional access to the San Jose Creek WRP is provided by I-605 and SR 60. Local access is provided by Workman Mill Road (Figure 2-6).

I-605 is a north-south facility extending north from I-405 to I-210 near Duarte. Near the plant, I-605 is eight lanes wide and has interchanges at SR 60 and Valley Boulevard.

The existing AADT on the segment of this freeway between the SR 60 interchange and the Valley Boulevard interchange is 175,000, with a peak-hour volume of 14,100 vehicles (California Department of Transportation 1993). This segment was estimated to operate at LOS F in 1990, signifying a highly congested freeway with volumes exceeding its capacity (Southern California Association of Governments 1994b).

SR 60 is an east-west facility connecting the cities of Los Angeles and Santa Monica to the west and Riverside and Beaumont to the east. Near the plant, SR 60 is eight lanes wide and has an interchange with Crossroads Parkway.

The existing AADT on the segment of this freeway between the I-605 interchange and the Crossroads Parkway interchange is 236,000, with a peak-hour volume of 17,000 vehicles (California Department of Transportation 1993). This segment was estimated to operate at LOS F in 1990, signifying a highly congested freeway with volumes exceeding its capacity (Southern California Association of Governments 1994b).

Workman Mill Road provides the only direct vehicle access to the San Jose Creek WRP and the Joint Administrative Office. At the plant access, this road has four through lanes and a continuous center left-turn lane. The posted speed limit on this segment is 45 mph.

A narrow, private two-lane road crossing under I-605 joins San Jose Creek WRP East and West, which are located on the two sides of this freeway. This undercrossing also includes a separate pedestrian walkway.

Whittier Narrows Water Reclamation Plant

Regional access to the Whittier Narrows WRP is provided by SR 60. Local access is provided by Rosemead Boulevard (SR 19) (Figure 2-7).

SR 60 is an east-west facility connecting the cities of Los Angeles and Santa Monica to the west and Riverside and Beaumont to the east. Near the plant, SR 60 is eight to ten lanes wide and has an interchange with SR 19.

The existing AADT on the segment of this freeway between the SR 19 interchange and the Santa Anita Avenue interchange is 210,000 vehicles per day, with a peak-hour volume of 15,300 vehicles per hour (California Department of Transportation 1993). This segment was estimated to operate at LOS F in 1990, signifying a highly congested freeway with volumes exceeding its capacity (Southern California Association of Governments 1994b).

SR 19 provides direct access to the plant. At the plant access point, SR 19 is a four-lane divided road with a posted speed limit of 50 mph. Turning movement at the plant access is limited to right turns in and out of the plant access.

IMPACTS AND MITIGATION MEASURES OF THE 2010 PLAN ALTERNATIVES

Methodology and Assumptions for Impact Analysis

Inland Water Reclamation Plants and Sewers

This EIR includes a qualitative analysis of transportation impacts of the 2010 Plan alternatives for the inland WRPs and the sewers. The EIR is not intended to offer a detailed roadway LOS analysis, but to discuss the overall impacts of the proposed alternatives on these facilities.

Joint Water Pollution Control Plant

A more detailed impact analysis was conducted for the JWPCP than for the inland WRPs and the sewers. According to the City of Carson guidelines, a detailed traffic study must be prepared if the project adds 50 or more new trips to any peak travel direction to and from the site during any peak hour (City of Carson Engineering Services Department 1993).

Construction-related traffic would consist primarily of construction employee trips and truck trips to and from the plant. The intersection of Sepulveda Boulevard and Figueroa Street is the intersection that would be most affected by construction-related traffic. An LOS

analysis was conducted for this intersection for the morning and evening peak hours during the period when construction activities generate the highest amount of traffic. The Intersection Capacity Utilization Methodology, as recommended by the City of Carson, was used for this analysis.

Operation- and biosolids disposal-related traffic impacts of each project alternative would result from the additional employee and truck trips to and from the plant. None of the project alternatives would result in addition of 50 or more new peak-hour trips to any peak travel direction; therefore, a detailed LOS analysis was not performed in assessment of the operational and biosolids disposal impacts of the project alternatives.

Table 7-2 presents an estimate of the number of daily construction employees for each JWPCP construction contract. The average number of daily construction employees for each contract was calculated based on the construction schedule and estimate of construction person-days provided by the Districts (which accounts for fluctuations during the construction period). For each contract, the average number of daily construction employees was calculated by dividing the number of person-days of labor by the duration of the contract, assuming an average of 20 working days per month.

Table 7-2 Estimated Number of Construction Employees for the JWPCP

Contract	Number of Construction Person-Days	Estimated Construction Period	Construction Duration (Months)	Average Number of Employees Per Day ^a
Site work	4,100	5/1996 - 12/1997	20	10
Reactors and clarifiers	127,950	5/1998 - 6/2002	50	128
Cryogenics plant construction	7,450	7/1999 - 6/2002	36	10
Phase I digesters	74,700	7/1999 - 6/2002	36	104
Power generator construction	9,250	7/1999 - 6/2002	36	13
Phase I dewatering construction	34,100	7/1996 - 3/1999	33	52
Phase II dewatering construction	15,300	1/2005 - 6/2007	30	26
Phase II digesters	64,500	1/2004 - 12/2006	36	90

^a The average number of daily construction employees was calculated by dividing the number of person-days of labor by the duration of the construction period, assuming an average of 20 working days per month.

The number of construction employees at the JWPCP would be highest between July 2000 and June 2002, when several construction contracts overlap. During this period, an average of about 255 construction employees would be present at the plant.

The construction-related traffic impact analysis was based on the worst-case scenario of the peak construction period between July 2000 and June 2002. Construction employees

were assumed to arrive at the site mostly during the morning peak hour and to depart the site mostly during the evening peak hour of the adjacent street system. Additionally, all employees were assumed to drive alone to work, rather than in carpools or by alternative modes of transportation.

To account for truck trips expected to be generated during the construction period, it was assumed that an average of 10 trucks per hour would travel to or from the site during the morning and evening peak hours. Table 7-3 presents a summary of the trip generation analysis for JWPCP construction activities.

Traffic volumes on the surrounding roadways are expected to increase by 2002, in addition to increasing as a result of the project construction-related traffic. To represent this growth, a growth rate of 3% per year was applied to the existing traffic volumes. This growth rate was obtained from the City of Carson Engineering Services Department (1993).

Construction-related trips were distributed through the street system using the trip distribution pattern provided by the City of Carson Engineering Services Department (1993). Because the intersection of Sepulveda Boulevard and Figueroa Street is the intersection most affected by JWPCP traffic, an LOS analysis was conducted for this intersection. This analysis was performed for 2002 conditions with and without the construction-related traffic.

Figure 7-5 shows the projected 2002 turning movement volumes at the intersection of Sepulveda Boulevard and Figueroa Street. Table 7-4 shows the results of the capacity analysis for this intersection.

To determine the effects of construction-related traffic on the surrounding highway system, the peak-hour construction-related traffic was added to the projected 2002 volumes on I-110 and SR 1. Table 7-5 shows the percentage peak-hour traffic increase on these highways that would result from construction-related traffic. Because the trends show that the traffic volumes on the analyzed segments have not increased in the last few years (California Department of Transportation 1990 and 1993), a growth rate of only 1% per year was applied to the 1992 traffic volumes to project the 2002 volumes.

Criteria for Determining Significance

According to the State CEQA Guidelines and professional standards, a project will normally have a significant effect on the environment if it will:

- cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system;
- cause a substantial increase in the use of roads resulting from transporting construction materials and crews to the work area;

Table 7-3. Trip Generation during Construction at the JWPCP

	Quantity	Trip Generation Rates						Trip Generation					
		Morning Peak Hour			Evening Peak Hour			Morning Peak Hour			Evening Peak Hour		
		Total	% In	% Out	Total	% In	% Out	Total	In	Out	Total	In	Out
Onsite employees	255	1 trip end/ employee	90	10	1	10	90	255	230	25	255	25	230
Construction trucks	10	1 trip end/ truck	50	50	1	50	50	10	5	5	10	5	5
Total								265	235	30	265	30	235

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Table 7-4. Summary of Capacity Analysis during Construction:
Intersection of Sepulveda Boulevard and Figueroa Street

	Morning Peak Hour		Evening Peak Hour	
	V/C	LOS	V/C	LOS
Existing conditions	0.59	A	0.63	B
2002 without project	0.72	C	0.78	C
2002 with project construction-related traffic	0.75	C	0.88	D

Table 7-5. Percent Highway Volume Increase Resulting from JWPCP Construction-Related Traffic

Route	Segment	1992 Peak-Hour Volume	2002 Peak-Hour Volume	2002 Project Construction Peak-Hour Traffic	Percentage Increase due to Construction
I-110	Anaheim Street - SR 1	6,900	7,600	20	0.3
I-110	SR 1 - Sepulveda Boulevard	8,900	9,850	15	0.2
I-110	Sepulveda Boulevard - Carson Street	11,200	12,350	155	1.3
SR 1	Avelon Boulevard - I-110	2,800	3,100	55	1.8
SR 1	I-110 - Vermont Avenue	3,550	3,900	20	0.5

- substantially increase the traffic delay experienced by drivers;
- substantially alter present patterns of circulation or movement; or
- increase traffic hazards to motor vehicles, bicycles, or pedestrians.

The Institute of Transportation Engineers (1989) recommends for the initial screening of impacts that a potential impact be examined more closely if it involves an increase of 50 or more trucks, 100 passenger vehicles, or an equivalent combination of vehicles per hour in the peak direction during the peak hour. For the JWPCP, this significance threshold was reduced to an increase of 50 new trips to the peak travel direction to or from the site during the peak hour to comply with the City of Carson guidelines (City of Carson Engineering Services Department 1993). Increases less than these thresholds were considered less than significant.

Local jurisdictions also establish significance criteria. The City of Carson guidelines indicate that a project will normally have a significant effect if it will result in a major intersection operating at an acceptable LOS (A, B, C, or D) to deteriorate to an unacceptable level (E or F). The Los Angeles County guidelines (Los Angeles County Metropolitan Transportation Authority 1993) indicate that a project will have a significant impact when it increases traffic demand on an already deficient facility by 2% of the capacity, causing the facility to operate at LOS F or worsening the operation of a facility that already operates at LOS F.

Comparison of Alternatives

Table 7-6, at the end of this chapter, shows that the transportation impacts associated with Alternatives 2, 3, and 4 are similar to those associated with Alternative 1, with some variation. This variation in impacts is described below for each alternative.

Alternative 1: Upgrade JWPCP/Expand Los Coyotes WRP/San Jose Creek WRP

Construction Impacts

Impact: Degradation of the Level of Service at the Intersection of Sepulveda Boulevard and Figueroa Street during Construction at the JWPCP. Construction-related traffic would degrade the 2002 evening peak-hour LOS at the intersection of Sepulveda Boulevard and Figueroa Street from LOS C to LOS D (Table 7-4). This impact is considered less than significant because LOS D is considered an acceptable LOS for major intersections in Carson.

Mitigation. No mitigation is required.

Impact: Minimal Increase in Construction-Related Traffic to I-110 at the JWPCP. Construction-related traffic would increase the traffic volumes on I-110, which is presently operating at LOS E. This impact is considered less than significant because the construction-related traffic would not increase traffic demand on this facility by more than 2% (Table 7-5).

Mitigation. No mitigation is required.

Impact: Increased Traffic on the Existing Roadway Facilities during Construction at the JWPCP. Even though the additional construction-related trips generated during construction at the JWPCP would not result in an unacceptable LOS at the adjacent facilities, it would result in increased use of the existing roadways by the construction employees and trucks. This impact is therefore considered significant.

Mitigation. Implementation of the following mitigation measure would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site.**

The Districts propose to develop and implement a traffic control plan to minimize the effects of construction activities on the roadway system. This plan would be prepared by a qualified professional engineer before construction activities begin and would comply with guidelines established by Caltrans and the affected local jurisdictions. Elements of this plan would include but would not be limited to:

- specifying types and locations of warning signs, lights, and other traffic control devices;
- identifying detour routes if road closures are necessary;
- minimizing road or lane closures during the peak hours;
- notifying and consulting with the emergency service providers and maintaining measures to provide an adequate level of access to allow delivery of emergency services;
- providing parking locations for construction employees that would have the least effect on the existing roadway operations or parking supply or providing offsite parking with shuttle service; and
- maintaining access to commercial parking lots, private driveways, sidewalks, and bikeways to the greatest extent feasible.

Developing and implementing the traffic control plan would reduce this impact to a less-than-significant level.

Impact: Potential Alteration of Present Patterns of Vehicle Circulation and Increase in Traffic Hazards during Construction at the JWPCP. Construction activities at the JWPCP may result in lane closures or detours and addition of construction trucks and equipment on the surrounding roadway system. This would be considered a significant impact because it could lead to traffic delays, damage to property or injury, and temporary reductions in LOS.

Mitigation. Implementation of the following mitigation measure would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site.**

This mitigation measure is described above.

Impact: Increased Truck Traffic on the Existing Roadway Facilities during Construction at the Los Coyotes and San Jose Creek WRPs. Construction during expansion of the Los Coyotes and San Jose Creek WRPs would result in increased use of the existing roadways by the construction employees and trucks. Addition of construction trucks to existing roadways could especially affect operating conditions. Piuma Avenue, which provides the only access to the Los Coyotes WRP, is a narrow 20-foot road without shoulders or sidewalks near the plant. This impact is considered significant.

Mitigation. Implementation of the following mitigation measure would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site.**

This mitigation measure is described above.

Impact: Potential Alteration of Present Patterns of Vehicle Circulation and Increase in Traffic Hazards during Construction at the Los Coyotes and San Jose Creek WRPs. Construction activities at the Los Coyotes and San Jose Creek WRPs could result in lane closures or detours and addition of construction trucks and equipment to the surrounding roadway system. Piuma Avenue, which provides the only access to the Los Coyotes WRP, narrows to about 20 feet of pavement without shoulders or sidewalks approximately 500 feet before reaching the plant access, and addition of construction trucks and equipment to this roadway could increase traffic hazards. This impact is considered significant.

Mitigation. Implementation of the following mitigation measure would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site.**

This mitigation measure is described above.

Impacts of Treatment Plant Operations

Impact: Minimal Increase in Employee Traffic Volume Resulting from Increased Operations at the JWPCP. Staffing for full secondary treatment at the JWPCP will increase by approximately 22 employees. To estimate the additional trips that would be generated by the new employees, it was assumed that the majority of new staff would all arrive at the site during the morning peak hour and depart the site during the evening peak hour using single-occupant vehicles. However, assuming that the JWPCP's existing rideshare program would apply, the JWPCP would generate 17 new trips during each of the peak hours. This is considered less than significant because the plant would produce less than the threshold of 50 new peak-hour trips in the peak commuting direction.

Mitigation. No mitigation is required.

Impact: Minimal Increase in Employee Traffic Volume Resulting from Expansion of the Los Coyotes and San Jose Creek WRPs. The expansion of the Los Coyotes and San Jose Creek WRPs would result in addition of employees for the operation and maintenance of this plant. Addition of these employees would result in a minimal increase in traffic volumes on the adjacent street system. This impact is considered less than significant.

Mitigation. No mitigation is required.

Impacts of Biosolids Disposal and Reuse

Impact: Minimal Increase in Truck Traffic Resulting from Biosolids Disposal and Reuse. Implementation of the 2010 Plan would increase the amount of biosolids generated by the Districts, which would require additional truck trips to transport biosolids from the JWPCP and result in increased traffic on nearby roadways. Under the 2010 scenario, each truck leaving the JWPCP would haul the biosolids to the end-use site. However, because large-capacity trucks (22 tons/ truck) would be used and the total additional number of trucks arriving at and leaving the JWPCP would be spread out on any given day, traffic volumes on local and regional roadways are not anticipated to increase substantially. This impact is considered less than significant.

Mitigation. No mitigation is required.

Alternative 2: Upgrade JWPCP/Expand Los Coyotes WRP

Under Alternative 2, impacts at the JWPCP and the Los Coyotes WRP would be the same as under Alternative 1. No impacts would occur at the San Jose Creek WRP. Construction of sewer lines would result in an additional impact, which is described below.

Impact: Potential for Alteration of Present Patterns of Vehicle Circulation and Increase in Traffic Hazards during Construction of Sewer Lines. Construction activities required for the construction of the required relief sewer may result in lane closures or detours and addition of construction trucks and equipment to the surrounding roadway system. However, construction will be phased so that interruptions will be for short segments and time frames. Additionally, Sections 7-10.1, "Traffic and Access," and 7-10.3, "Street Closures, Detours, and Barricades," of Standard Specifications for Public Works Construction (American Public Works Association 1991) require the Districts' contractors to follow specific instructions to ensure public convenience and safety for traffic and pedestrian access and street closures and detours. This impact is considered less than significant.

Mitigation. No mitigation is required.

Alternative 3: Upgrade JWPCP/Expand Whittier Narrows WRP

Under Alternative 3, impacts at the JWPCP would be the same as under Alternatives 1 and 2. No impacts would occur at the Los Coyotes or San Jose Creek WRPs or on sewers. Impacts at the Whittier Narrows WRP are described below.

Construction Impacts

Impact: Increased Truck Traffic on the Existing Roadway Facilities during Construction at the Whittier Narrows WRP. Construction during the expansion of the Whittier Narrows WRP would result in increased use of the existing roadways by the construction employees and trucks. This impact is considered significant for reasons described above under the discussion of JWPCP construction impacts under Alternative 1.

Mitigation. Implementation of the following mitigation measure would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site.**

This mitigation measure is described above, under the discussion of Alternative 1 impacts.

Impact: Potential Alteration of Present Patterns of Vehicle Circulation and Increase in Traffic Hazards during Construction Activities at the Whittier Narrows WRP. Construction activities at the Whittier Narrows WRP could result in lane closures or detours and addition of construction trucks and equipment on the surrounding roadway system. This impact is considered significant for reasons described above under the discussion of JWPCP construction impacts under Alternative 1.

Mitigation. Implementation of the following mitigation measure would be required to reduce this impact to a less-than-significant level:

- **Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site.**

This mitigation measure is described above under the discussion of Alternative 1 impacts.

Impact of Treatment Plant Operations

Impact: Minimal Increase in Employee Traffic Volume Resulting from Expansion of the Whittier Narrows WRP. Expansion of the Whittier Narrows WRP would result in the addition of employees for the operation and maintenance of this plant. The addition of these employees would result in a minimal increase in traffic volumes on the adjacent street system. This impact is considered less than significant.

Mitigation. No mitigation is required.

Alternative 4: Upgrade JWPCP/Expand Los Coyotes WRP/ San Jose Creek WRP/Whittier Narrows WRP

Under Alternative 4, impacts at the JWPCP and the Los Coyotes and San Jose Creek WRPs would be the same as under Alternative 1. Impacts at the Whittier Narrows WRP would be the same as under Alternative 3. Impacts of sewer construction would be similar to those described under Alternative 2.

No-Project Alternative

Under the No-Project Alternative, no new JOS facilities would be constructed to upgrade the level of treatment or accommodate growth in the JOS service area. No significant transportation impacts are associated with this alternative.

Table 7-6. Comparison of Transportation Impacts by Alternative

Impacts and Mitigation Measures	Alternative 1			Alternative 2			Alternative 3		Alternative 4				
	JWPCP	LC	SJC	JWPCP	LC	Sewers	JWPCP	WN	JWPCP	LC	SJC	WN	Sewers
Construction Impacts													
Impact: Degradation of the level of service at the intersection of Sepulveda Boulevard and Figueroa Street during construction at the JWPCP (LT) No mitigation is required	✓			✓			✓		✓				
Impact: Minimal increase in construction-related traffic to I-110 at the JWPCP (LT) No mitigation is required	✓			✓			✓		✓				
Impact: Increased traffic on the existing roadway facilities during construction at the JWPCP (S) Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site	✓			✓			✓		✓				
Impact: Potential alteration of present patterns of vehicle circulation and increase in traffic hazards during construction at the JWPCP (S) Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site	✓			✓			✓		✓				
Impact: Increased truck traffic on the existing roadway facilities during construction at the Los Coyotes and San Jose Creek WRPs (S) Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site		✓	✓		✓					✓	✓		
Impact: Potential alteration of present patterns of vehicle circulation and increase in traffic hazards during construction at the Los Coyotes and San Jose Creek WRPs (S) Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site		✓	✓		✓					✓	✓		

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LT = less than significant. S = significant.

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Impacts and Mitigation Measures	Alternative 1			Alternative 2			Alternative 3		Alternative 4				
	JWPCP	LC	SJC	JWPCP	LC	Sewers	JWPCP	WN	JWPCP	LC	SJC	WN	Sewers
Impact: Potential for alteration of present patterns of vehicle circulation and increase in traffic hazards during sewer construction (LT) No mitigation is required.						✓							✓
Impact: Increased truck traffic on the existing roadway facilities during construction at the Whittier Narrows WRP (S) Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site								✓				✓	
Impact: Potential alteration of present patterns of vehicle circulation and increase in traffic hazards during construction activities at the Whittier Narrows WRP (S) Mitigation Measure 7-1. Develop and implement a traffic control plan for the construction site								✓				✓	
Impacts of Treatment Plant Operations Impact: Minimal increase in employee traffic volume resulting from increased operations at the JWPCP (LT) No mitigation is required	✓			✓			✓		✓				
Impact: Minimal increase in employee traffic volume resulting from expansion of the Los Coyotes and San Jose Creek WRPs (LT) No mitigation is required		✓	✓		✓					✓	✓		
Impact: Minimal increase in employee traffic volume resulting from expansion of the Whittier Narrows WRP (LT) No mitigation is required								✓				✓	

LT = less than significant. S = significant.

Impacts and Mitigation Measures	Alternative 1			Alternative 2			Alternative 3		Alternative 4				
	JWPCP	LC	SJC	JWPCP	LC	Sewers	JWPCP	WN	JWPCP	LC	SJC	WN	Sewers
Impacts of Biosolids Disposal and Reuse Impact: Minimal increase in truck traffic resulting from biosolids disposal and reuse (LT) No mitigation is required	✓			✓			✓		✓				

No significant and unavoidable transportation-related impacts would occur.

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LT = less than significant. S = significant.