

CIRCULATION ELEMENT



City of Lomita
General Plan

INTRODUCTION TO THE CIRCULATION ELEMENT

The Circulation Element of the Lomita General Plan is one of seven State mandated elements and is intended to guide the development of the City's circulation system in a manner that is compatible with the Land Use Element. Future development in the City and new development in the surrounding communities will result in increased demands on the City's roadways. To help meet these demands, the City has adopted specific policies to serve as this Element's policy framework.

Relationship to the General Plan

The purpose of the Circulation Element is to provide a safe and efficient circulation system for Lomita and to promote the safe and efficient movement of goods and traffic within the City. According to California Government Code Section 65302(b), this Element must identify "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other public utilities and facilities, all correlated with the Land Use Element of the Plan."

The Circulation Element of the Lomita General Plan portrays the roadway system needed to serve traffic generated by uses permitted under the Land Use Element. Traffic forecasts in the Circulation Element are also used to determine future traffic noise levels within the Noise Element. The Safety Element indicates emergency evacuation routes and minimum road widths to accommodate emergency vehicles. Finally, the Circulation Element is responsive to regional transportation plans, such as the Congestion Management Plan which focuses on the development of a regional transportation system to accommodate the projected traffic demands within the greater metropolitan area. This Circulation Element is organized around the following sections:

- ❑ *The Introduction to the Circulation Element* provides an overview of the Element and its statutory requirements.

- ❑ *The Circulation Element Policies* contains policies related to transportation issues and circulation related infrastructure.
- ❑ *The Circulation Plan* establishes policies and indicated programs designed to improve traffic and circulation within the City. Typical standards for each category of roadway are also indicated.
- ❑ *The Background for Planning* section includes information related to current traffic and circulation conditions. Public transportation and alternative forms of transportation are also addressed.

CIRCULATION ELEMENT POLICIES

The City of Lomita seeks to accomplish the following goals through implementation of the policies and programs contained in this Circulation Element:

- ❑ To promote the maintenance and improvement of roadway systems in the City which will accommodate future traffic;
- ❑ To promote the use of innovative circulation strategies designed to create a transportation system that is sensitive to the City's aims for economic development;
- ❑ To support the development of a roadway and circulation network that promotes pedestrian activity in selected districts within the City;
- ❑ To promote a more efficient use of alternative forms of transportation that serve the City; and
- ❑ To ensure that roadway improvements are sensitive to the community's long-range goals for a livable and sustainable community.

To accomplish the aforementioned goals, the City of Lomita has adopted the following policies to guide future transportation planning and design in the City.

Circulation Policy 1

The City will encourage the development of an increasingly safe and efficient regional transportation system in the area and discourage the use of local streets in the City for non-local and regional through traffic except in emergency situations.

Circulation Policy 2

The City will strive to provide a system of signalization which will augment and assist in the safe and efficient movement of traffic through the City. The City will investigate the feasibility of participating in a regional signalization program (such as the ATSAC program) with neighboring jurisdictions.

Circulation Policy 3

The City will develop and maintain a logical local circulation system based on a hierarchy of streets which serve the existing and future needs of the City. The City will evaluate the need to "reopen" roads now closed to through traffic.

Circulation Policy 4

The City will be proactive in assessing the impact of future land uses and development on the local circulation system.

Circulation Policy 5

The City will continue to promote the use of public transit and other alternative forms of transit to reduce travel expense, energy use, environmental impact, and congestion.

Circulation Policy 6

The City will encourage the development, maintenance, and improvement of pedestrian-oriented facilities, where appropriate, to ensure the safety and use of pedestrian movement throughout the City and as a means to reduce traffic. The City will also encourage the maintenance and improvement of bicycle oriented facilities, where appropriate, to ensure the safety and use of bicycle movement throughout the City.

Circulation Policy 7

The City will evaluate parking restrictions/regulations to increase the

availability of parking whenever possible without jeopardizing safety.

Circulation Policy 8

The City will strive to establish a beautification program for major roadways in Lomita.

Circulation Policy 9

The use of alternative fueled vehicles for local and ways to more efficiently use the existing Dial-A-Ride services will be investigated

CIRCULATION PLAN

The Circulation Plan for the City of Lomita supports the land use and development objectives outlined in the Land Use Element. The Circulation Plan is shown in Exhibit 3-1 and is discussed in this section.

Roadway Classifications & Standards

The roadway classification system described herein is used to identify the function of each roadway in the City. The classification system provides a logical framework for the design and operation of roadways serving Lomita. The functional classification system allows the residents and elected officials to identify preferred characteristics of each street.

If the observed characteristics of a street changes from the functional classification, then actions may be taken to return the street to its originally intended use or to change the roadway classification in response to new development. In the latter instance, certain additional roadway improvements may be required to accommodate the roadway's new functional classification and the corresponding standards.

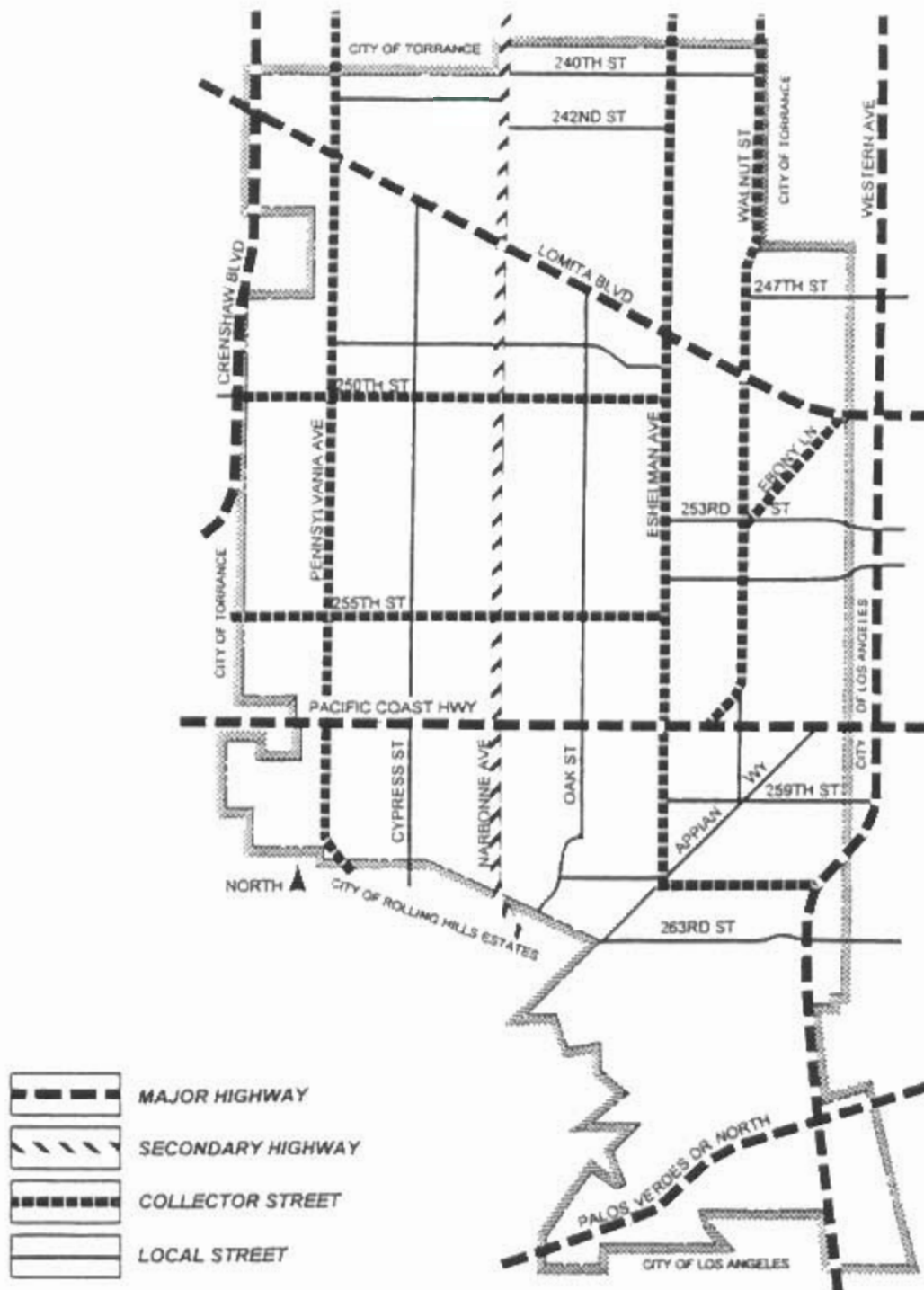


EXHIBIT 3-1
CIRCULATION PLAN

Source: Blodgett/Baylosis Associates

The primary circulation system in the City of Lomita serves two distinct and equally important functions: the City's roadways provide access to individual properties, and enable persons and goods to be transported into and through the City. The design and operation of each roadway depends on the importance placed on each of these functions. For example, some roadways are designed to carry larger traffic volumes and generally have more lanes, higher speed limits and fewer driveways. In contrast, other streets have fewer lanes, lower speed limits, and more driveways to provide access to individual properties.

The roadway system in Lomita has been defined using a classification system which describes a hierarchy of roadway types. The categories of roadways included in this classification system differentiate the size, function, and capacity of each type of roadway. The various roadway classifications are described below.

Major Highways

This roadway classification provides for through traffic movement between and across the City. The designated curb-to-curb width for a typical major highway is 80 to 86 feet within a 100-foot right-of-way. This roadway classification typically provides four through travel lanes and may or may not include a raised or painted median. Designated major highways in Lomita include Pacific Coast Highway, Lomita Boulevard, Crenshaw Boulevard, Western Avenue, and Palos Verdes Drive North.

Secondary Highways

Secondary highways provide for traffic movement across the City, as well as shorter distance local intra-city traffic movement. This classification of roadway generally provides greater access to abutting land uses compared to major highways. This classification of roadway generally carries lower traffic volumes. Secondary highways typically have a curb-to-curb width of 64 feet in an 80 foot right-of-way. Narbonne Avenue is the only designated secondary highway in Lomita.

Collector Streets

Collector streets are designed solely to collect traffic from residential streets and channel it to the arterial highway system. Collector streets typically have 40 foot curb-to-curb widths and 60 foot rights-of-way. Designated collector streets in Lomita include 250th, 255th, and 262nd Streets (east-west collectors) and Pennsylvania Avenue, Eshelman Avenue, Walnut Avenue, and Ebony Street (north-south collectors). Narbonne Avenue, north of Lomita Boulevard, is designated as a collector street.

Local Streets

Local streets are subordinate to the basic circulation network described above, yet constitute the majority of the roads in Lomita. These streets provide access to individual parcels and only provide circulation within a neighborhood block. Local streets in Lomita are generally 40 to 50 feet wide, with a pavement width of between 24 to 30 feet. Most streets have been improved with curbs, gutters, and sidewalks. The City standard for local streets is 60 feet (with 36 feet curb to curb pavement width and two lanes and on street parking on both sides). This standard has not been achieved for a number of local streets in the City and is not likely to be achieved considering the developed character of the City.

Private Streets

Private streets refer to those roadways which provide access to individual lots within a planned unit development, condominium project or residential tract. These streets are typically 60 feet wide and provide one travel lane in each direction. Most of the private streets in the City are cul-de-sacs which have not been dedicated to the City and are maintained by developers or homeowner associations.

Table 3-1 summarizes the standards generally applicable to each roadway classification. Exhibit 3-1 illustrates Circulation Plan in the City of Lomita and Exhibit 3-2 illustrates the typical cross section for each roadway classification.

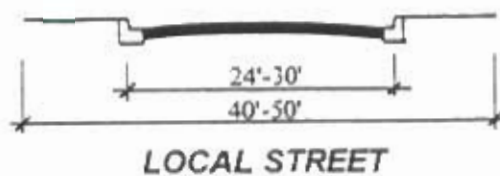
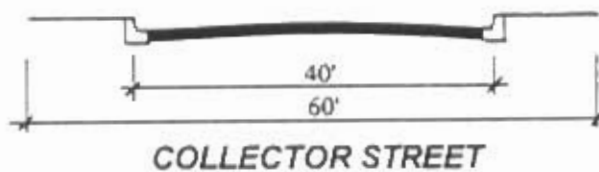
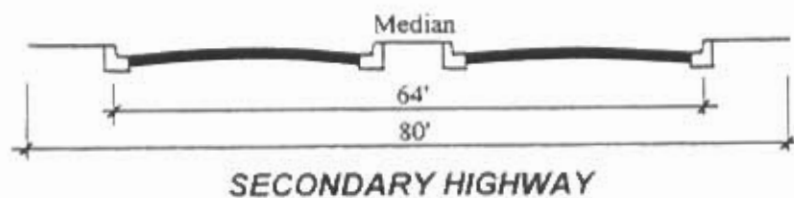
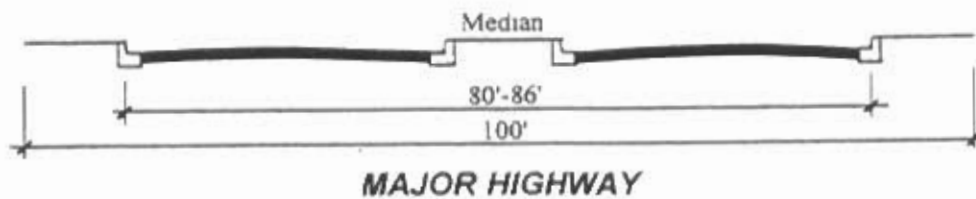
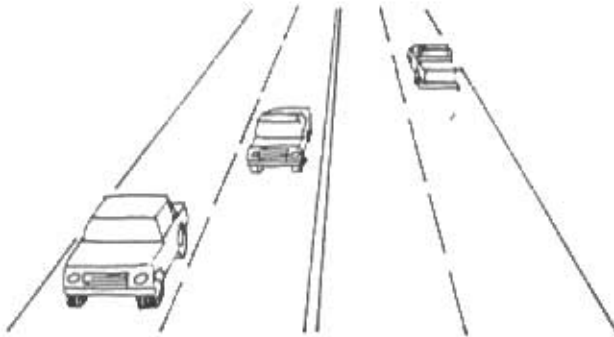
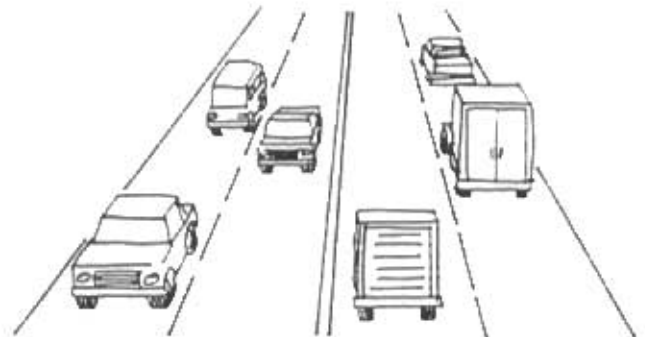


EXHIBIT 3-2
TYPICAL ROADWAY CROSS SECTIONS

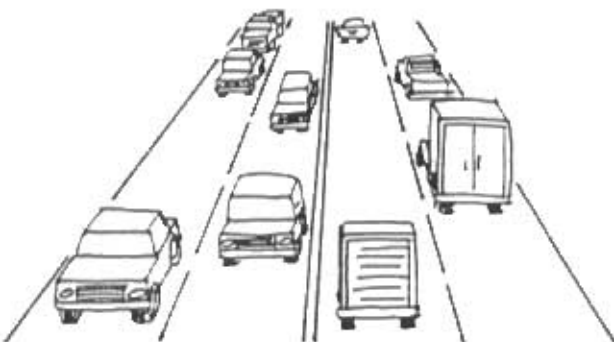
Source: Blodgett/Baylosis Associates



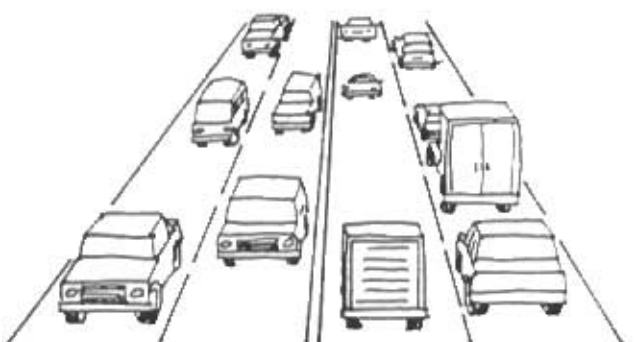
Level of Service A
Free flow in which there is little or no restriction on speed or maneuverability.



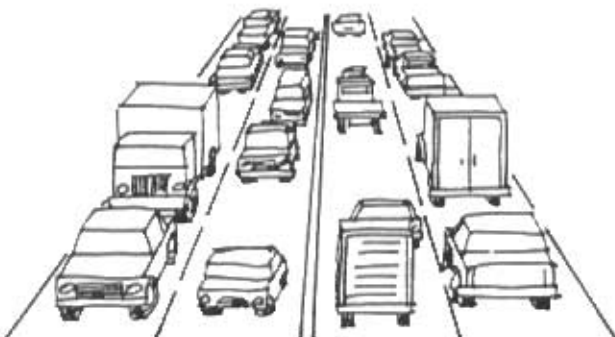
Level of Service B
Stable flow though operating speed is beginning to be restricted by other traffic.



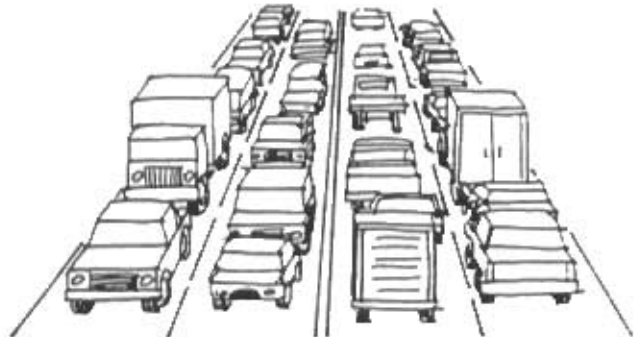
Level of Service C
Stable flow though drivers are becoming restricted in their freedom to select speed, change lanes or pass.



Level of Service D
Tolerable average operating speeds are maintained but are subject to considerable sudden variation.



Level of Service E
Speeds and flow rates fluctuate and there is little independence on speed selection or ability to maneuver.



Level of Service F
Speeds and flow rates are below those attained in Level E and may, for short periods, drop to zero.

**EXHIBIT 3-3
LEVEL OF SERVICE**

Source: Blodgett/Baylos Associates

Table 3-1
Roadway Classification Standards

	Major Hwys	Secondary Hwys	Collector Roads	Local Streets
Travel Lanes	4	2-4 lanes	2 lanes	2 lanes
Parking Lanes	0-2	0-2 lanes	0-2 lanes	0-2 lanes
Volumes ADT	20,000-greater	10,000 or greater	Up to 10,000	2,000 or less
ROW width	100 ft	80 ft.	60 ft.	40-50 ft.
Pavement Width	80-86 ft	64 ft.	40 ft.	24-30 ft

Notes: ADT refers to average daily traffic volumes.

Performance Standards

Evaluating the ability of the circulation system to serve existing and projected traffic demands requires the establishment of suitable "performance criteria". These performance criteria serves as a means by which traffic volumes are compared to circulation infrastructure (roadway segments and intersections) and the adequacy of that infrastructure to accommodate existing or projected traffic volumes. Performance criteria have a policy component, which establishes a desired level of service (LOS), and a technical component, which provides a more quantified measure.

LOS may be defined in a number of ways. A qualitative measure often used (and illustrated in Exhibit 3-3) defines LOS according to a sliding scale (A through F) where LOS "A" represents optimal traffic conditions and LOS "F" equates to significant congestion and is generally considered to represent an unacceptable condition.

A more quantitative measure used to define an intersection's level of service employs a ratio between an intersection's design capacity (as measured in traffic volumes) and the existing and/or projected traffic volumes. This method, referred to as the Intersection Capacity Utilization (ICU) is compared to LOS standards in Table 3-2.

Table 3-2
Level of Service Definitions

LOS	ICU Ratio	Definition
A	0.00-0.60	free flow traffic conditions
B	0.61-0.70	stable flow, some restrictions
C	0.71-0.80	satisfactory operating speeds
D	0.81-0.90	unstable conditions beginning
E	0.91-1.00	significant delays
F	1.01-	severe congestion

Source: Blodgett/Baylosis Associates, 1997

The performance criteria used for evaluating volumes and capacities of the City street and highway system include both average daily traffic (ADT) volumes for individual roadway segments and peak hour intersection volume criteria (CL).

Average daily traffic (ADT) capacities represent the general level of daily traffic that each roadway type can carry and should be used as a general design guideline only. Level of service for intersections is more precisely determined by examining peak hour intersection volumes. Therefore, the Circulation Element uses peak hour volumes as a basis for determining appropriate capacity needs.

The City of Lomita has established level of service (LOS) "D" as a target level of service (LOS) standard and LOS "E" as a threshold standard. The City recognizes that not all intersections within the City can meet the target LOS "D". In these instances, the City Council must find that the improvements necessary to meet the target LOS "D" are not feasible because of one or more of the following reasons: 1. the cost of the necessary improvements exceeds available funding sources; 2. the design of the necessary improvements is not compatible with the surrounding land uses; or, 3. the design of the necessary improvements is contrary to other established City policies. For individual roadway segments, a level of service "C" standard is used to monitor capacity needs.

The functional designation of a roadway does not necessarily indicate the existing conditions (i.e., traffic volume, width and available right-of-way). Instead, it indicates the intended use and ultimate design of the roadway to accommodate the anticipated travel demand. In addition, the typical cross section of the roadway does not necessarily mean that the roadway should be redesigned or widened to meet its typical cross section. Rather, the typical cross section serves as a benchmark in planning future roadway improvements.

Regional Transportation Plans

The City of Lomita is a part of the Los Angeles County Congestion Management Plan (CMP) which is a state-mandated program with the passage of Assembly Bill 471.

The requirements of the CMP became effective with the voter approval of Proposition 111 in June, 1990. The CMP was created for the following purposes:

- ☐ To link land use, transportation and air quality decisions;
- ☐ To develop a partnership among transportation decision makers in devising appropriate transportation solutions that include all modes of travel; and
- ☐ To propose transportation projects which are eligible to compete for State gas tax funds.

Pacific Coast Highway and Western Avenue are both CMP-designated arterial roadways in Lomita. The Pacific Coast Highway/Western Avenue intersection is currently operating at LOS D, during both the morning (AM) and evening (PM) peak hour. Other intersections with Pacific Coast Highway are operating at LOS F during the AM and PM peak hours.

Implications of Future Development on the Circulation Plan

As discussed in the previous section, the desirable goal for every classified street is that it carry the designated volume of traffic at the desired level of service. The arterial roadways in the City's

circulation system are classified according to their facility-type designation and sized to provide sufficient capacity for projected volumes.

Based on future growth and development in the City, the future daily, two-way street and highway traffic volumes have been estimated to reflect new trips from future development. The traffic volumes reflected in Table 3-3 present the daily, two-way traffic volumes at year 2010 based on a cumulative growth of 0.77 percent per year or a 14-year growth of 11.34 percent.

Table 3-3
Future Traffic Volumes from Major Roadways

Roadway	Classification	ADT
Ebony Lane	Collector	3,340
Lomita Blvd	Major Highway	40,083
Eshelman Ave.	Collector	6,124-6,903
Palos Verdes Dr N	Major Highway	25,608-36,742
Pennsylvania Ave.	Collector	4,676-7,014
Walnut Ave	Collector	3,507-4,732
Western Ave.	Major Highway	23,381-28,948
Crenshaw Ave.	Major Highway	34,515-45,649
Pacific Coast Highway	Major Highway	50,660-52,330
Narbonne Ave	Secondary Highway	13,361-15,588

Source: Blodgett/Baylosis Associates, 1996.

Circulation Programs

There are a number of key programs the City will continue to implement or undertake as part of the implementation of this General Plan. These existing and proposed programs are identified below.

Caltrans Coordination

The City will coordinate efforts with Caltrans to upgrade Pacific Coast Highway. The purpose of this undertaking is to ensure the City is fully appraised of roadway and facility improvement efforts in the early stages of planning and design.

The City will continue to work with Caltrans and the Metropolitan Transportation Authority (MTA), as appropriate and will request to be on all notification lists for future projects that may impact the City.

Capital Improvement Planning

The City's Capital Improvement Program (CIP) is a five-year plan which indicates the timing of major capital expenditures. Individual projects are reviewed and ranked on an annual basis and may include street scape upgrades, installation of traffic signals, slurry seal for streets, sidewalk repair, and sewer line upgrades. The City will continue to update, review, and implement its CIP to consider transportation related improvements.

Dial-A-Ride Review Program

This program involves a review of existing and future policies and procedures with regards to the operation of the City's Dial-a-Ride program. The purpose of this program is to devise and initiate an adequate and truly cost effective "Dial-A-Ride" program which will maximize the acquisition of public and government funds where applicable and available, while maintaining an optimum level of convenient and comfortable service for its users. The City Administrator will initiate review at the discretion of the City Council.

Environmental Review

The City shall continue to evaluate the environmental impacts of new development and provide mitigation measures prior to development approval, as required by the California Environmental Quality Act (CEQA). Environmental review shall be provided for major projects and those that will have a potential to adversely impact the environment. Among those issue which may be addressed in the environmental analysis includes traffic, parking, and circulation. In compliance with CEQA, the City shall also assign responsibilities for the verification of the implementation of mitigation measures. The City's environmental review procedures are in place.

Mitigation Fee Ordinance

The City will explore strategies to ensure the public does not bear an undue burden associated with new development. The City will determine a

reasonable and fair method of assessing new development for the cost of providing any additional infrastructure required by the development. The first step of this program's implementation calls for the preparation of a mitigation fee strategy study to be initiated by the City Administrator.

Parking Ordinance Review

The City shall evaluate the existing parking standards provided in the City's Zoning Ordinance. The City Administrator will initiate the study of the City's parking standards. The City Council, following consideration of the study, will provide direction regarding how to proceed with the implementation of the study's recommendations.

Parkway Landscaping Program

The City shall implement a parkway landscaping and maintenance program. The program will be subject to annual review as part of the City budget and CIP review.

Public Transit Review Program

The City will evaluate the need to modify routes, schedules, and fares of local transit service to achieve circulation goals and policies (e.g., coordinate the local transit system with the regional transit system). The City will work with the MTA and transit service agencies in adjacent communities to identify the most beneficial route and stops in the City. A City staff person will be assigned as liaison between the City and transit providers. The City will provide development plans for those projects which may affect public transit services to service providers for review.

Signalization

The City will strive to provide optimum signalization on major thoroughfares to maximize circulation efficiency, such as participation in a regional signalization program. City staff will outline both the need and strategy for improved signalization. Coordination with Caltrans and MTA in this regard will be undertaken. City staff will present their findings to the City Council for direction.

Transit Centers

The Land Use Plan calls for the development of a pedestrian-friendly downtown and business district. Transit centers consisting of bus turnouts and loading areas, weatherproof shelters, information center, emergency phones, and in some areas, park and ride facilities will be expanded as part of this future development. The lead City Agency to study the feasibility of developing "transit centers" will be designated by the City Administrator.

Traffic and Circulation Studies

The City Traffic Commission will evaluate the feasibility of altering the circulation and traffic patterns for a number of roadways in the City. One task will include an assessment of Narbonne Avenue to examine the feasibility of converting that portion of the roadway in the vicinity of the "downtown to a two-lane roadway. This would enable on-street angled parking to be provided immediately in front of businesses. It would also result in a reduction in travel speeds through the area which would make the area more pedestrian friendly. A second study will be undertaken to evaluate the feasibility of re-opening a number of local streets that were previously closed-off. These studies will involve the requisite review by the traffic commission and public testimony to determine whether these approaches are acceptable to the community at large.

BACKGROUND FOR PLANNING

This section of the Circulation Element serves as the technical appendix to the Element indicating existing conditions relative to traffic and circulation in the City. According to State guidelines (State of California Government Code Section 65302(b)), General Plan Circulation Elements shall identify "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other public utilities and facilities, all correlated with the Land Use Element of the Plan."

This section describes the existing roadway network in the City, existing circulation conditions, and alternative means of transportation, as well as identify any circulation issues that need to be considered in planning improvements to the circulation system to accommodate planned growth in the City.

Existing Roadway Network

There are approximately 55 miles of roadways in the City. The street system is defined by major north-south streets such as Crenshaw Boulevard, Narbonne Avenue, Eshelman Avenue and Western Avenue and east-west streets including Pacific Coast Highway, Lomita Boulevard and Palos Verdes Drive North. Other local residential streets generally form an uneven grid at varying intervals reflecting earlier subdivision patterns. Streets within the southernmost portion of the City are more curvilinear and follow the local topography.

Freeway access to the City is provided by Pacific Coast Highway (SR-1), which runs in an east-west direction through the southerly portion of the City. Pacific Coast Highway connects to the Harbor Freeway (SR-110) approximately 3.5 miles to the east. Crenshaw Boulevard and Western Avenue are major arterial roadways which form the western and eastern borders of the City of Lomita. These two roadways provide connections to the San Diego Freeway (I-405) approximately 8.0 miles to the north.

The primary circulation system in the City of Lomita consists of local surface streets and arterial roadways. These streets serve two distinct and equally important functions: access to adjacent properties, and movement of persons and goods into and through the City, respectively. The design and operation of each street or arterial roadway depend upon the importance placed on each of these functions. For example, the arterial roadways are designed to carry large volumes of vehicles into and through the City. Because of their function, arterial roadways have more lanes, higher speed limits and fewer driveways. In contrast, residential streets have fewer lanes, lower speed limits, and more driveways to provide access to individual properties.

The major roadways which serve as the framework for the City's circulation system are discussed below:

Pacific Coast Highway, State Route 1, is a major east-west highway through the City. In Lomita, Pacific Coast Highway has two travel lanes in each direction and traffic signals at its intersections with Western Avenue, Eshelman Avenue, Narbonne Avenue, Walnut Avenue, Oak Street, Cypress Avenue, Pennsylvania Avenue and Crenshaw Boulevard.

Lomita Boulevard is oriented in a northwest to southeast direction through the City and has two travel lanes in each direction, a painted median and left turn pockets and signals at major intersections (Narbonne Avenue, Pennsylvania Avenue, Eshelman Avenue, Walnut Avenue, Crenshaw Boulevard, and Western Avenue).

Narbonne Avenue is a major north-south arterial highway and is the City's oldest roadway corridor. Narbonne Avenue has two travel lanes in each direction, with traffic signals with Lomita Boulevard, 250th Street, 255th Street, and Pacific Coast Highway. The roadway connects to Palos Verdes Drive East on the south and to Arlington Avenue on the north.

Crenshaw Boulevard defines the City's western boundary and has three travel lanes in each direction, a center median lane and exclusive left-turn lanes at major intersections. This regional arterial roadway extends from Rancho Palos Verdes on the south, all the way to downtown Los Angeles on the north.

Western Avenue is another regional arterial roadway which runs in a north-south direction, just east of the City of Lomita. A short segment of this major roadway is located within Lomita, south of Pacific Coast Highway and north of Peninsula Verde Drive. Western Avenue has two lanes in each direction with a raised center median.

Other main north-south streets in the City include Pennsylvania Avenue, Eshelman Avenue, and Oak Avenue. East-west streets in the City include the number streets from 239th Street on the north edge of the City to 264th Street at the southern section of Lomita.

The rights-of-way, number of lanes, and existing average daily traffic on primary roadways in the City are provided in Table 3-4. As shown, Pacific Coast Highway handles as much as 47,000 vehicles per day, with a peak of 48,500 vehicles. Lomita Boulevard carries 36,000 vehicles per day and Western Avenue carries as much as 26,000 vehicles per day.

Table 3-4
Existing Traffic Volumes

Roadway	ROW	Lanes	ADT ¹
Ebony Lane	56'	1@way	3000
Lomita Blvd	60'-84'	2-3@way	36000
Eshelman Ave	60'	1@way	5500-6200
Narbonne Ave	60'	2@way	12000-14000
Palos Verdes Drive North	84'-110'	3@way	23000-33000
Pennsylvania Ave	36'	1@way	4200-6300
Walnut Ave	30'-56'	1-2@way	3150-4250
Western Ave	80'	2@way	21000-26000
Crenshaw Blvd	84'	3@way	31000-41000
Pacific Coast Highway	74'	2-3@way	45500-47000 ²

¹ADT-Average Daily Traffic Volumes

²Caltrans 1995 Freeway Volumes

Source: City of Lomita, 1996; City of Torrance, 1996.

Intersection Analysis

Currently, the intersections of major and secondary highways in Lomita are signalized and all other intersections are unsignalized (two-way or four-way stop sign controlled). As traffic volumes increase, there may be a need to install more traffic signals in the City or implement other roadway improvements. The function of a traffic signal at the intersection of two streets is to assign right-of-way to the traffic on each of the intersecting streets. The capacity of each street is reduced at a signal because traffic on one street is delayed while traffic on the intersecting street is allowed to flow. Therefore, signalized intersections are generally the most critical element affecting a roadway system's capacity.

One of the most important types of data needed to conduct intersection analysis is peak period (i.e., 7:00 to 9:00 a.m. and 4:00 to 6:00 p.m.) traffic

volume counts. Operating conditions at major intersections were analyzed for the morning (AM) and evening (PM) peak hours using the Intersection Capacity Utilization (ICU) methodology. Based upon the 1996 traffic counts, each study intersection was analyzed for AM and PM peak hour volume/ capacity ratios (V/C) and levels of service (LOS).

The Los Angeles County Congestion Management Plan (CMP) has LOS E as the standard LOS for designated CMP roadways in Los Angeles County. According to the CMP, a significant traffic impact is one which increases traffic demand on a CMP facility by 2 percent or results in a decline in the volume-to-capacity ratio of 0.02 or greater, which results in a Level of Service F.

Table 3-5 illustrates the existing levels of service at major intersections in the City. During the AM peak hour, all signalized intersections are operating at Level of Service E or better. During the PM peak hour, several intersections along Lomita Boulevard and Pacific Coast Highway are operating at a level of service F. Pacific Coast Highway generally runs parallel the I-405 Freeway and carries large volumes of traffic. Also, Lomita Boulevard seems to be serving as an alternate route to Pacific Coast Highway and the I-405 Freeway, the heavy eastbound through and left-turns from Lomita Boulevard are contributing to the level of service F at intersections along this route.

Table 3-5
Intersection Levels of Service

Intersection	AM ICU/LOS	PM ICU/LOS
Pacific Coast Highway/Western		0.909/E
Pacific Coast Highway/Narbonne		1.216/F
Pacific Coast Highway/Crenshaw		1.028/F
Lomita/Western	—	0.838/D
Lomita/Walnut	0.854/D	0.751/C
Lomita/Eshelman	0.762/C	0.748/C
Lomita/Narbonne	0.671/B	1.01/F
Lomita/Pennsylvania	0.866/D	0.98/E
Lomita/Crenshaw	0.937/E	1.141/F

Source: City of Lomita, 1996; City of Torrance, 1996.

Unsignalized intersections are different from signalized intersections due to different operating characteristics. At signalized locations, all approaches to the intersection are subject to delay by a red signal indication. At a majority of unsignalized locations, however, only the minor street traffic and left-turning traffic from the major street are subject to delay. The major street through movement is never forced to stop to accommodate other traffic (unless there is a four-way stop). At unsignalized intersections, the level of service is therefore defined for the minor street traffic movements and the major street left turns only. Major street through traffic is not constrained and measurement of level of service is not possible, except for intersections with a four-way stop.

The vehicles on the side street and turning left from the major street at such an intersection must wait for gaps in through-traffic before proceeding through the intersection. The critical gap (length of time) that is acceptable to that traffic is a function of the number of through lanes on the major street and the prevailing speed of through traffic on the major street. Certain other physical characteristics of the intersections, such as lane-curb radii or the presence of acceleration lanes, can reduce the critical gap necessary to perform certain maneuvers. The unsignalized street intersections in Lomita are generally operating at acceptable levels of service since the minor streets are primarily residential local streets which do not carry large volumes of traffic.

Congestion Management Plan Program

Approval of Proposition 111 in 1990 provided a nine-cent increase in the state gas tax over a five-year period, which would be used by local governments for roadway improvements, transit services and other programs designed to reduce regional traffic congestion. The proposition also led to the enactment of Section 65089 of the California Government Code, which requires that regional congestion issues be addressed by transportation, land use and air quality decisions. The Los Angeles County Congestion Management Program (CMP) was developed to meet the requirements of this mandate. The CMP has been developed primarily to make individual cities responsible for the congestion and air quality

problems that would accompany new development within each jurisdiction.

The Los Angeles County CMP program includes a designation of a CMP highway network and level of service standards for designated roadways; a capital improvement plan and deficiency plan to mitigate congestion within the network; adoption of transportation demand management measures by individual cities; highway and transit monitoring; requirements for traffic and transit analysis for new developments; and a region-wide credit/debit system which measures transportation improvements (credits for improving the regional system) with new development projects (debits for adding new trips to the CMP highway system) for each city.

Pacific Coast Highway and Western Avenue are both CMP-designated arterial roadways in Lomita. The Pacific Coast Highway/Western Avenue intersection is currently operating at LOS D, during both the AM and PM peak hour. Other intersections with Pacific Coast Highway are operating at LOS F during the AM and PM peak hours.

The credit/debit system is designed to encourage cities to provide a balance between new construction (debits) and roadway projects (credits), so that each City is essentially mitigating the traffic impacts associated with development within its boundaries. In 1996, the City of Lomita has a balance of 5,726 credits which may be used to offset debits for future new construction. This means that for Lomita to not lose its share of gas taxes, the City may approve new construction as long as the City or the developer provides the necessary improvements to mitigate the project's traffic impacts, or as long as the City's CMP credit balance does not become negative within the planning year.

Alternative Forms of Transportation

Public Transit Services

The Los Angeles County Metropolitan Transportation Authority (MTA) operates MTA buses through the City of Lomita. These include Bus Route 448 which goes through Pacific Coast Highway from downtown Los Angeles to Rancho Palos Verdes and Bus Route 205 which runs along Western Avenue and Pacific Coast Highway and Bus Route 232 along Pacific Coast Highway. In addition, the Torrance Transit Route 9 runs through Lomita Boulevard and Torrance Transit Route 5 runs through Narbonne Avenue and Crenshaw Boulevard. Other bus transits running through and near the City of Lomita include the Municipal Area Express and the Gardena Municipal Buses. Exhibit 3-4 shows these routes.

The Metrorail Blue Line runs from Long Beach to downtown Los Angeles and the nearest station is located approximately 14.5 miles east on Pacific Coast Highway in the City of Long Beach.

Truck Routes

Designated truck routes are roadways which allow vehicles weighing more than 2,000 pounds. These roadways are designed and built to withstand the heavier traffic associated with trucks and larger vehicles. The City of Lomita has designated major roadways in the City as truck routes, with truck traffic prohibited on all other streets to prevent roadway deterioration and traffic safety hazards associated with larger vehicles on narrow streets. Exhibit 3-5 shows truck routes in the City.

Bicycle Routes and Scenic Highways

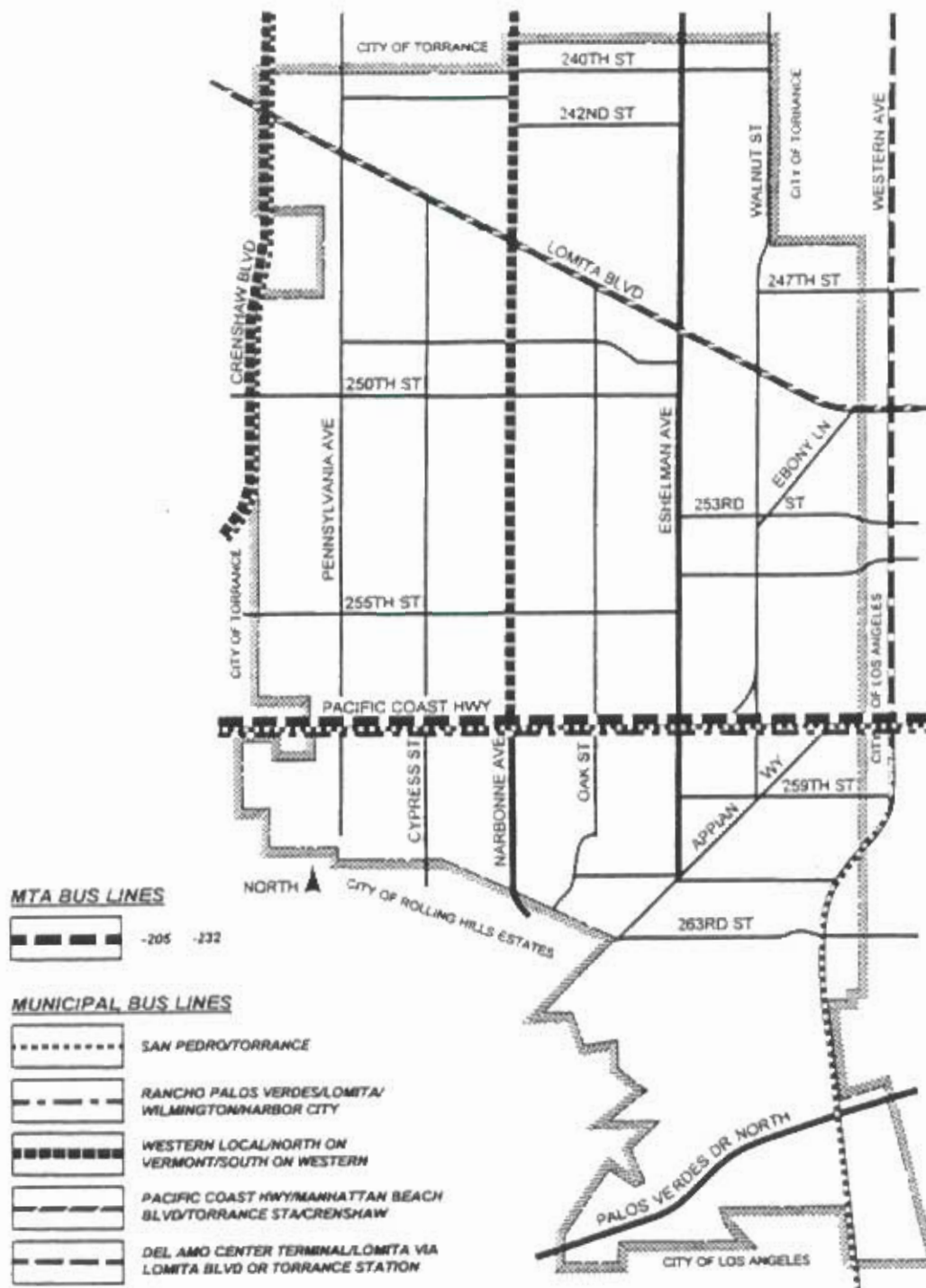
Individual cities in the region have designated bicycle routes in the County to create an integrated biking/hiking/walking system for cyclists and hikers. A bike trail within the Palos Verdes Peninsula runs along Palos Verdes Drive North from Palos Verdes Boulevard to Anaheim Street. In City of Lomita, only the segment of Palos Verdes Drive North within the City is designated as a bike trail. The bike route on Pacific Coast Highway and the bike lane on Lomita Boulevard end just west of the Lomita city limits.

The State of California or the County of Los Angeles has not designated any roadway in the City of Lomita as a scenic highway. The County's scenic highways within the Palos Verdes Peninsula connect to roadways in Lomita. In an effort by the City to protect the views and gateways to these adjacent scenic highways, Lomita has adopted design standards for development along Narbonne Avenue and Palos Verdes Drive North. The Resource Management Element Background Report discusses this issue in greater detail.

Airports, Ports, Railways

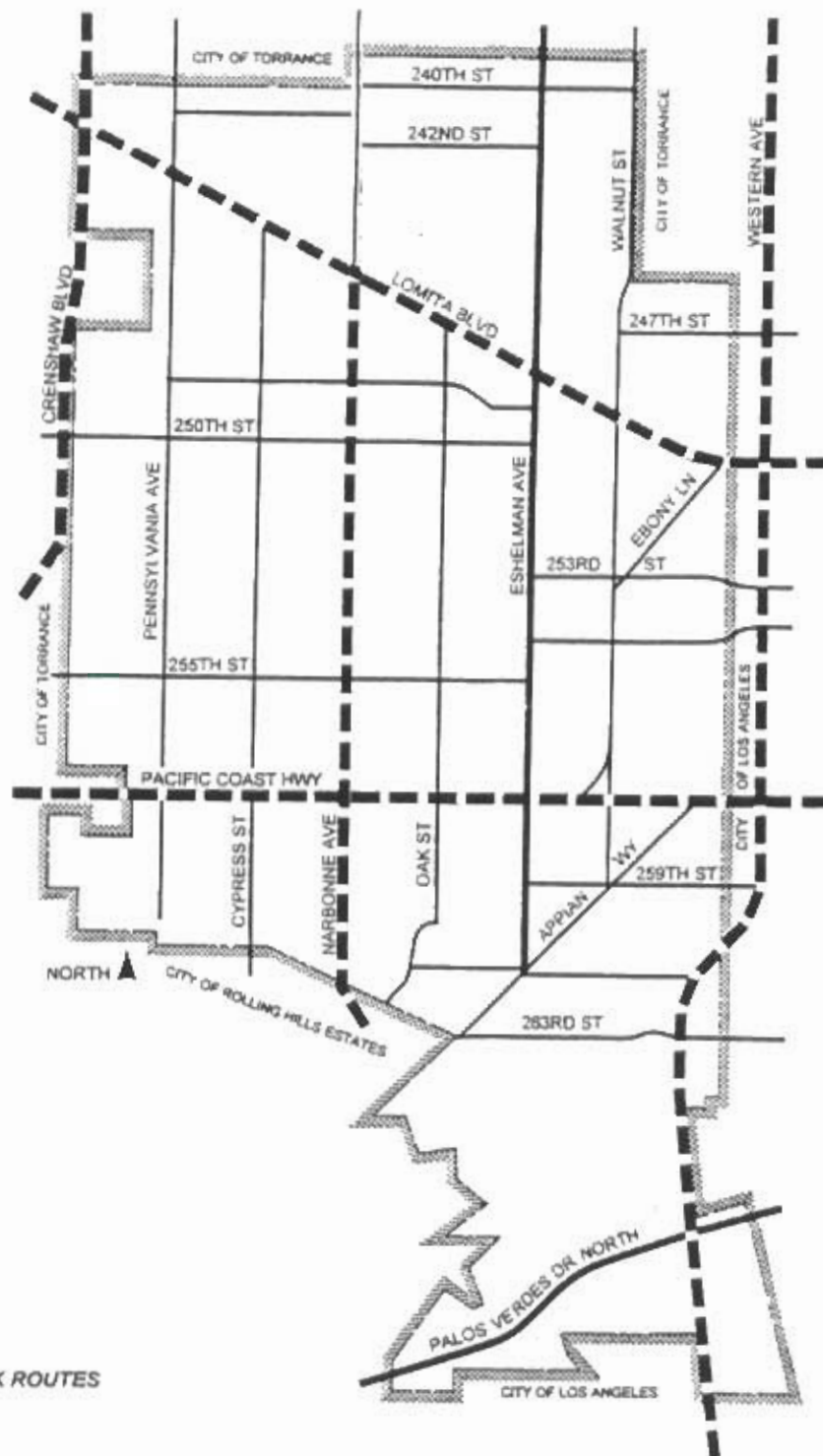
There are no airport, port or railway facilities in the City of Lomita, but the Torrance Airport is located immediately west of the City limits. The Torrance Airport is a general aviation airport (small, private aircraft and helicopters) owned and operated by the City of Torrance. The airport handles as many as 187,000 flight operations per year. The nearest commercial airports are the Long Beach Airport and the Los Angeles International Airport (LAX). The Long Beach Airport is located approximately 16 miles east of Lomita and handles commercial aircraft (SunJet and America West), helicopters and private planes. Approximately 490,000 flight operations occur at the Long Beach Airport per year. The Los Angeles International Airport or LAX is located 18 miles northwest of the City in West L.A. and handles international air traffic, as well as local commercial flights from a wide variety of airline companies.

There are no nearby rail lines in Lomita. The Port of Los Angeles and the Port of Long Beach are located nine to twelve miles southeast of Lomita, respectively. These ports handle international freight cargo ships, cruise ships and sport sailing.



**EXHIBIT 3-4
PUBLIC TRANSIT**

Source: Blodgett/Baylosis Associates



 TRUCK ROUTES

**EXHIBIT 3-5
TRUCK ROUTES**

Source: Blodgett/Baylosis Associates