



# CHAPTER 3 CIRCULATION ELEMENT

#### 1.0 INTRODUCTION

The Circulation Element represents the City's overall transportation plan. The transportation plan consists not only of the physical transportation system itself, such as streets, highways, bicycle routes and sidewalks, but also to the various modes of transportation, such as cars, buses, trucks (goods movement), rail, bicycles, ridesharing and walking, as well. Circulation also refers to the movement of people and goods and products within and through the City. The circulation and transportation system plays an important role in shaping the overall structure and form of the City, in that it both divides and connects land uses at the same time.

The relationship of the Circulation Element to the Land Use Element is critical since the circulation system must adequately handle future traffic as the City and surrounding areas continue to grow, and provide the means to move people and goods through and within the City of Glendora. Land use and circulation must be closely tied to ensure that citizens are able to move in and around the City to locations where they live, work, shop, and spend leisure hours. The circulation system is directly affected, and even shaped by existing and future land use patterns.

The Circulation Element identifies and establishes the City's policies governing the system of roadways, intersections, bicycle paths, pedestrian ways and other components of the circulation system, which collectively provide for the movement of people and goods throughout the City. The Circulation Element establishes official city policy that:

- Identifies the transportation facilities that will be required to serve both present and future vehicular and non-vehicular travel demand in the City;
- Identifies classifications and design standards for circulation facilities; and
- Identifies strategies to implement the City's circulation system.

The Circulation Element describes existing circulation conditions in the City, and establishes standards for implementation of future improvements in conjunction with planned growth, and provides a method for measuring system performance for future updates. The Element considers not only the physical requirements of the transportation system (roadway facility type, number of lanes, etc.), but also operational issues such as the provision of transit services, and programs and policies that encourage use of alternative transit modes.





#### 2.0 AUTHORITY FOR ELEMENT

The State of California Government Code Section 65302 (b) requires that a General Plan include:

"A circulation element consisting of the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities, all correlated with the land use element of the plan."

#### 3.0 SUMMARY OF EXISTING CONDITIONS

The City of Glendora shares borders with the City of San Dimas on the east, southeast, and south, City of Covina on the southwest, and the City of Azusa on the west. The Angeles National Forest and Glendora Wilderness Park form the city's northern border.

Many of the arterial roadways through the City of Glendora extend beyond the city boundaries into neighboring cities. Circulation issues and travel patterns, likewise, extend beyond the Glendora city limits. The land use decisions and traffic patterns in these other jurisdictions have the potential to affect the quality of traffic flow and mobility in the City of Glendora, and conversely, traffic conditions and decisions made by the City of Glendora can affect its neighbors. In particular, existing and future commercial development in San Dimas on the east side of the City, and future development on the former Monrovia nursery property on the west have the potential to affect traffic conditions in some portions of the City of Glendora.

#### 3.1 EXISTING CIRCULATION SYSTEM

#### 3.1.1 Regional and Local Access

Regional access to the City of Glendora is provided by the Foothill Freeway (I-210). The I-210 Freeway provides east-west regional circulation through the City, connecting with the Orange Freeway (SR-57) at the eastern boundary of the City. Interchanges with the I-210 Freeway are provided at Grand Avenue, Sunflower Avenue, and Lone Hill Avenue. Arrow Highway, which forms the City's southern border, continues easterly through the City of San Dimas, and has an interchange with the SR-57 Freeway.

Continuous travel routes through the City are constrained by the I-210 Freeway and the 260-acre South Hills Park, located in the middle of the City. North-south mobility through the City is limited to arterials and collectors on either side of the park that cross the I-210 Freeway, which include Barranca Avenue, Grand Avenue, Glendora Avenue, and Lone Hill Avenue. Other limited north-south collectors that carry local traffic include Loraine Avenue, Valley Center Avenue, Bonnie Cove Avenue, Sunflower Avenue, and Amelia Avenue.





East-west roadways through the city include Sierra Madre Avenue, Foothill Boulevard, Route 66 (formerly called Alosta Avenue), Gladstone Street, and Arrow Highway. Baseline Road ends at Glendora Avenue, on the west side of South Hills Park, and picks up again at Amelia Avenue, at the eastern city boundary. Other limited east-west collectors that carry local traffic include Leadora Avenue, Bennett Avenue, and Ada Avenue.

#### 3.1.2 Los Angeles County Congestion Management Program (LA CMP)

The I-210 Freeway and a portion of the I-210 / SR-57 interchange are the only routes in the City of Glendora designated in the Los Angeles County Congestion Management Program (LA CMP). Since no CMP arterials are designated in Glendora, there are no intersections in Glendora designated as CMP monitoring intersections.

#### 3.1.3 Roadway Functional Classification System

The City of Glendora circulation system consists of a network of local neighborhood streets providing access to the arterial street system, which in turn provide access to the regional freeway system. This network serves two distinct and equally important functions: it provides access to adjacent land uses, and it facilitates the movement of persons and goods to and from, within and through the City. The design and operation of each street is determined by the importance placed on each of these functions. Streets that have a mobility and/or regional access function will have more lanes, higher speed limits and fewer driveways. Where access to properties is required, streets will have fewer lanes, lower speeds, parking, and more frequent driveways to serve abutting properties.

To define the intended uses of roadways, many jurisdictions, including Glendora, use a functional classification system. The system provides a logical framework for the design and operation of the roadway system and helps residents and elected officials identify preferred characteristics of each street.

Four roadway categories are described in the City's 1992 Circulation Element: Freeway, Arterial, Collector, and Local. Descriptions of these four categories are provided below.

<u>Freeway</u> – A freeway is a controlled-access, high-speed facility with anywhere from six to ten lanes, plus auxiliary and merge lanes. The I-210 Freeway is the only freeway through the City, with eight lanes (four lanes in each direction) carrying up to 150,000 vehicles per day.

<u>Arterial</u> – The primary function of an arterial is to provide for regional, sub-regional, and inter-city travel, carrying approximately 12,000 to 50,000 vehicles per day. Arterials generally consist of four to six travel lanes (two to three in each direction) with the optimal right-of-way width of 100 feet and a curb-to-curb width of 84 feet. Speed limits range from 35 to 55 miles per hour.

<u>Collector</u> – Collectors are designed to carry traffic between local streets and the arterial roadway network. This category of roadway generally consists of two to four travel lanes (one to two in each direction) with the optimal right-of-way width of 60 to 80 feet with a curb-to-curb width of 40 feet.





Collectors typically carry approximately 12,000 vehicles per day. Posted speed limits range from 25 to 40 miles per hour.

Local - Local streets are designed to provide direct access to individual properties not served by arterial and collector roadways. Local streets include roadways not classified as arterials or collectors. A Local street generally consists of two travel lanes (one in each direction) with parking permitted on one or both sides. Local streets generally have a right-of-way width of 50 feet and a curb-to-curb width of 36 feet. Posted speed limits range from 25 to 30 miles per hour.

The existing functional classifications for the roadways in the City of Glendora, as currently designated in the City's Circulation Element, are listed on Table CIR-1, Existing Roadway Classifications, and are depicted on Exhibit CIR-1, Existing Roadway Classifications. The number of existing lanes for each roadway is also shown on <u>Table CIR-1</u> and is shown on <u>Exhibit CIR-2</u>, <u>Existing Roadway Lanes</u>.

The City of Glendora street cross-sections for the various roadway types, which are provided on the City's Standard Design and Specifications, Standard Plan 1.07, are shown on Exhibit CIR-3, Standard Street Sections. It is noted that the designations described in the Circulation Element are not consistent with the Standard Plan cross-sections, as shown on the following chart.

Circulation Element		Standard Plan Specification		
Designation	Description	Designation	Specification	
Arterial	100' R/W	Major	100' R/W	
	84' curb-to-curb		84' curb-to-curb	
	4 to 6 lanes, divided		6 lanes, divided	
Collector	60 – 80' R/W	Secondary	80' – 84' R/W	
	40' curb-to-curb		64' curb-to-curb	
	2 to 4 lanes		4 lanes undivided	
Local Street	50' R/W	Collector	60' R/W	
	36' curb-to-curb	(Local Residential)	40' curb-to-curb	
	2 lanes		2 lanes	
		Local – Residential	50' R/W	
		(24 Lots or Less)	36' curb-to-curb	
			2 lanes	
R/W = right-of way				

<sup>&#</sup>x27; = foot

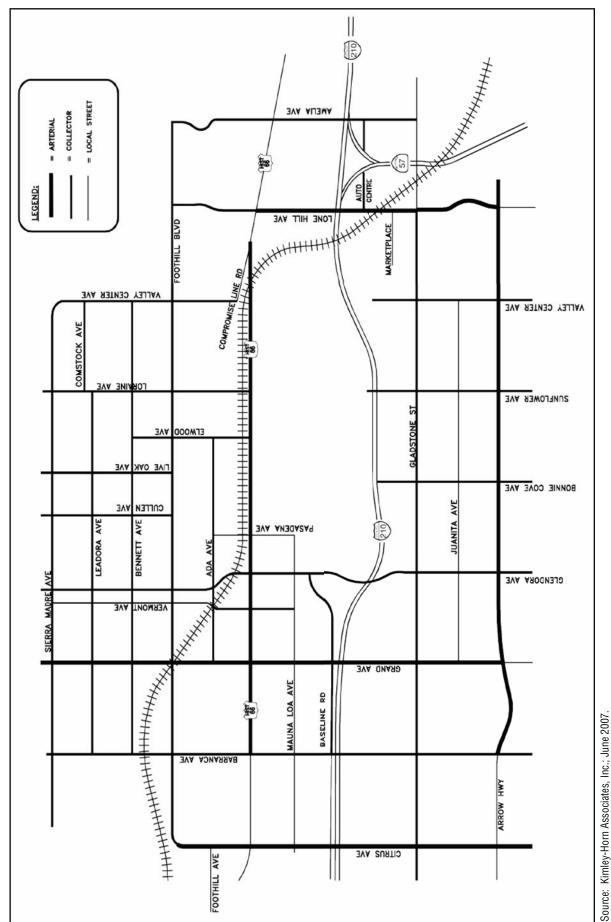


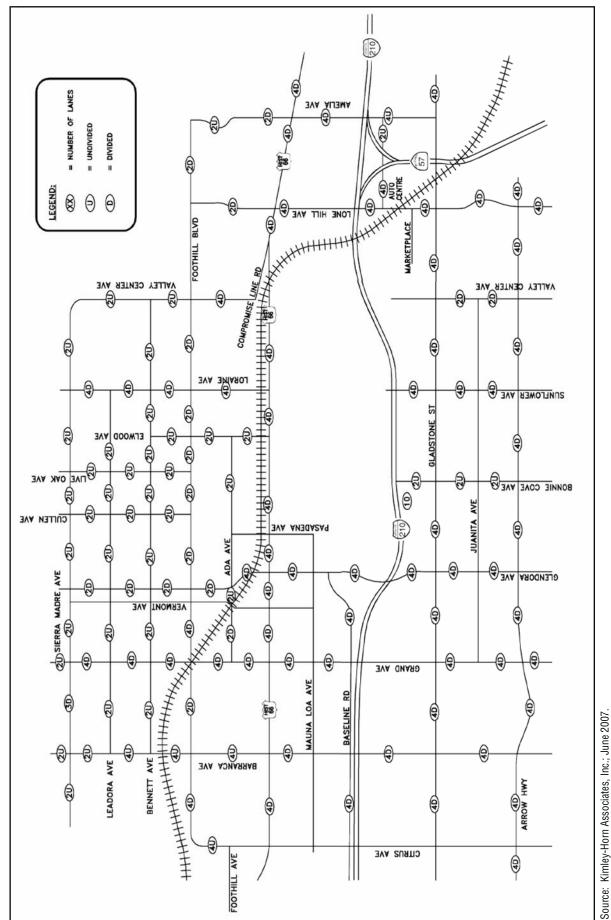


#### Table CIR-1 Existing Roadway Classifications

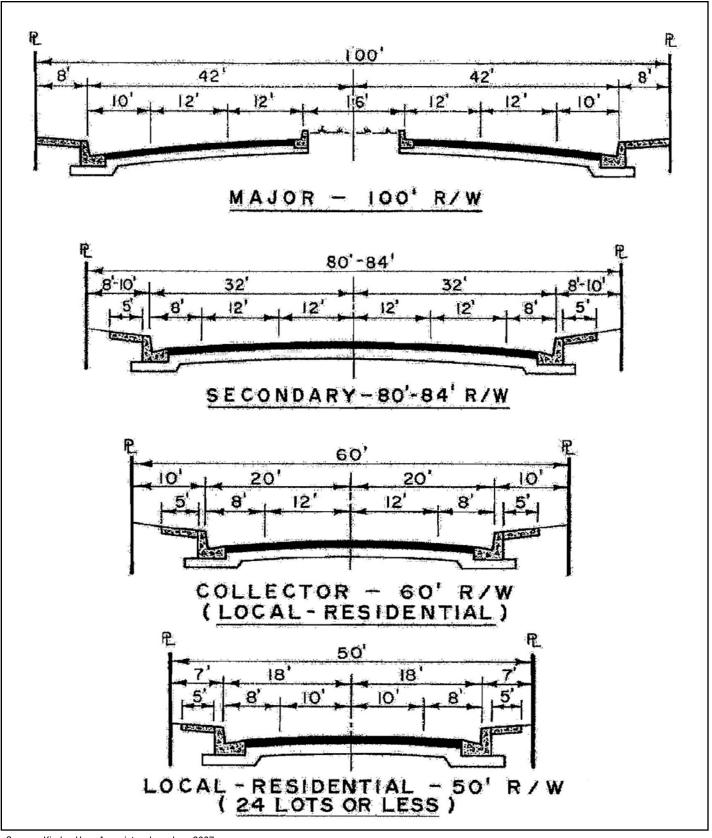
Arterial	Existing Classification	Existing Lanes	Ī	
East - West Roadways				
Sierra Madre Avenue	Collector	2 lanes		
Leadora Avenue	Collector	2 lanes		
Comstock Ave: Loraine Avenue to Valley Center	Collector	2 lanes		
Bennett Avenue	Collector	2 lanes		
Foothill Boulevard: Citrus Avenue to Glendora	Collector	4-lane divided		
Foothill Boulevard: east of Glendora Street	Collector	2 lanes		
Ada Avenue	Collector	2 lanes		
Route 66	Arterial	4-lane divided		
Auto Centre Drive	Collector	4-lane divided		
Gladstone Street	Collector	4-lane divided		
Baseline Avenue	Collector	4-lane divided		
Arrow Highway	Arterial	4-lane divided		
North - South Roadway	'S		J	
Citrus Avenue: Foothill to Sierra Madre	Arterial	4-lane undivided	Ĵ	
Barranca Avenue: north of Leadora Avenue	Collector	2 lanes		
Barranca Avenue: south of Leadora Avenue	Collector	4-lane undivided		
Grand Avenue: north of Sierra Madre Avenue	Arterial	2 lanes		
Grand Avenue: Sierra Madre Avenue to Gladstone	Arterial	4-lane divided		
Grand Avenue: south of Gladstone	Arterial	4-lane divided		
Glendora Avenue: Sierra Madre Avenue to Ada Avenue	Collector	2 lanes		
Glendora Avenue: Ada Avenue to Arrow Highway	Collector	4-lane divided		
Cullen Avenue	Collector	2 lanes		
Bonnie Cove Avenue	Collector	2 lanes		
Live Oak Avenue	Collector	2 lanes		
Sunflower Avenue	Collector	4-lane divided		
Elwood Avenue	Collector	2 lanes		
Loraine Avenue	Collector	4-lane divided		
Valley Center Avenue	Collector	2 lanes		
Lone Hill Avenue: north of Route 66	Collector	2 lanes		
Lone Hill Avenue: Route 66 to Gladstone	Arterial	4-lane divided		
Lone Hill Avenue: south of Gladstone	Arterial	4-lane divided		
Amelia Avenue: north of Route 66	Collector	2 lanes		
Amelia Avenue: south of Route 66	Collector	4-lane divided	Pu	











 $Source: \ Kimley-Horn \ Associates, Inc.; June \ 2007.$ 

CHAPTER 4 • NOISE ELEMENT GLENDORA COMMUNITY PLAN 2025

**Standard Street Sections** 

CONSULTING





#### 3.1.4 Public Transportation Services

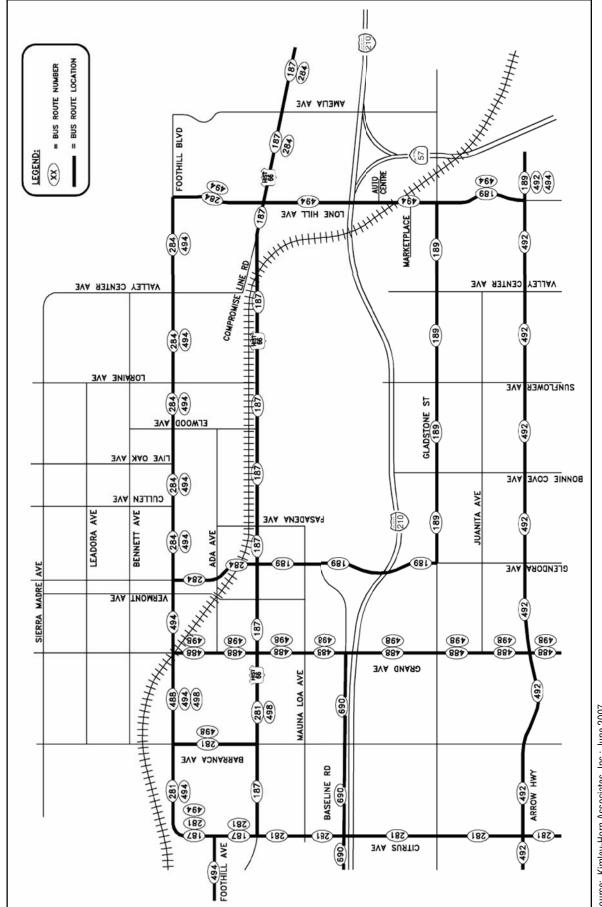
The City of Glendora is well served by public transit systems. The Foothill Transit and the Glendora Mini-Bus both operate routes that extend into or through the City of Glendora. Local lines include service to Citrus College, four regional shopping centers, and the main bus terminal in El Monte. Limited express service is available weekdays to Cal State Los Angeles, the University of Southern California, and Downtown Los Angeles from El Monte. Bus lines travel down multiple streets such as Arrow Highway, Route 66, Grand Avenue, Lone Hill Avenue, Foothill Boulevard, and Sierra Madre Avenue.

<u>Exhibit CIR-4</u>, <u>Public Transportation Services</u>, illustrates the bus routes that run through the City of Glendora. A brief description of each of the transit services in the City of Glendora is provided below.

#### Foothill Transit Authority

Foothill Transit (FTA) operates several routes in the City of Glendora.

- ▶ Route 187 is operated between Claremont and Pasadena, serving Glendora via Foothill Boulevard and Route 66 en route. Service is provided every day with a frequency of one bus every twenty minutes in each direction, except that the frequency is decreased to one bus every one-half hour during the weekends and holidays.
- ▶ Route 189 is operated between Claremont and Glendora, generally traveling along Foothill Boulevard, Gladstone Street, and Glendora Avenue. Service is provided Monday through Friday with a frequency of about one bus per hour in each direction.
- ▶ Route 281 is operated between the Puente Hills Mall and Glendora, serving Glendora via Citrus Avenue, Foothill Boulevard, Barranca Avenue, and Route 66. Service is provided every day with a frequency of generally one bus every one-half hour in each direction, except that the frequency is decreased to one bus per hour during the weekends and holidays.
- ▶ Route 284 is operated between the Plaza at West Covina and Glendora, traveling along Lone Hill Avenue, Foothill Boulevard, and Glendora Avenue in the City of Glendora. Service is provided every day with a frequency of generally one bus per hour in each direction.
- ▶ Route 488 is operated between the El Monte Transit Station and Glendora, serving Glendora via Grand Avenue, and Foothill Boulevard. Service is provided every day with a frequency of generally one bus per hour in each direction, except that the frequency is increased to one bus every one-half hour during the weekday peak periods.
- ▶ Route 492 is operated between Downtown Los Angeles and the Montclair Transit Center, traveling along Arrow Highway at the southern end of the City. Service is provided every day with a frequency of generally one bus every one-half hour in each direction, except that the frequency is decreased to one bus per hour during the weekends and holidays.



Source: Kimley-Horn Associates, Inc.; June 2007.







- ▶ Route 494 is operated between the El Monte Transit Station and the San Dimas Park and Ride Center, traveling along Lone Hill Avenue, Foothill Boulevard, and Citrus Avenue in the City of Glendora. Service is provided Monday through Friday with a frequency of about one bus every one-half hour in each direction.
- ▶ Route 498 is operated between Downtown Los Angeles and the Citrus College Park and Ride, serving Glendora via Grand Avenue and Foothill Boulevard. Service is provided Monday through Friday with a frequency of generally one bus every one-half hour in each direction, except that the frequency is increased to one bus every ten minutes during the weekday peak period.
- ▶ Route 690 is operated between Downtown Pasadena and the Montclair Transit Center, traveling along Baseline Road through the City of Glendora. Service is provided every day with a frequency of generally one bus every one-half hour in each direction.
- ▶ Route 851 is operated between Eastland Center in West Covina, serving Glendora via Glendora Avenue, Arrow Highway, Sunflower Avenue, Gladstone Street, Sierra Madre Avenue, and Valley Center. Service is provided Monday through Friday with a frequency of generally one bus per hour in each direction, except that the frequency is increased to one bus every one-half hour during the weekday peak period.

#### Glendora's Mini-Bus

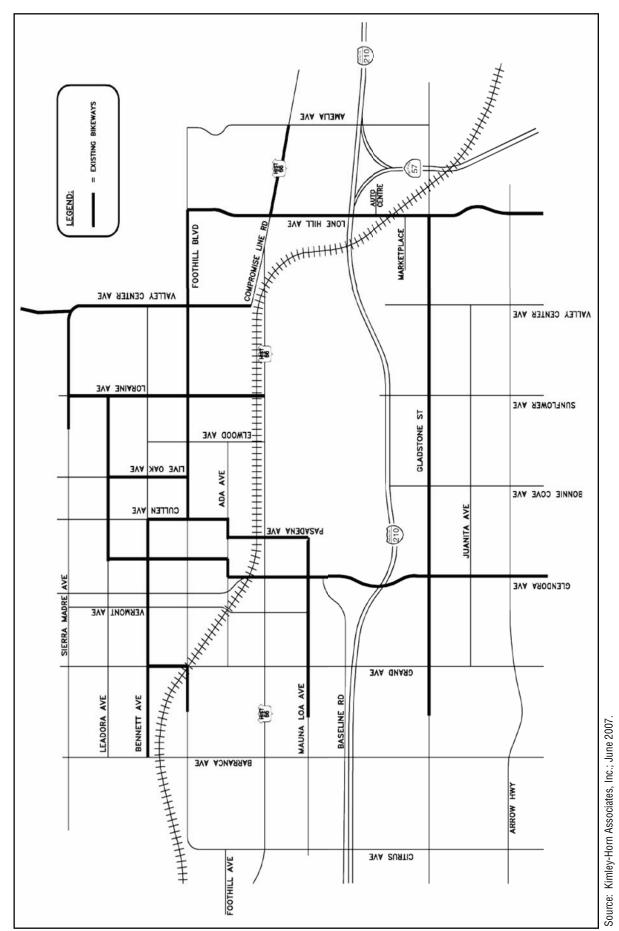
Glendora's mini-bus offers curb-to-curb transportation services for senior citizens and permanently disabled persons of Glendora. The bus operates Monday through Friday from 8:00 AM to 5:00 PM, Saturday and Sunday from 9:00 AM to 2:00 PM. The cost is 50 cents each way. The service transfers riders to the Pomona Valley Transit Station at the Lone Hill Shopping Center, the Metro Link Station in Covina, and also to the Azusa Transit system at the Citrus College Center.

#### 3.1.5 Bicycle Facilities

Bicycle routes are provided on a number of roadways within the City of Glendora. For east-west travel, Class III bike routes (signed routes) are provided on portions of Sierra Madre Avenue, Leadora Avenue, Bennett Avenue, Foothill Boulevard, Mauna Loa Avenue, and Gladstone Avenue. For north-south travel, bike routes are provided on portions of Grand Avenue, Glendora Avenue, Pasadena Avenue, Live Oak Avenue, Loraine Avenue, Valley Center Avenue, and Lone Hill Avenue. The existing bikeways in Glendora are illustrated on *Exhibit CIR-5*, *Bikeways*.

The bikeway system is intended to provide bicyclists with connections between neighborhoods, parks, schools, and other neighborhood and recreational facilities. Foothill Transit provides bike racks on all buses, to improve mobility and provide the bicycle rider with travel mode options for longer trips. Riding and hiking trails through the city's park and open space system also provide residents with recreational biking opportunities.









The City of Glendora plans to upgrade the existing bicycle system to encourage and facilitate alternative travel modes, which will also benefit air quality. The City will adopt a City Policy for Bicycle and Mopeds, which will include lane striping, signing, and control devices, in accordance with State guidelines. Additional bicycle racks will be provided to enhance bicyclists' access to The Village. The plan considers construction of Class I (off-road facility) along Foothill Boulevard to provide access to Citrus Community College, Azusa Pacific University, and the proposed Gold Line Station.

#### 3.1.6 Truck Routes

The City of Glendora has designated selected roadways as truck routes to provide for the regulated movement of trucks through the City. The designated truck routes in Glendora are illustrated on *Exhibit CIR-6*, *Truck Routes*. The designation of truck routes is intended to direct truck traffic to those streets where it would cause the least amount of neighborhood intrusion and where noise, vibration, and other factors would have the least impact. Primary arterials and roadways providing access to the freeways are the most likely candidates for truck route designation. The designation of truck routes does not prevent trucks from using other roads or streets needed to make deliveries to specified destinations, or for other reasons, as defined in the Motor Vehicle Code of the State of California.

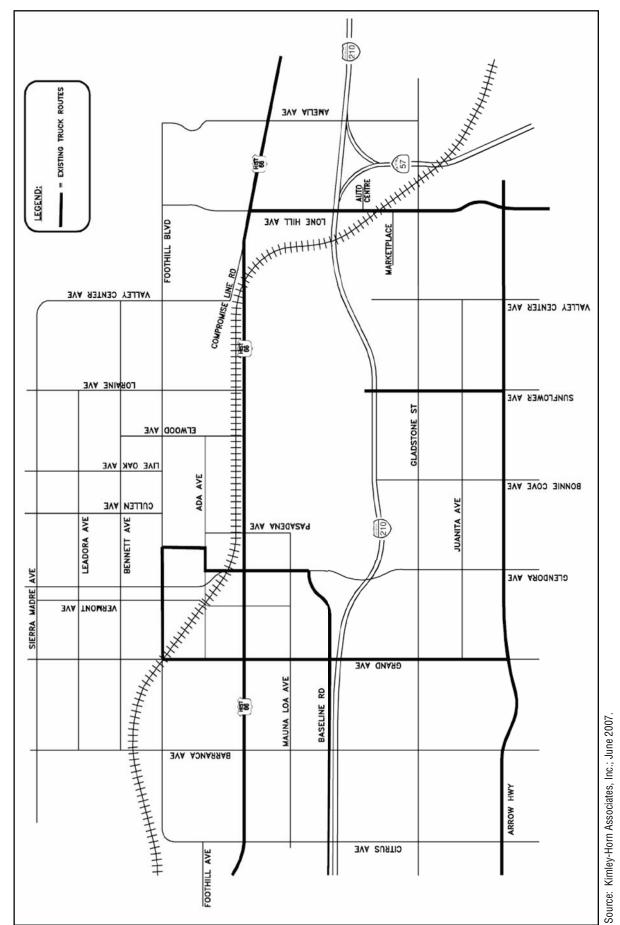
#### 3.1.7 Rail

#### Proposed Foothill Extension of Metro Gold Line

The Foothill Extension of the Metro Gold Line is proposed to follow an alignment from its current terminus in Pasadena to its proposed eastern terminus in the City of Montclair, passing through many Foothill cities, including Glendora. The Gold Line extension project will be completed in phases. Glendora is in Phase II, which is projected to open in 2014. The Draft Environmental Impact Report (DEIR) for the Gold Line extension was released in 2004, and the release of the Final EIR is pending.

Service is planned to be offered from approximately 4:30 AM to 12:30 AM seven days a week. The trains will stop at stations every 10 minutes during the rush hours (6 per hour), and every 20 minutes during off-peak hours (3 per hour). A station is proposed to be located approximately 180 feet east of Vermont Avenue, just south of the City's downtown Village. Passengers will be able to enter the center platform station from the east or west end. The Gold Line DEIR identifies a need for 400 parking spaces at the Glendora station.

Gold Line passengers will be able to connect with the Metro Red Line at Union Station in Downtown Los Angeles, which will also allow passengers to connect with the Metro Blue Line (Long Beach) and the Metro Green Line (Pasadena).



PLANNING B DESIGN B CONSTRUCTION





#### **Existing At-Grade Rail Crossings**

There are currently eight at-grade rail crossings of the existing rail line in the City of Glendora. To improve traffic safety once the number of train movements through these intersections increase, the Los Angeles County Metropolitan Transportation Authority (LACMTA or MTA) has adopted a Grade Crossing Safety Improvement Program, which includes a four-gate crossing (two gates in each direction) at accident-prone locations, to reduce the incidence of drivers attempting to drive around single-arm gates; increased manned enforcement details, and photo enforcement at the at-grade crossings. The City will work with MTA to advocate grade-separated rail crossing for safety and to reduce congestion at the diagonal Grand/Foothill intersection crossing, and other key locations.

#### 3.2 ANALYSIS OF EXISTING CONDITIONS

#### 3.2.1 Level of Service Definition for Intersections

Intersections are analyzed using the Intersection Capacity Utilization (ICU) methodology as specified by the Los Angeles CMP. The ICU methodology uses peak hourly traffic volumes and lane capacities to calculate a volume-to-capacity ratio (V/C ratio) for each turning movement on each approach. A capacity of 1,600 vehicles per lane per hour through signalized intersections is assumed, with a 10 percent clearance factor to account for the effect of yellow and red phases in each signal cycle. Critical movements are then identified and an ICU value determined based on a summation of the critical V/C ratios. The ICU methodology provides a comparison of intersection volumes to the intersection capacity and the results are then related to LOS values, ranging from "A" to "F," according to the following chart.

Intersection Level of Service and Corresponding ICU Values

	Intersection Capacity
Level of Service	Utilization (ICU)
A	0.00 - 0.60
В	0.61 - 0.70
С	0.71 - 0.80
D	0.81 - 0.90
E	0.91 - 1.00
F	Greater than 1.00

Level of Service (LOS) terms are used to qualitatively describe prevailing conditions and their effect on traffic. Broadly interpreted, the LOS concept denotes any one of a number of differing combinations of operating conditions that may take place as a roadway is accommodating various traffic volumes. The LOS is related to the volume-to-capacity ratio (V/C). To determine the V/C ratio, the average daily traffic volume on a particular roadway link is divided by the link capacity. There are six defined Levels of Service, LOS "A" through "F" which describe conditions ranging from "ideal" to "worst" as defined in the chart on the following page.





#### Level of Service Descriptions

Level of Service	Description of Operation	Range of V/C Ratios
A	Low volumes; high speeds; speed not restricted by other vehicles; all signal cycles clear with no vehicles waiting through more than one signal cycle.	0.00 - 0.60
В	Operating speeds begin to be affected by other vehicles; between one and ten percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods.	0.61 - 0.70
С	Operating speeds and maneuverability closely controlled by other traffic between 11 and 30 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods: recommended ideal design standard.	0.71 - 0.80
D	Tolerable operating speeds; 31 to 70 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods; often used as design standard in urban areas.	0.81 - 0.90
Е	Capacity; the maximum traffic volumes an intersection can accommodate; restricted speeds; 71 to 100 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods.	0.91 - 1.00
F	Long queues of traffic; unstable flow; stoppages of long duration; traffic volumes and traffic speed can drop to zero; traffic volumes will be less than the volume which occurs at Level of Service E.	> 1.00

As shown on this chart, traffic conditions are best when the daily traffic volumes are less than 60 or 70 percent of the theoretical capacity of the intersection, while extreme congestion and delays can be expected when the daily traffic volumes approach or exceed 100 percent of the intersection capacity.

#### 3.2.2 Level of Service Standard

As of the last General Plan update in 1992), Objective 1 of Goal 1 of the Circulation Element stated that the City's Level of Service standard is to maintain a Level of Service "C" or better on the city's roads and intersections. In December, 2003, in conjunction with the processing of the General Plan Amendment for the Route 66 Specific Plan, the City amended the Circulation Element to establish the Level of Service standard as LOS "D" or better on roads and intersections.





#### 3.2.3 Peak Hour Intersection Analysis

Twenty intersections were selected for analysis of existing traffic conditions as well as future traffic conditions that would be anticipated when General Plan land uses would be built out. The selection of the 20 intersections was based on which intersections are currently carrying high peak hour volumes, such as those near activity centers and freeway interchanges, as well as those near vacant or underutilized parcels where development could occur and traffic growth might be anticipated. The 20 intersections selected for analysis are:

- 1. Sierra Madre Avenue at Loraine Avenue
- 2. Bennett Avenue at Grand Avenue
- 3. Foothill Boulevard at Grand Avenue
- 4. Foothill Boulevard at Loraine Avenue
- 5. Foothill Boulevard at Valley Center Avenue
- 6. Route 66 at Barranca Avenue
- 7. Route 66 at Grand Avenue
- 8. Route 66 at Glendora Avenue
- 9. Route 66 at Loraine Avenue
- 10. Route 66 at Compromise Line Road
- 11. Route 66 at Lone Hill Avenue
- 12. Route 66 at Amelia Avenue
- 13. Baseline Road at Grand Avenue
- 14. Baseline Road at Glendora Avenue
- 15. Gladstone Street at Grand Avenue
- 16. Gladstone Street at Glendora Avenue
- 17. Gladstone Street at Sunflower Avenue
- 18. Gladstone Street at Lone Hill Avenue
- 19. Auto Centre Drive at Lone Hill Avenue
- 20. Marketplace (entrance) at Lone Hill Avenue

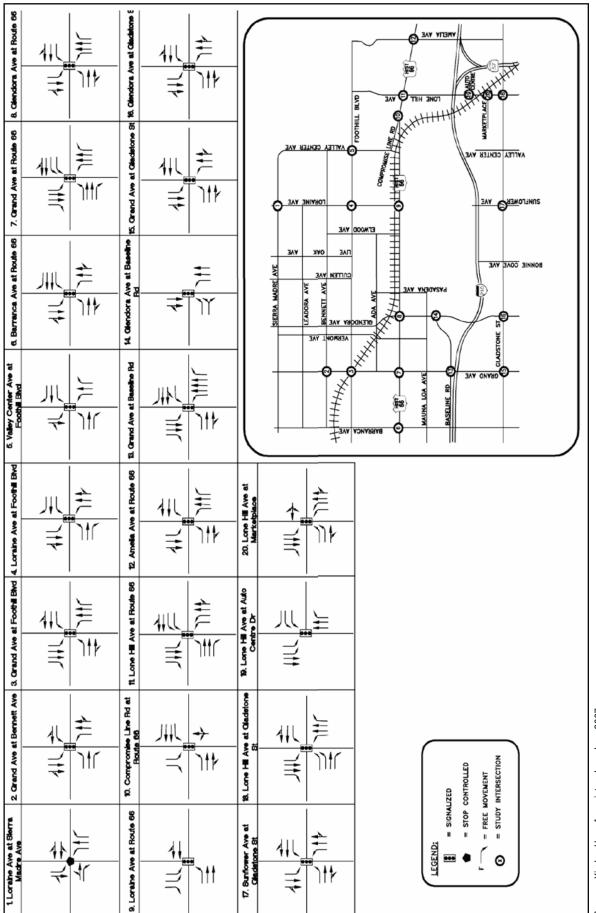
#### 3.2.4 Intersection Capacity Analysis

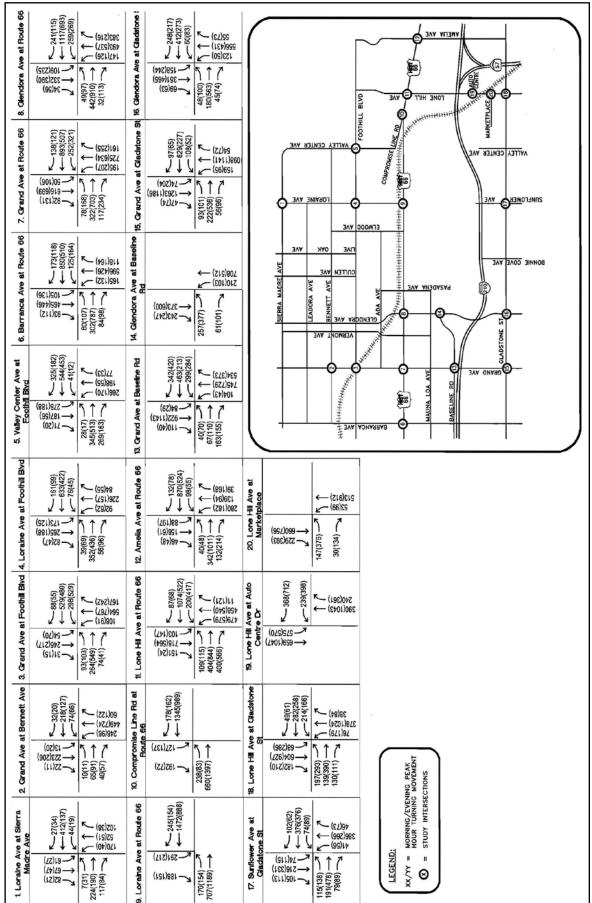
Existing lane configurations and traffic control at the study intersections are shown on <u>Exhibit CIR-7</u>, <u>Existing Lane Configurations and Traffic Control</u>. Morning and evening peak hour traffic counts were conducted at the 20 intersections in March 2006<sup>1</sup>, and are depicted on <u>Exhibit CIR-8</u>, <u>Existing Peak Hour Traffic Volumes</u>. The peak hours are the highest volume hour within the morning peak period (7:00 - 9:00 AM) and the evening peak period (4:00 - 7:00 PM). Copies of the traffic count data sheets are provided in Appendix A. ICU analyses were conducted to evaluate the existing operating conditions of the 20 intersections. The resulting ICU values and the corresponding LOS are summarized in <u>Table CIR-2</u>, <u>Existing Conditions Peak Hour Intersection Operation</u>. Intersection analysis worksheets for existing conditions are provided in Appendix B.

\_

<sup>&</sup>lt;sup>1</sup> Traffic counts were conducted on Tuesday through Thursday during the week of March 21, 2006.







ø,

Source: Kimley-Horn Associates, Inc.; June 2007



CONSTRUCTION





With the exception of two intersections, all study intersections are currently operating at LOS "D" or better under existing conditions. Two intersections are currently operating at LOS "E" as follows:

- ► Route 66 and Lone Hill Avenue (AM Peak Hour)
- ► Gladstone Street and Lone Hill Avenue (PM Peak Hour)

Needed improvements to achieve acceptable Level of Service at these two intersections will be discussed in the following section.

Table CIR-2
Existing Conditions Peak Hour Intersection Operation

	AM Peak Hour		PM Pea	ık Hour
Signalized Intersection	ICU	LOS	ICU	LOS
Sierra Madre Ave / Loraine Ave	0.471	A	0.318	A
Bennett Ave / Grand Ave	0.494	A	0.475	A
Foothill Blvd / Grand Ave	0.602	В	0.898	D
Foothill Blvd / Loraine Ave	0.725	С	0.545	A
Foothill Blvd / Valley Center Drive	0.785	С	0.582	A
Route 66 / Barramca Ave	0.704	С	0.748	С
Route 66 / Grand Ave	0.785	С	0.779	С
Route 66 / Glendora Ave	0.777	С	0.867	D
Route 66 / Loraine Ave	0.784	С	0.568	A
Route 66 / Compromise Line Road	0.789	С	0.622	В
Route 66 / Lone Hill Ave	0.922	Е	0.886	D
Route 66 / Amelia Ave	0.677	В	0.745	С
Baseline Rd / Grand Ave	0.716	С	0.825	D
Baseline Rd / Glendora Ave	0.523	A	0.578	A
Glastone St / Grand Ave	0.894	D	0.837	D
Gladstone St / Glendora Ave	0.626	В	0.661	В
Gladstone St / Sunflower Ave	0.503	A	0.507	A
Gladstone St / Lone Hill Ave	0.557	A	0.946	Е
Auto Centre / Lone Hill Ave	0.524	A	0.871	D
Marketplace / Lone Hill Ave	0.371	A	0.511	A





#### 4.0 GENERAL PLAN BUILDOUT TRAFFIC CONDITIONS

This element addresses forecasted traffic conditions upon buildout of the City of Glendora. Buildout traffic conditions include not only the future growth in traffic that will result from development of vacant and under-utilized parcels within the City, but also growth in traffic from neighboring cities, and area-wide traffic that passes through the Glendora. Because of its location, situated just north of the I-210 Freeway, and positioned between downtown Los Angeles and several other San Gabriel Valley cities to the west and the County of San Bernardino to the east, the City of Glendora streets carry a portion of the region's east-west travel demand on its arterial streets.

As the region continues to grow, and regional transportation facilities (most specifically the I-210 in the case of Glendora) become more congested, the effect of regional traffic on city streets will continue to be felt. The County of Los Angeles Congestion Management Program (CMP) forecasts a 14.76 percent increase in traffic volumes in the San Gabriel Valley area by the Year 2025. While some of this growth within the City of Glendora is accounted for by the buildout of its vacant and underutilized parcels city-wide, a portion of this also represents growth in through traffic particularly in the east-west direction. The analysis for the update of the City of Glendora Circulation Element includes not only the future traffic associated with buildout of the City's land use, but the effect of traffic growth throughout the region, as well.

#### 4.1 METHODOLOGY

Analysis of projected traffic conditions at buildout of the City was conducted to determine whether or not the City's circulation system can accommodate the future traffic demands of the City's land use plan. Buildout assumes that each vacant or underutilized parcel in the City will buildout to its full General Plan potential. If roadway or intersection deficiencies are projected to occur as a result of buildout of General Plan land uses, then improvements needed to accommodate future traffic volumes will be identified.

The methodology for evaluating future traffic volumes on the roadway segments and at intersections in Glendora is based on the following major premises:

- ► The Circulation Element must be consistent with all other Elements of the General Plan, especially the Land Use Element, such that there is a good balance between the transportation capacity to be provided and the travel demand to be generated by the buildout land uses.
- ▶ The effects of increased traffic in Glendora due to growth and development in neighboring communities must be taken into consideration. While "through" traffic is not encouraged, its presence must be recognized so that the Circulation Element can be responsive.
- ► The City's current circulation system is largely built out to its designated capacities, and is assumed to be the buildout network for the buildout analysis. If improvements to the





roadway system or intersections are needed to accommodate General Plan Buildout, these will be recommended as mitigation measures.

➤ The traffic for development in Glendora on vacant or underutilized parcels was estimated and added to the background future traffic volumes. Further details are presented in the following paragraphs.

#### 4.2 FUTURE LAND USE TRIP GENERATION

While the City of Glendora is generally developed, parcels throughout the city are still vacant, or are underdeveloped and have the potential for further development. The Land Use Element of the General Plan quantifies the potential development on these underutilized and vacant parcels. The remaining potential development on these parcels of interest in Glendora is estimated to consist of 3,066 dwelling units and approximately 2.23 million square feet of development. This total includes the proposed land uses planned for the Route 66 Specific Plan area.

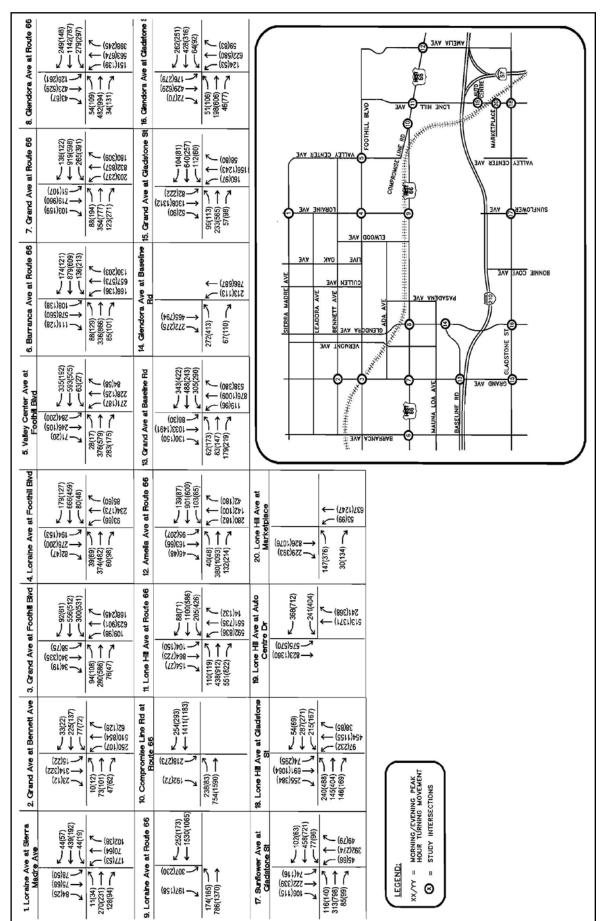
For the analysis of future traffic conditions, each parcel was identified in terms of its potential future land use, including the land use type (residential, retail, office, industrial, etc.) and the quantity of those land uses (dwelling units, thousand square feet, etc.). The number of trips that would be generated by the potential development was calculated and is summarized in Appendix C to this report. In total, the buildout land uses have the potential to generate approximately 3,500 new trips in the morning peak hour, and approximately 8,300 trips in the evening peak hour.

The traffic analysis is intended to provide an evaluation of the traffic impacts associated with buildout of the City's remaining land use, as summarized in the Land Use Element. Buildout land use information was based on existing and General Plan land use data provided by the City and compiled parcel by parcel by RBF Consulting. All vacant and underutilized parcels were accounted for in the future land use database, including major approved and pending projects, such as the Route 66 Specific Plan and the Diamond Ridge Marketplace.

Buildout land uses were grouped by Traffic Analysis Zone (TAZ) as shown in Appendix C. The distribution assumptions for each TAZ include a combination of assignments to multiple destinations within the city and destinations external to the city. A detailed printout of the distribution assumptions for each TAZ is provided in Appendix C.

## 4.3 BUILDOUT TRAFFIC PROJECTIONS

The additional trips that would be generated by the proposed developments were estimated and distributed on the surrounding road network as described earlier in the report. Interaction between complementary land uses within the city, and pass-by assumptions were taken into account in the distribution and assignment of traffic. The buildout traffic estimates for the study intersections are presented in *Exhibit CIR-9*, *Buildout Peak Hour Traffic Volumes*.



Source: Kimley-Horn Associates, Inc.; June 2007



CONSTRUCTION





#### 4.4 BUILDOUT TRAFFIC CONDITIONS AT INTERSECTIONS

The ICU analysis was conducted for buildout conditions, and the Level of Service was determined for each of the 20 study intersections, and the results are presented in <u>Table CIR-3</u>, <u>Buildout Conditions</u> <u>Park Hour Intersection Operation</u>. The data in <u>Table CIR-3</u> indicates that 12 of the 20 intersections analyzed would operate at LOS "D" or better under buildout conditions. The following eight intersections would operate at LOS "E" or LOS "F."

- ► Foothill Boulevard and Grand Avenue (LOS "E" in the PM Peak Hour)
- ▶ Route 66 and Grand Avenue (LOS "E" in the PM Peak Hour)
- ▶ Route 66 and Glendora Avenue (LOS "E" in the PM Peak Hour)
- ► Route 66 and Lone Hill Avenue (LOS "E" in the AM Peak Hour and LOS "F" in the PM Peak Hour)
- ▶ Baseline Road and Grand Avenue (LOS "F" in the PM Peak Hour)
- ► Gladstone Street and Grand Avenue (LOS "E" in the AM Peak Hour)
- ► Gladstone Street and Lone Hill Avenue (LOS "F" in the PM Peak Hour)
- ► Auto Centre and Lone Hill Avenue (LOS "E" in the PM Peak Hour)

#### 4.5 RECOMMENDED MITIGATION MEASURES

Buildout of the City will result in deficient conditions (Level of Service "E" or "F") at eight study intersections. Some of these deficiencies were identified previously in traffic studies for other approved and pending projects, such as the Route 66 Specific Plan and Diamond Ridge Marketplace. Wherever possible, mitigation measures identified here are consistent with mitigation measures for approved and pending projects. Improvements were identified that would achieve Level of Service "D" under buildout conditions at the eight impacted intersections. Wherever possible, the improvements will be achieved by re-striping and/or re-assigning lanes at intersections to minimize construction impacts on adjacent properties. These improvements are:

- ► Foothill Boulevard and Grand Avenue: The addition of a second westbound left-turn lane would improve the Level of Service from LOS "E" to LOS "C."
- ▶ Route 66 and Grand Avenue: The addition of a third eastbound through lane would improve the Level of Service from LOS "E" to LOS "D". (Identified in the Route 66 Specific Plan Traffic Study). An alternative improvement for this intersection would be the conversion of the southbound exclusive right-turn lane to a shared through-right-turn lane. Either of these improvements can be achieved within the existing paved travelway.
- ▶ Route 66 and Glendora Avenue: The addition of a second westbound left-turn lane would improve the Level of Service from LOS "E" to LOS "D."





- ▶ Route 66 and Lone Hill Avenue: The conversion of the southbound exclusive right-turn lane to a shared through-right-turn lane would improve the Level of Service from LOS "F" to LOS "E". The additional improvements needed to improve the intersection to LOS "D" would require right-of-way take and would impact the businesses on the southwest and northwest corners of the intersection.
- ▶ Baseline Road and Grand Avenue: The addition of a second westbound right-turn lane would improve the level of service from LOS "F" to LOS "D". This improvement would help to accommodate the very high westbound right-turn demand coming from the freeway off-ramp. However, it may require right-of-way take on the north side of the street to achieve this improvement. An alternative improvement for this intersection would be the conversion of the southbound exclusive right-turn lane to a shared through-right-turn lane. This improvement can be achieved within the existing paved travelway on Grand Avenue.
- ▶ Gladstone Street and Grand Avenue: The addition of a third southbound through lane would improve the level of service from LOS "E" to LOS "D." This improvement can be achieved within the existing paved travelway on Grand Avenue.
- ► Gladstone Street and Lone Hill Avenue: The addition of a third northbound through lane and a third southbound through lane would improve the level of service from LOS "F" to LOS "C."
- ▶ Auto Centre and Lone Hill Avenue: the addition of a second westbound right-turn lane would improve the level of service from LOS "E" to LOS "D."

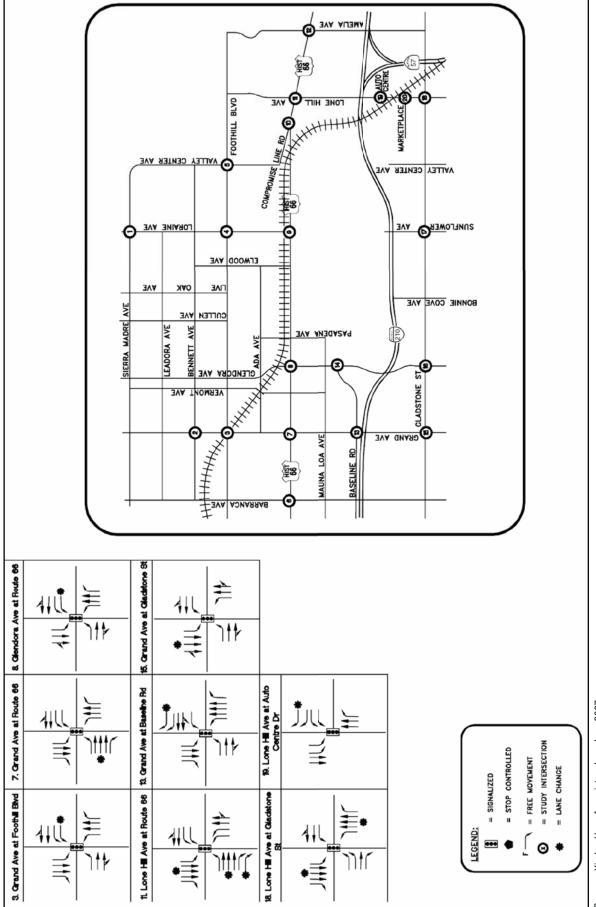
These recommended intersection improvements are depicted on <u>Exhibit CIR-10</u>, <u>Recommended Intersection Improvements</u>. A summary of the buildout ICU and Level of Service values with the recommended mitigation measures are presented in <u>Table CIR-4</u>, <u>Buildout Conditions Peak House Intersection Operation Before and After Recommended Mitigation</u>. Intersection analysis worksheets for buildout with mitigation conditions are provided in Appendix B.

#### 5.0 RECOMMENDATIONS FOR CIRCULATION PLAN

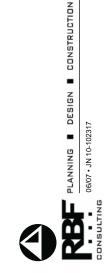
Buildout of the city entails the potential development of 3,066 new dwelling units and approximately 2.23 million square feet of development on vacant and underutilized parcels in Glendora. This total includes the proposed land uses planned for the Route 66 Specific Plan area. This development is estimated to generate over 100,000 new daily trips, with approximately 3,500 new trips in the morning peak hour, and approximately 8,300 trips in the evening peak hour.

With buildout of the City, increased traffic volumes will occur throughout the City, with deficient conditions (Level of Service "E" or "F") forecasted at eight study intersections.





Source: Kimley-Horn Associates, Inc.; June 2007.







#### Table CIR-3 Buildout Conditions Peak Hour Intersection Operation

	AM Pea	AM Peak Hour		ık Hour
Signalized Intersection	ICU	LOS	ICU	LOS
Sierra Madre Ave / Loraine Ave	0.513	A	0.369	A
Bennett Ave / Grand Ave	0.529	A	0.527	A
Foothill Blvd / Grand Ave	0.630	В	0.958	Е
Foothill Blvd / Loraine Ave	0.762	С	0.598	A
Foothill Blvd / Valley Center Drive	0.856	D	0.674	В
Route 66 / Barramca Ave	0.749	C	0.864	D
Route 66 / Grand Ave	0.837	D	0.913	Е
Route 66 / Glendora Ave	0.824	D	0.970	Е
Route 66 / Loraine Ave	0.810	D	0.635	В
Route 66 / Compromise Line Road	0.826	D	0.768	С
Route 66 / Lone Hill Ave	0.995	Е	1.005	F
Route 66 / Amelia Ave	0.690	В	0.791	С
Baseline Rd / Grand Ave	0.774	C	1.008	F
Baseline Rd / Glendora Ave	0.569	A	0.668	В
Glastone St / Grand Ave	0.919	Е	0.897	D
Gladstone St / Glendora Ave	0.670	В	0.753	С
Gladstone St / Sunflower Ave	0.532	A	0.623	В
Gladstone St / Lone Hill Ave	0.602	В	1.002	F
Auto Centre / Lone Hill Ave	0.515	A	0.973	Е
Marketplace / Lone Hill Ave	0.421	A	0.607	В





# Table CIR-4 Buildout Conditions Peak Hour Intersection Operation Before and After Recommended Mitigation

	AM Pea	ak Hour	PM Pea	ak Hour
Signalized Intersection	ICU	LOS	ICU	LOS
Foothill Blvd / Grand Ave	0.630	В	0.958	Е
With Mitigation: Add WB Left Turn Lane	0.592	A	0.792	С
Route 66 / Grand Ave	0.837	D	0.913	Е
With Mitigation 1: Add EB Through Lane	0.837	D	0.894	D
With Mitigation 2: Convert SB Right Turn to SB Through-Right Turn Lane	0.783	С	0.846	D
Route 66 / Glendora Ave	0.824	D	0.970	Е
With Mitigation: Add WB Left Turn Lane	0.824	D	0.877	D
Route 66 / Lone Hill Ave	0.995	Е	1.005	F
With Mitigation 1: Convert SB Right Turn to SB Through-Right Turn Lane	0.937	Е	0.936	Е
With Mitigation 2: Add EB Left Turn, SB Through, and EB Through Lane	0.871	D	0.898	D
Baseline Rd / Grand Ave	0.774	С	1.008	F
With Mitigation 1: Add WB Right Turn Lane	0.774	С	0.876	D
With Mitigation 2: Convert SB Right Turn to SB Through-Right Turn Lane	0.694	В	0.884	D
Glastone St / Grand Ave	0.919	Е	0.897	D
With Mitigation: Add SB Through Lane	0.825	D	0.897	D
Gladstone St / Lone Hill Ave	0.602	В	1.002	F
With Mitigation: Add NB Through Lane and SB Through Lane	0.545	A	0.882	С
Auto Centre / Lone Hill Ave	0.515	A	0.973	Е
With Mitigation: Add WB Right Turn Lane	0.515	A	0.833	D





Recommendations for this Circulation Element to address future traffic conditions are presented below.

- ▶ Improvements to mitigate the deficient peak hour conditions at study intersections have been presented in Section 4.5 of this Element.
- ▶ A funding or fee assessment mechanism, such as a traffic impact fee, or an improvement district, should be implemented to collect a portion of the costs to implement these improvements from new development.
- ▶ It is recommended that the roadway classifications in the Roadway Standards section of the Circulation Element be modified to be consistent with the newly adopted Standard Street Sections in the City's Standard Designs and Specifications, as follows:
  - O Major 84 feet of pavement within 100 feet of right-of-way (4 to 6 lanes divided)
  - O Secondary 64 feet of pavement within 80 to 84 feet of right-of-way (4 lanes)
  - Collector 40 feet of pavement with 60 feet of right-of-way (2 lanes)
- ▶ With the recommended changes in classification types, the "Arterial" designation would be eliminated. It is recommended that all Arterial roadways currently built to the 100-foot right-of-way be classified as a Major, and that those currently built to less than the 100-foot right-of-way be classified as a Secondary.
- ▶ It is recommended that the Major classification allow for either Major-4 or Major-6 category, to account for those roadways built to the Major standard, but striped for only four lanes.
- ▶ It is recommended that the following roadway segments be improved to provide six travel lanes (three in each direction):
  - O Grand Avenue between Route 66 and Gladstone Street
  - O Lone Hill Avenue between Route 66 and Gladstone Street
- ▶ It is recommended the existing Collectors that are built to two lanes be classified as a Collector, and that those that are four lanes be classified as a Secondary.

These recommended changes are shown on <u>Table CIR-5</u>, <u>Recommended Roadway Classifications</u>, and are depicted on <u>Exhibit CIR-11</u>, <u>Recommended Roadway Classifications</u>.

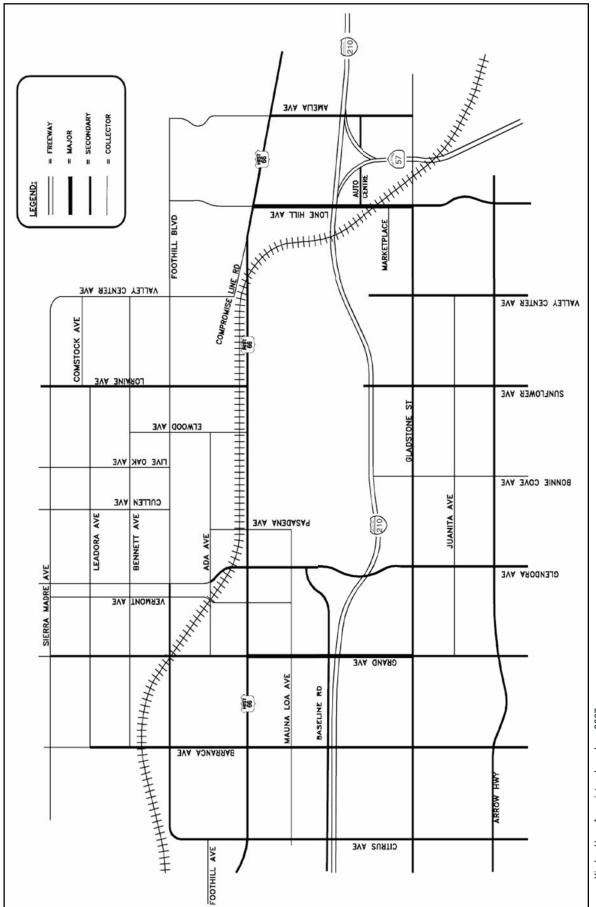




Table CIR-5 Recommended Roadway Classifications

	Existing	Existing	Recommended	
Arterial	Classification	Lanes	Classification	
East - West Roadways				
Sierra Madre Avenue	Collector	2 lanes	Collector	
Leadora Avenue	Collector	2 lanes	Collector	
Comstock Ave: Loraine Avenue to Valley Center	Collector	2 lanes	Collector	
Bennett Avenue	Collector	2 lanes	Collector	
Foothill Boulevard: Citrus Avenue to Glendora	Collector	4-lane divided	Secondary	
Foothill Boulevard: east of Glendora Street	Collector	2 lanes	Collector	
Ada Avenue	Collector	2 lanes	Collector	
Route 66	Arterial	4-lane divided	Major - 4	
Auto Centre Drive	Collector	4-lane divided	Secondary	
Gladstone Street	Collector	4-lane divided	Secondary	
Baseline Avenue	Collector	4-lane divided	Secondary	
Arrow Highway	Arterial	4-lane divided	Major - 4	
North - So	uth Roadways			
Citrus Avenue	Arterial	4-lane undivided	Secondary	
Barranca Avenue: north of Leadora Avenue	Collector	2 lanes	Collector	
Barranca Avennue: south of Leadora Avenue	Collector	4-lane undivided	Secondary	
Grand Avenue: north of Sierra Madre Avenue	Arterial	2 lanes	Collector	
Grand Avenue: Sierra Madre Avenue to Route 66	Arterial	4-lane divided	Major - 4	
Grand Avenue: Route 66 to Gladstone	Arterial	4-lane divided	Major - 6	
Grand Avenue: south of Gladstone	Arterial	4-lane divided	Major - 4	
Glendora Avenue: Sierra Madre Ave to Ada Ave	Collector	2 lanes	Collector	
Glendora Avenue: Ada Avenue to Arrow Highway	Collector	4-lane divided	Secondary	
Cullen Avenue	Collector	2 lanes	Collector	
Bonnie Cove Avenue	Collector	2 lanes	Collector	
Live Oak Avenue	Collector	2 lanes	Collector	
Sunflower Avenue	Collector	4-lane divided	Secondary	
Elwood Avenue	Collector	2 lanes	Collector	
Loraine Avenue	Collector	4-lane divided	Secondary	
Valley Center Avenue	Collector	2 lanes	Collector	
Lone Hill Avenue: north of Route 66	Collector	2 lanes	Collector	
Lone Hill Avenue: Route 66 to Gladstone	Arterial	4-lane divided	Major - 6	
Lone Hill Avenue: south of Gladstone	Arterial	4-lane divided	Major - 4	
Amelia Avenue: north of Route 66	Collector	2 lanes	Collector	
Amelia Avenue: south of Route 66	Collector	4-lane divided	Secondary	

Note: Recommended classification changes are shown in *Bold Italics*.



# 6.0 PLANNING CONSIDERATIONS, GOALS, AND POLICIES

#### **TRAFFIC SAFETY**

**Planning Consideration:** The City of Glendora understands that the safe and efficient movement of vehicles and pedestrians contributes to overall community safety. Planning, design and maintenance of existing and future transportation infrastructure should seek to enhance the safety of vehicular traffic and pedestrians utilizing local roadways.

Goal	CIR-1	Safety for motorists and pedestrians on local roadways.
Policies	CIR-1.1	Determine appropriate design of local roadway system considering all potential users including automobile, bicycle, and pedestrian users.
	CIR-1.2	Based on traffic counts, add audible and "countdown" signals to enhance pedestrian safety.
	CIR-1.3	Initiate public education programs that address the following components:
		<ul> <li>Pedestrian rights, legal movements.</li> <li>Location of bike lanes and routes.</li> <li>Youth involvement/programs with Police (e.g. bike rodeos, etc.).</li> </ul>
	CIR-1.4	Improve public directional and safety signage.
	CIR-1.5	Enforce speeds and traffic laws on all City streets.
	CIR-1.6	Employ traffic calming measures where appropriate to deter speeding.
	CIR-1.7	Explore opportunities to fund sidewalk safety enhancements through the Safe Routes to School program.

#### LOCAL COORDINATION OF LAND USE AND CIRCULATION PLANNING

**Planning Consideration:** Local land use planning significantly influences the safe and efficient function of the local roadway system. The ability to adequately serve the transportation needs of the community should be a primary consideration in all land use planning decisions so that impacts of growth and development are reflected by appropriate improvements.

#### Goal CIR-2 Coordinated transportation and land use planning.

Policies	CIR-2.1	Ensure transportation planning is fully evaluated in the context of future land use planning decisions.
	CIR-2.2	Ensure that the evaluation of potential transportation impacts is an integral component of all land use decisions.
	CIR-2.3	Encourage the sharing of land use and transportation data between the City and adjacent jurisdictions to ensure transportation impacts are properly mitigated.
	CIR-2.4	Support Caltrans' efforts to improve traffic flow on the I-210 freeway.
	CIR-2.5	Support the efforts of the MTA in providing alternative transportation modes within Glendora that would compliment land use planning efforts.
	CIR-2.6	Enhance business and directional signage.
	CIR-2.7	Explore better use of uninterrupted roadways (e.g., Gladstone and Foothill).
	CIR-2.7	Create a funding or fee assessment mechanism, such as traffic impact fee or improvement district, to implement roadway or intersection improvements in the City or those necessary to support new development or redevelopment.
	CIR-2.9	Incorporate the Gold Line Extension into the local planning program.
	Program:	Provide adequate station facilities that support and enhance surrounding land uses.
	<u>CIR-2.10</u>	Plan for adequate bus service to meet Glendora's future needs.
	Program:	Work with Foothill Transit on new route development.
	Program:	Develop a fixed route local shuttle service, using either public or private franchises.
	Program:	Enhance bus stop facilities with shaded seating areas, waste receptacles and route information.

CIR-2.12: Ensure future development along existing railroad rights-of-way includes appropriate public dedications or public easements to include opportunities for additional open space, and/or pedestrian and bicycle pathways.

Goal CIR-3 Infrastructure improvements coordinated with local growth.

**Policies** CIR-3.1 Continue to update traffic count database every five years.

**Planning Consideration:** Design considerations that minimize the intrusion of traffic into local neighborhoods and divert through traffic onto appropriate roadways should be encouraged.

Goal	CIR-4	Reduced transportation impacts in local neighborhoods.
<b>Policies</b> CIR-4.1		Designate routes to regional commerce that have minimum impact on schools and homes.
	CIR-4.2	Clearly designate and understand arterials versus neighborhood streets.
	CIR-4.3	Provide alternative options for local travel.
	Program: Program:	Provide opportunities for local shuttle/ jitney service. Implement a pedestrian and bikeway master plan.

#### REGIONAL COORDINATION

<u>Planning Consideration</u>: The City of Glendora understands circulation impacts from local planning decisions also affect the function and quality of circulation in adjacent jurisdictions. Conversely, planning decisions of adjacent jurisdictions can affect the function and quality of the circulation system within the City of Glendora. While the City of Glendora understands that it is part of the regional transportation system, the City seeks to discourage the use of non-arterials as major circulation routes and protect existing and future Glendora neighborhoods from unwanted traffic intrusions.

Goal adjacent ju	CIR-5 urisdictions.	Appropriate coordination of transportation planning with
Policies	CIR-5.1	Coordinate local and regional circulation planning with County Congestion Management Plan.
	CIR-5.2	Continue to stay involved and aware of local jurisdiction developments (e.g., Monrovia Nursery in Azusa).
	CIR-5.3	Coordinate signals on inter-city thoroughfares such as Grand Avenue, Lone Hill, and Route 66.

CIR-5.4 Support regional transportation planning including the Gold Line extension, bus network planning, and regional bikeway and hiking networks.

CIR-5.4 Except where required to support emergency access, no public or private streets shall connect to the planning areas of adjoining

communities.

Program: For new development the City shall not permit vehicular

connections into the planning area from adjoining cities as

condition of development approval.

Program: For new development, the City shall not permit vehicular

connections into the planning area from adjoining cities except where emergency access is deemed appropriate. The City shall require appropriate limited access devices and improvements in its environmental review and land development processes to ensure

vehicular connections are limited to emergency vehicles only.

#### TRANSPORTATION AND UTILITY SYSTEM EFFICIENCY

<u>Planning Consideration</u>: The City of Glendora is approaching buildout conditions. As future growth will continue to impact the existing circulation and infrastructure systems, specific strategies should be implemented to maximize infrastructure efficiency. Emphasizing strategies that reduce demand for and that implement physical improvements that promote system efficiency will contribute to a well functioning circulation system.

Goal	CIR-6	Acceptable level of service on local roadways.
Policies	CIR-6.1	Improve the function of the circulation system through transportation system management strategies.
Goal	CIR-7	Improved access to alternative modes of transportation.
Policies	CIR-7.1	Explore funding for alternative transportation.
	CIR-7.2	Enhance alternative transportation services (mini-bus, seniors and private shuttle franchise service).
	CIR-7.3	Initiate a citywide campaign to promote for carpooling/park-n-ride.
	CIR-7.4	Create and implement a masterplan(s) for pedestrians, trails and bikeways.

CIR-7.5 Ensure adequate pedestrian/ bike amenities at key destinations

such as the Village, the Marketplace and other retail service areas

such as along Route 66.

Goal CIR-8 Controlled utility and infrastructure access between Glendora and

adjoining jurisdictions.

**Policies** Infrastructure for new development shall be limited to the service

of properties within the City's planning area.

#### **Programs:**

1. The City shall prohibit City-controlled infrastructure connections through its development approval process and public works contract bidding process.