Chapter 3
CIRCULATION

The Circulation Element addresses anticipated mobility needs, and the ability of the roadway network and the various transportation modes to meet future travel demands through the buildout year of the Land Use Element (2025). Incremental increases in development intensity increase the use of local and regional roadways by passenger vehicles and trucks. The plan and policies presented in this Element identify strategies that the City will pursue to maintain good service levels wherever possible.

As local roadway facilities are linked to regional roadways, the policies within this Element highlight Rosemead's continued need to work within the region and with neighboring jurisdictions to alleviate traffic congestion. Reduced dependency on the automobile for typical trips supports these objectives and improves overall environmental quality in terms of noise and air quality. As there are alternatives to the passenger vehicle, this Element examines the transportation options available to Rosemead residents and establishes appropriate policies to promote diverse trip modes.

California State law requires that each city undertake a periodic review of its General Plan. The law also requires an update of the Circulation Element as part of the overall process. The

X 2017 GPA 17-001 ~~APRIL 13, 2010~~

specific code sections and the related requirements are as follows:

- *Government Code Section 65302 (b):* (The general plan shall 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.
- *Government Code Section 95303:* The general plan may address any other subjects, which, in the judgment of the legislative body, relate to the physical development of the county or city.

Relationship to Other Elements

According to California planning law, the Circulation Element must be independent but consistent with other elements. The Circulation Element is most closely related to the Land Use Element, as changes in trip patterns and increases in local trip generation are caused by increases in land use intensity over time.

The planned development areas identified in the Land Use Element served as the basis for the analysis of future traffic levels, and then needed roadway improvements were identified. Implementation of the Circulation Element ensures that existing transportation facilities will be improved to adequately serve traffic generated by future development, where the improvements are both warranted and feasible. Additionally, projected noise contours from transportation sources are included in the Noise Element.

Other Plans

Regional Transportation Plan

The *Regional Transportation Plan* is a component of the *Regional Comprehensive Plan and Guide* prepared by the Southern California Association of Governments (SCAG) to address regional issues, goals, objectives, and policies into the middle of the 21st century. The Plan, which SCAG periodically updates to address changing conditions, has been developed

with active participation from local agencies throughout the region, elected officials, the business community, community groups, private institutions, and private citizens. The Plan sets broad goals for the region and provides strategies to reduce problems related to congestion and mobility.

Congestion Management Plan

The Los Angeles County Metropolitan Transportation Authority (LACMTA or officially known as "Metro") is responsible for planning and operating regional transit facilities and services in Los Angeles County. As required by State law, Metro prepares a Congestion Management Plan (CMP) for Los Angeles County. The CMP identifies the future regional transportation network, establishes acceptable service levels for network routes, and identifies strategies to reduce congestion. Local jurisdictions within the County are responsible for implementing the CMP. The CMP roadway network includes the following roadways that serve Rosemead:

- San Bernardino Freeway (Interstate 10)
- Pomona Freeway (State Route 60)
- Rosemead Boulevard (State Route 19)

In addition, the intersection of Rosemead Boulevard at Valley Boulevard is classified as a CMP arterial monitoring station. The performance of this intersection is regularly tracked for CMP report updates.

Air Quality Management Plan

The federal Clean Air Act requires preparation of plans to improve air quality in any region designated as a non-attainment area (A non-attainment area is a geographic area identified by the Environmental Protection Agency and/or California Air Resources Board as not meeting State or federal standards for a given pollutant). The plan must outline specific programs, strategies, and timelines for bringing the area into compliance with air quality standards. The *Air Quality Management Plan* prepared by the South Coast Air Quality Management District, first adopted in 1994 and updated on a three-year cycle, contains policies and measures designed to achieve federal and State standards for healthier air quality in the South Coast Air Basin. Many of the programs address circulation improvements, since fossil-fuel-powered vehicles account for more than 60 percent of the nitrogen oxide emissions and 70 percent of the carbon monoxide emissions within the Basin.

Roadway Classifications

Roadways within Rosemead, as in any typical urbanized area, are defined using a hierarchical classification system. Each type of roadway is generally described by purpose and capacity. Rosemead's circulation system is defined by five types of roadway facilities, for which the general standards are described below.

Freeways

Freeways are controlled access, high-speed roadways with grade-separated interchanges. They are intended to carry high volumes of traffic from region to region. The planning, design, construction, and maintenance of freeways in California are the responsibility of the California Department of Transportation (Caltrans).

Interstate 10 – The San Bernardino Freeway is a six-lane freeway with high-occupancy vehicle lanes in both directions. The facility bisects the commercial/retail areas of the city. Interstate 10 provides a full-access interchange with Interstate 710 (Long Beach Freeway) approximately four miles to the west, and also with Interstate 605 (San Gabriel River Freeway) approximately four miles to the east. Via Interstate 10, direct access is provided to Los Angeles on the west and San Bernardino County on the east.

State Route 60 – The Pomona Freeway traverses the southern end of Rosemead, with an interchange at San Gabriel Boulevard. The facility generally parallels the San Bernardino Freeway and has nearby interchanges with the Interstate 710 and Interstate 605 freeways.

Major Arterials

The function of a Major Arterial is to connect traffic from minor arterials and collectors to other parts of the city, freeway interchanges, and adjacent major land uses. They are the principal urban thoroughfares and provide a linkage between activity centers in the City and to adjacent communities. Major Arterials are designed to move large volumes of traffic, typically in the range of 40,000 to 60,000 vehicles per day. They are generally served by regional transit routes and are the primary truck routes in the community. The adoption of the Garvey Avenue Specific Plan in 2017 introduced multimodal transportation and infrastructure for bicycles, pedestrians, and transit into the portion of Garvey Avenue within the Specific Plan area.

There are currently four Major Arterials within the City of Rosemead: Valley Boulevard, Garvey Avenue, San Gabriel Boulevard, and Rosemead Boulevard.

Minor Arterials

The primary purpose of Minor Arterials is to serve as an intermediate route carrying traffic between local streets and major arterials. They are designed to carry moderate levels of traffic, generally in the range of 15,000 to 25,000 vehicles per day. Within Rosemead, these roadway facilities were previously referred to as Secondary Arterials. The roadway plan within this Element introduces the Minor Arterial designation, as it is a more descriptive name for the function of these facilities.

Minor Arterials within the City include Del Mar Avenue, Graves Avenue, New Avenue, Rush Street, Temple City Boulevard, Lower Azusa Road, Mission Drive, and Walnut Grove Avenue. These well-placed streets complete the well-balanced arterial circulation system, which the City has constructed to provide an efficient flow of traffic to places of importance while protecting residential neighborhoods.

Collector Roads

The primary function of a collector street is to connect a neighborhood area with nearby arterials. Collector roads are intended to move traffic between local streets and arterials and commonly carry less than 15,000 vehicles per day.

Roadways classified as collector streets include Encinita Avenue, Grand Avenue, Hellman Avenue, Ivar Avenue, Loftus Drive, Marshall Street, Muscatel Avenue, Ramona Boulevard, Rio Hondo Avenue, and Rosemead Place.

Local Streets

Local streets are designed to principally provide vehicular, pedestrian, and bicycle access to individual parcels throughout the City. They are intended to carry low volumes of traffic, and are typically two-lane roadways.

The established hierarchy of roadway facilities within Rosemead is illustrated within **Figure 3-1**.

Figure 3-1: Existing Roadway Classifications

Measurement of Traffic Flow

The traffic study for this element was primarily based on two traffic engineering concepts – Intersection Capacity Utilization (ICU) values and Level of Service (LOS) values. Both of these are used to measure the adequacy of roadway facilities, but the ICU methodology was specifically developed to gauge the operations at signalized roadway intersections. The ICU methodology is based on specific calculations that include the number of approach lanes and approach volumes by turning movement.

The ICU output value correlates directly with a more common term in traffic engineering, the volume to capacity (V/C) ratio.

Traffic volumes for existing conditions at the analyzed locations are defined by traffic counts, conducted manually at roadway intersections or by automatic tube counters at mid-block roadway segments. Traffic volumes for future or forecast conditions are defined by annual increases in ambient/area traffic and specific traffic increases calculated for planned land use intensity/use changes under the Land Use Element.

Capacity refers to the maximum vehicle carrying ability of a roadway, and is a critical component of roadway design. A roadway that carries 16,000 vehicles per day, with the capacity to accommodate 20,000 vehicles within the same timeframe, has a V/C value of 0.80 for the analyzed time period.

The V/C value is used in turn to establish Level of Service (LOS) categories describing the performance of roadways and intersections throughout the community. Six categories of LOS – the letter designations A to F – are used to identify traffic conditions, with LOS A representing excellent conditions and LOS F representing extreme congestion. For roadways, the LOS designations are based on V/C ratios calculated based on the roadway's capacity at the LOS E/LOS F threshold of 1.00. **Table 3-1** provides V/C ranges, the corresponding LOS, and a description of expected traffic conditions for roadway segments.

For intersections, LOS is based on Intersection Capacity Utilization (ICU) ratios, which take into account the volume-to-capacity ratios of all of the critical turning movements that take place at an intersection. **Table 3-2** provides ranges of ICU values (equivalent to V/C values), the corresponding LOS, and a description of expected traffic conditions for intersections.

Table 3-1
Level of Service Descriptions for Roadways

Level of Service	Flow Conditions	Volume to Capacity Ratio
A	LOS A describes primarily free-flow operations at average travel speeds, usually about 90 percent of the free-flow speed for the arterial classification. Vehicles are completely unimpeded in their ability to maneuver within the traffic stream. Stopped delays at signalized intersections are minimal.	0-0.60
B	LOS B represents reasonably unimpeded operations at average travel speeds, usually about 70 percent of the free-flow speed for the arterial classification. The ability to maneuver within the traffic stream is only slightly restricted and stopped delays are not bothersome. Drivers are not generally subjected to appreciable tension.	0.61-0.70
C	LOS C represents stable operations; however, ability to maneuver and change lanes in midblock locations may be more restricted than at LOS B, and longer queues, adverse signal coordination, or both may contribute to lower average speeds of about 50 percent of the average free-flow speed for the arterial classification. Motorists will experience appreciable tension while driving.	0.71-0.80
D	LOS D borders on a range in which small increases in flow may cause a substantial increase in delay and hence decreases in arterial speed. LOS D may be due to adverse signal progression, inappropriate signal timing, high volumes, or some combination of these factors. Average travel speeds are about 40 percent of free-flow speed.	0.81-0.90
E	LOS E is characterized by significant delays and average travel speeds of one-third the free-flow speed or less. Such operations are caused by some combination of adverse progression, high signal density, high volumes, extensive delays at critical intersections, and inappropriate signal timing.	0.91-1.00
F	LOS F characterizes arterial flow at extremely low speeds below one-third to one-fourth of the free-flow speed. Intersection congestion is likely at critical signalized locations, with high delays and extensive queuing. Adverse progression is frequently a contributor to this condition.	Over 1.00

Table 3-2
Level of Service Descriptions for Signalized Intersections

Level of Service	Description	Intersection Capacity Utilization (ICU) Ratio
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	0-0.60
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	0.61-0.70
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	0.71-0.80
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues. This level is typically associated with design practice for peak periods.	0.81-0.90
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	0.91-1.00
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	Over 1.00

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board, Washington, D.C., 1985 and Interim Materials on Highway Capacity, NCHRP Circular 212, 1982.

Future Circulation Issues

The local circulation system within Rosemead has evolved over time to provide travel routes for both local and regional trips. Major roadways provide access to the I-10 freeway and the State Route (SR) 60 freeway. The I-10 and SR-60 freeways are both east-west trending facilities within the city that have access ramps at major north-south roadways. These freeways link Rosemead residents and businesses to destinations throughout the Los Angeles area and the Southern California region.

Rosemead Boulevard, Walnut Grove Avenue, San Gabriel Boulevard, and Del Mar Avenue are the major north-south roadways within the City. All four major north-south roads provide connections to Interstate 10. In addition, San Gabriel Boulevard connects to SR-60 within the southern area of the city. Valley Boulevard, Garvey Avenue, Graves Avenue, and Rush Street are the major east-west roadways within the City. Although these arterials often act as relief valves to the freeways during peak commute periods, they also provide good alternative travel routes to destinations throughout the San Gabriel Valley.

A safe and convenient circulation system is needed to support the variety of land uses in Rosemead and to manage through traffic that originates in and is destined for locations outside the City.

Four major issues are addressed by the goals, policies, and implementation actions of the Circulation Element:

(1) Efficient movement of vehicles and pedestrians throughout the city;

(2) Promoting alternative modes of travel;

(3) Separating traffic associated with commercial and industrial uses from residential neighborhoods; and

(4) Ensuring that adequate parking exists for all commercial and industrial development.

Future Land Use Intensification

Development outside of the City limits will generate additional increases in area traffic volumes. Such development has been incorporated into the ambient annual growth rate within the Circulation Element traffic analysis, added to existing volumes and compounded over the period between existing (year 2009) and future buildout (year 2025) conditions. Traffic generated from developments envisioned under the updated Land Use Element was added to the analysis after the creation of future ambient growth volumes.

Relationship of Trip Generation to Land Use Makeup

All development creates vehicle trips of some measurable total per unit of intensity (floor area increment or residential unit). The trip generation methodology used within the traffic study, and the assumptions utilized for trip reductions, are discussed below. The potential for increased use of transit, bicycles, or other trip modes was not included in the analysis in order to provide a conservative estimate of impacts.

Conservative Nature of Development Analysis

The trip generation totals used within the traffic analysis prepared for the Circulation Element update were conservative, both by design and by necessity. The traffic analysis methodology was designed to plan for a conservative level of trip generation from each area of intensified development that would be allowed under the updated Land Use Element. It is also necessary to provide this conservative analysis, as additional trip generation reductions, beyond those taken for 7mixed-use developments (discussed below) cannot be substantiated without intense transit service levels or established and active trip reduction programs.

With increasing land use densities that commonly occur during the maturation of an urban-area city, there is an increasing potential for higher transit use or an increasing potential for higher percentage shares of walking trips and bicycle trips. Infrastructure and programs must support these changes in trip patterns, however.

As Rosemead is entering a new phase of urbanization through establishment of major mixed-use centers within the updated Land Use Element and the current predominant makeup of the City is lower density, single-use developments, credits were only taken for internal trip capture between uses within mixed-

use projects and for pass-by or linked trips. These deductions, typical to traffic studies, are based on national standards for related trip reductions and characteristics.

Pass-by reductions were taken for commercial retail trips during the p.m. peak hour only. These reductions were based on typical percentages of these occurrences (unplanned side trips that take place between a planned or regular daily origin and destination). These primary trips already exist on the area roadways, and the pass-by trips would become an additional linked trip along the route of the overall primary trip, so these are not included in the impact calculations.

Additional reductions were taken for internal trip capture within mixed-use developments. There are multiple mixed-use project zones envisioned within the updated Land Use Element. These mixed-use developments – most typically consisting of retail and residential uses in one building – capture some residential-to-commercial trip demand internally and such trips are therefore not generated on area roadways.

Further trip reductions were not taken. A methodology that established trip reduction estimates for developments along transit corridors are provided within the CMP document. However, existing transit levels within Rosemead, and transit levels envisioned for the near future, would not support the use of these additional trip reductions in the analysis.

Potential Trip Generation Intensity Reductions

The synergy that is possible between multiple mixed-use and higher-density development projects has not been factored into the trip generation calculations. When this synergy occurs, more walking trips occur between different nearby developments and more non-auto trips can be generated. These aspects, however, are difficult to estimate at the level of analysis undertaken for the city-wide traffic study conducted for this Element. In addition, estimates for such reductions can only be defined through surveys at similar uses which were not conducted for this macro-level analysis. As trip reductions for these types of trips were not taken, the analysis provides a conservative (or worst-case) estimate of potential traffic impacts.

Traffic Circulation Analysis

According to the Circulation Element Update traffic impact study report, completed by KOA Corporation on February 19, 2010, multiple roadway segments and major intersections would operate at LOS values of E or F in the year 2025 with

implementation of land use intensification that would be allowed by the updated Land Use Element of the General Plan.

Table 3-~~3~~4 provides a summary of future conditions with the projected General Plan land use development, without the proposed circulation roadway network improvements, as analyzed within the traffic study. Within the table headings, the term "V/C" refers to the calculated volume-to-capacity ratio provided by the Intersection Capacity Utilization (ICU) analysis methodology. Values of 1.000 or greater define at-capacity operations. The term "LOS" refers to the related level of service values, ranging from A to F. The Garvey Avenue Specific Plan Traffic Impact Analysis included in the certified Final Environmental Impact Report (SCH: 2015041067) updated the Levels of Service for the intersections identified in Table 3-3

Table 3-3
Garvey Avenue Specific Plan – Traffic Impact Study Intersections

Intersection
Del Mar Avenue/Hellman Avenue
San Gabriel Blvd/Hellman Ave
New Avenue/Garvey Avenue
Jackson Avenue/Garvey Avenue
Del Mar Avenue/Garvey Avenue
Kelburn Avenue/Garvey Avenue
San Gabriel Blvd/Garvey Avenue
Delta Avenue/Garvey Avenue
Walnut Grove Avenue/Garvey Avenue

Formatted: Table Title, Right: 1.08"

Formatted Table

Table 3-~~34~~
Future (year 2025) Area Intersection Levels of Service *

Intersection		AM Peak Hour		PM Peak Hour	
		V/C	LOS	V/C	LOS
1	Walnut Grove Ave at Mission Dr.	0.858	D	0.871	D
2	Rosemead Blvd. at Lower Azusa Rd.	0.889	D	0.942	**E**
3	Rosemead Blvd. at Mission Dr.	1.220	**F**	1.155	**F**
4	Walnut Grove Ave, at Valley Blvd.	1.132	**F**	1.171	**F**
5	Rosemead Blvd. at Valley Blvd.	1.155	**F**	1.123	**F**
6	Valley Blvd. at Mission Dr.	0.615	B	0.614	B
7	Valley Blvd. at Rio Hondo Ave.	0.631	B	0.929	**E**
8	Valley Blvd. at Temple City Blvd.	1.079	**F**	0.942	**E**
9	Walnut Grove Ave. at Marshall St.	1.432	**F**	1.586	**F**
10	Rosemead Blvd. at Marshall St.	1.051	**F**	1.107	**F**
11	Rosemead Blvd. at Glendon Way	1.005	**F**	0.898	D
12	Temple City Blvd. at Loftus Dr.	0.799	C	0.952	**E**
13	Del Mar Ave. at Hellman Ave.	0.958	**E**	0.898	D
14	San Gabriel Blvd. at Hellman Ave.	1.014	**F**	0.906	**E**
15	Walnut Grove Ave. at Hellman/Ramona	0.989	**E**	1.207	**F**
16	Rosemead Blvd. at Telstar Ave.	0.931	**E**	1.056	**F**
17	Rosemead Blvd. at Whitmore St.	0.742	C	0.831	D
18	New Ave. at Garvey Ave.	0.916	**E**	1.013	**F**
19	Del Mar Ave. at Garvey Ave.	0.948	**E**	1.084	**F**
20	San Gabriel Blvd. at Garvey Ave.	1.078	**F**	1.123	**F**
21	Walnut Grove Ave. at Garvey Ave.	1.009	**F**	1.143	**F**
22	San Gabriel Blvd. at Rush St./Potrero Grande	0.587	A	0.776	C
23	Walnut Grove Ave. at Rush St.	0.641	B	0.741	C
24	Walnut Grove Ave. at Landis View Ln.	0.490	A	0.507	A
25	Walnut Grove Ave. at San Gabriel Blvd.	0.923	**E**	1.069	**F**
26	San Gabriel Blvd. at SR-60 WB Ramps	0.945	**E**	0.921	**E**
27	Town Center Dr. at SR-60 EB Ramps	0.628	B	0.649	B
28	San Gabriel Blvd. at Town Center Dr.	0.750	C	0.778	C

** Projected General Plan land use development without General Plan circulation roadway network improvements.*

The following degradations in intersection peak-hour LOS values would occur with full implementation of the updated Land Use Element:

- Valley Blvd. at Rio Hondo Ave. – Operations would worsen from LOS D to E within the p.m. peak hour.
- Walnut Grove Ave. at Marshall St. – Operations would worsen from LOS E to F within the a.m. peak hour.
- Rosemead Blvd. at Marshall St. – Operations would worsen from LOS E to F within the a.m. peak hour.
- Rosemead Blvd. at Glendon Wy. – Operations would worsen from LOS E to F within the a.m. peak hour.
- San Gabriel Blvd. at Hellman Ave. – Operations would worsen from LOS E to F within the a.m. peak hour and from LOS D to E in the p.m. peak hour.
- Walnut Grove Ave. at Hellman Ave./Ramona Ave. – Operations would worsen from LOS D to E within the a.m. peak hour.
- Rosemead Blvd. at Telstar Ave. – Operations would worsen from LOS D to E within the a.m. peak hour.
- New Ave. at Garvey Ave. – Operations would worsen from LOS D to E within the a.m. peak hour and from LOS E to F within the pm. peak hour.
- Del Mar Ave. at Garvey Ave. – Operations would worsen from LOS D to E within the a.m. peak hour.
- Walnut Grove Ave. at Garvey Ave. - Operations would worsen from LOS E to F within the a.m. peak hour.
- Walnut Grove Ave. at San Gabriel Blvd. – Operations would worsen from LOS D to E within the a.m. peak hour.
- San Gabriel Blvd. at SR-60 westbound ramps – Operations would worsen from LOS D to E within the p.m. peak hour.

Figure 3-2 illustrates the level of service values at the study intersections during the a.m. and p.m. peak hour for the future with General Plan development scenario without roadway improvements.

Table 3-~~45~~ provides the results of the level of service calculations for each of the study roadway segments, based on this analysis scenario. LOS values of E or F are displayed in bold text on the right side of the table.

Table 3-54
Future (year 2025) Area Roadway Segment Levels of Service *

	Primary Street	N/E End of Segment	S/W End of Segment	Roadway Class	No. of Lanes	Roadway Capacity	Future (2025) w/ Development		
							Volume	V/C	LOS
1	Walnut Grove Av	Grand Ave	Mission Drive	Secondary	4	30,000	15,608	0.520	A
2	Walnut Grove Av	Wells/Edmond	Valley Blvd	Secondary	4	30,000	21,710	0.724	C
3	Walnut Grove Av	Valley Blvd	Marshall St	Secondary	4	30,000	30,614	1.020	F
4	Walnut Grove Av	Hellman Ave	Garvey Ave	Secondary	4	30,000	29,107	0.970	E
5	Walnut Grove Av	Fern Ave	Klingerman St	Secondary	4	30,000	22,982	0.766	C
6	Walnut Grove Av	Rush St	Landis View Lane	Secondary	4	30,000	20,322	0.677	B
7	San Gabriel Blvd	Hellman Ave	Emerson Place	Major	4	40,000	36,520	0.913	E
8	San Gabriel Blvd	Garvey Ave	Klingerman St	Major	4	40,000	26,000	0.650	B
9	San Gabriel Blvd	Delta Ave	Walnut Grove Ave	Major	4	40,000	20,525	0.513	A
10	Del Mar Ave	Hellman Ave	Emerson Place	Secondary	4	30,000	27,137	0.905	E
11	Del Mar Ave	Garvey Ave	Newmark Ave	Collector	2	15,000	19,273	1.285	F
12	New Ave	Newmark Ave	Graves Ave	Collector	2	15,000	9,467	0.631	B
13	Valley Blvd	Muscatel Ave	Ivar Ave	Major	4	40,000	33,212	0.830	D
14	Valley Blvd	Hart Ave	Mission Drive	Major	4	40,000	21,519	0.538	A
15	Valley Blvd	Rio Hondo Ave	Temple City Blvd	Major	4	40,000	31,573	0.789	C
16	Temple City Blvd	Valley Blvd	Marshall St	Secondary	4	30,000	25,000	0.833	D
17	Garvey Ave	New Ave	Del Mar Ave	Major	4	40,000	36,095	0.902	E
18	Garvey Ave	Del Mar Ave	San Gabriel Blvd	Major	4	40,000	35,744	0.894	D
19	Garvey Ave	San Gabriel Blvd	Walnut Grove Ave	Major	4	40,000	37,381	0.935	E
20	Garvey Ave	Walnut Grove Ave	Rosemead Blvd	Major	4	40,000	32,728	0.818	D
21	Rosemead Blvd	Lower Azusa Road	Mission Drive	Major	5	50,000	56,505	1.130	F
22	Rosemead Blvd	Valley Blvd	Marshall St	Major	4	40,000	60,035	1.501	F
23	Rosemead Blvd	Telstar Ave	Whitmore St	Major	6	60,000	71,215	1.187	F

** Projected General Plan land use development without General Plan circulation roadway network improvements.*

Figure 3-2
Level of Service Values at Study Intersections

This page intentionally left blank.

The following degradations in roadway segment daily LOS values would occur with full implementation of the updated Land Use Element:

- Walnut Grove Ave., between Valley Blvd. and Marshall St. – LOS would worsen from E to F
- Walnut Grove Ave., between Hellman Ave. and Garvey Ave. – LOS would worsen from D to E
- Garvey Ave., between New Ave. and Del Mar Ave. -LOS would worsen from C to E.
- Garvey Ave., between San Gabriel Blvd. and Walnut Grove Ave. -LOS would worsen from D to E.

Figure 3-3 illustrates the levels of service based on the analyzed daily volumes at the study roadway segments, for the future with General Plan development scenario.

Traffic Incursion onto Residential Roadways

In residential neighborhoods, there is a growing trend to design and implement traffic control measures to enhance the livability for residents that live along local streets. Some of the control measures include speed humps, speed cushions, curb extensions, traffic diverters, chokers, and traffic circles. The intent of such measures is to slow traffic or prevent through traffic, which should remain on collector or arterial streets and not infiltrate residential neighborhoods.

This Element acknowledges the potential for significant traffic increases on residential roadways due to nearby intensification of corridor commercial or industrial development.

Figure 3-3
Level of Service Values – Study Roadway Segments,
Future with General Plan Development

Circulation Plan

The goals and policies in this Element emphasize the need for a circulation system capable of serving the travel traffic needs within Rosemead. These needs are discussed within this section.

General Plan Roadway System

The updated roadway plan for the city is illustrated on **Figure 3-4**. The updates to the roadway plan are based on needs for increased roadway corridor capacity in the future analysis period with General Plan development, as identified by the Circulation Element update traffic study.

Roadway improvements, outside of those required as mitigation for individual development projects, are prioritized, funded, and completed using the City's Capital Improvement Plan process. Many of the recommended mitigations for significant impacts of the Circulation Element update would need to be provided by individual developments as they trigger impacts, or otherwise would need to be funded through the Capital Improvement Plan or another source.

The Circulation Policy Plan for Rosemead is illustrated in Figure 3-4. This Plan includes the following roadway classification updates, for certain segments of these roadways, based on the recommended addition of lanes within this section:

- Walnut Grove Avenue, from the I-10 freeway north to Valley Boulevard – Reclassified from Minor Arterial to Major Arterial.

For some roadways, an increase in the number of lanes does not translate to a change in classification (for example, a four-lane major arterial upgraded to a six-lane major arterial stays at the same classification). The Garvey Avenue Specific Plan for the LA Auto Auction and Landwin Property Sites Mixed Use Destination "Restore the Street Grid" diagram envisions extending Denton Avenue, Kelburn Avenue, Falling Leaf Avenue, and Pine Street across Garvey Avenue and into the development opportunity site. It also envisions extending Virginia Street east to San Gabriel Blvd. Implementation of this envisioned roadway system is through the Garvey Avenue Specific Plan.

Figure 3-4 -
Circulation Plan for Major
Rosemead Roadways

X 2017 GPA 17-001 ~~APRIL 13, 2010~~

Addressing Traffic Congestion

Although many of the policies within this Element concentrate on reducing trips and promoting alternate modes of travel within Rosemead, the base of any urban circulation system is a roadway network that provides enough capacity to avoid peak-period gridlock and allow for economic functions, resident/visitor and commercial customer access, and emergency access to continue in as efficient a manner as possible.

The land area within Rosemead has not been developed within a vacuum. The city has grown up and urbanized along with the surrounding communities and the Southern California region as a whole. Traffic volumes will continue to increase on Rosemead roadways whether local development is intensified or not. Capacity enhancements will be necessary to accommodate both regional trips that traverse Rosemead and for trips generated by new development within the city.

Traffic congestion continues to be a key issue affecting the quality of life in Rosemead. Although Rosemead will experience limited growth outside of planned mixed-use project areas, regional influences will continue to contribute to traffic congestion. Over time, the City will pursue two primary courses of action to improve congestion:

(1) Focused physical improvements that enhance the capacity of roadways and intersections; and
(2) Creative programmatic solutions to manage trip generation and congestion.

These two sets of actions are discussed further within the remainder of this section.

Physical Capacity Improvements

The first set of physical capacity improvements that were evaluated for the Circulation Element update were aimed at reducing traffic congestion at major intersection approaches. Identified capacity improvements at major intersections, for implementation through the buildout analysis year of 2025, are listed within **Table 3-5** below.

Table 3-~~56~~
Identified Intersection Approach Improvements

Intersection		Recommended Intersection Improvement
3	Rosemead Blvd. at Mission Dr.	NB & SB thru lane; EB additional left turn lane
4	Walnut Grove Ave, at Valley Blvd.	EB & WB thru lane
5	Rosemead Blvd. at Valley Blvd.	NB & SB thru lane
9	Walnut Grove Ave. at Marshall St.	EB & WB left turn lane; NB right turn lane
10	Rosemead Blvd. at Marshall St.	NB & SB thru lane
11	Rosemead Blvd. at Glendon Way	SB shared thru-right lane (near I-10 on & off ramps)
14	San Gabriel Blvd. at Hellman Ave.	Restripe SB shared thru-right lane to new thru lane and right turn lane
15	Walnut Grove Ave. at Hellman/Ramona	Restripe right turn lane to EB shared left-thru-right, and exclusive left turn
16	Rosemead Blvd. at Telstar Ave.	NB thru lane
18	New Ave. at Garvey Ave.	WB thru lane
19	Del Mar Ave. at Garvey Ave.	Restrict parking providing an additional EB & WB thru lane
20	San Gabriel Blvd. at Garvey Ave.	EB & WB thru lane
21	Walnut Grove Ave. at Garvey Ave.	WB thru lane
25	Walnut Grove Ave. at San Gabriel Blvd.	SB all-way into thru-right turn lane; new second left turn

Also included in the analysis was the configuration of mid-block segments of major roadways. These also represent capacity increases for the reduction of congestion. The identified physical improvements to major roadway corridors, for implementation through the buildout analysis year of 2025, are listed within **Table 3-~~67~~** below.

Table 3-~~67~~
Identified Roadway Segment Improvements

Primary Street		N/E End of Segment	S/W End of Segment	Roadway Class	No. of Lanes	IMPROVEMENT	
						Description	No. of Lanes
3	Walnut Grove Av	Valley Blvd	Marshall St	Secondary	4	On-street parking removal would likely be required.	6
21	Rosemead Blvd	Lower Azusa Road	Mission Drive	Major	5	On-street parking removal on west curb would likely be required.	6
22	Rosemead Blvd	Valley Blvd	Marshall St	Major	4	Widening and on-street parking removal would likely be required.	8
23	Rosemead Blvd	Telstar Ave	Whitmore St	Major	6	Widening would likely be required.	8

Additional Potential Capacity Improvements

Other general operational improvements were identified for the study intersections that focus on turn lane configurations. Improvements can be made at these locations as operational improvements, but they are not required to mitigate study intersection impacts. The improvements are based on general traffic engineering standards. It is general traffic engineering practice to consider a separate right-turn lane when movement traffic volumes exceed 200 vehicles in the peak hour, and a single left-turn lane is considered when traffic volumes exceed 100 vehicles during the peak hour. For dual turn lanes, the standard is to consider additional turn lanes when the movement traffic volumes exceed 300 vehicles in either peak hour.

Based on these additional potential improvements, widening would likely occur at most intersections. Land dedications should be considered to implement these measures as new adjacent development occurs.

Table 3-~~7~~8 provides a summary of additional potential capacity improvements based on the turn volumes at the study intersections.

Alternative Capacity Enhancements

An alternate strategy for traffic improvement is the implementation of corridor traffic signal synchronization with adaptive control technology. Adaptive signal control technologies have the goals of reducing travel times, vehicle delay, and overall congestion. According to studies conducted by the City of Los Angeles Department of Transportation (LADOT), increases in roadway capacity by as much as ten percent can be achieved through the implementation of these signal system technologies. This gain appears in the form of less congestion, delays, and stops at the included roadway intersections.

Table 3-~~78~~
Additional Potential Capacity Improvements

	Intersection	Potential Mitigation Measure			
		Right-turn lane	Additional right-turn lane	Left-turn lane	Additional left-turn lane
1	Walnut Grove Ave at Mission Dr.	NB			
2	Rosemead Blvd. at Lower Azusa Rd.	WB	NB *		WB *
3	Rosemead Blvd. at Mission Dr.	EB/SB			
4	Walnut Grove Ave, at Valley Blvd.	NB/SB			
5	Rosemead Blvd. at Valley Blvd.		SB		WB
6	Valley Blvd. at Mission Dr.		WB		
7	Valley Blvd. at Rio Hondo Ave.	NB		NB	
8	Valley Blvd. at Temple City Blvd.	SB/WB			
9	Walnut Grove Ave. at Marshall St.	NB	NB	WB	WB
10	Rosemead Blvd. at Marshall St.		EB		
11	Rosemead Blvd. at Glendon Way	NB/SB *			
12	Temple City Blvd. at Loftus Dr.		NB/WB		
13	Del Mar Ave. at Hellman Ave.				
14	San Gabriel Blvd. at Hellman Ave. *	SB			
15	Walnut Grove Ave. at Hellman/Ramona	SB	WB		
16	Rosemead Blvd. at Telstar Ave.				SB/WB
17	Rosemead Blvd. at Whitmore St.				
18	New Ave. at Garvey Ave.	WB			SB
19	Del Mar Ave. at Garvey Ave.	SB/WB			SB
20	San Gabriel Blvd. at Garvey Ave.				SB
21	Walnut Grove Ave. at Garvey Ave.	SB/WB			
22	San Gabriel Blvd. at Rush St./Potrero Grande	SB/WB			
23	Walnut Grove Ave. at Rush St.	NB/SB	SB		EB
24	Walnut Grove Ave. at Landis View Ln.				
25	Walnut Grove Ave. at San Gabriel Blvd. *				SB
26	San Gabriel Blvd. at SR-60 WB Ramps	NB	WB		
27	Town Center Dr. at SR-60 EB Ramps		WB		
28	San Gabriel Blvd. at Town Center Dr.		EB/SB		

* - Overlaps with recommended mitigation measures for identified impacts

Notes:

EB - Eastbound

NB - Northbound

SB - Southbound

WB - Westbound

Corridor synchronization improvements, however, can only be effective in implementation where there are multiple traffic signals along a corridor that can facilitate movements of platoons of vehicles while minimizing delay on the major street.

Figure 3-5 provides an illustration of the corridors recommended for traffic signal coordination and centralized control within the traffic study for this Element.

The post-improvement operations at the study intersection are provided within **Table 3-~~89~~** (a.m. peak) and **Table 3-~~109~~** (p.m. peak). The analyzed improvements include operational benefits for those intersections within the recommended synchronization corridors, and approach capacity improvements for locations outside of those corridors.

With the implementation of signal synchronization and adaptive control within the recommended corridors, the following intersections within the corridors would continue to have significant impacts and would require traditional widening improvements:

- Walnut Grove Ave. at Marshall St. – a.m. peak and p.m. peak hours
- Walnut Grove Ave. at San Gabriel Blvd. – p.m. peak hour

Implementation of a centralized and adaptive traffic signal control system, while not eliminating the need for physical capacity increases at all major area intersections, will provide alternative remedy for traffic impacts of the Land Use Element update at many local intersections.

Local implementation of such a system in Rosemead can be implemented as an extension of the Intelligent Transportation System (ITS) projects currently being planned and implemented by the County of Los Angeles Department of Public Works. Rosemead will become part of the San Gabriel Valley ITS system, and would potentially have the ability (with additional funding sources) to build upon the initial sub-regional system set up by the County.

This page intentionally left blank.

Figure 3-5 -
Corridors Recommended for Signal Synchronization and Adaptive Control (color)

This page intentionally left blank.

Table 3-~~89~~
Post-Synchronization and Roadway Improvement Operations at Study Intersections – AM Peak

	Intersection	Recommended Mitigation Measure	Future With Mitigation Conditions Year (2025)		Diff.	V/C Impact?
			V/C	LOS		
1	Walnut Grove Ave at Mission Dr.	Corridor Signal Synchronization and Adaptive Control	0.758	C	-0.074	No
2	Rosemead Blvd. at Lower Azusa Rd.	Corridor Signal Synchronization and Adaptive Control	0.789	C	-0.087	No
3	Rosemead Blvd. at Mission Dr.	Corridor Signal Synchronization and Adaptive Control	1.120	F	-0.059	No
4	Walnut Grove Ave, at Valley Blvd.	Corridor Signal Synchronization and Adaptive Control	1.032	F	-0.040	No
5	Rosemead Blvd. at Valley Blvd.	Corridor Signal Synchronization and Adaptive Control	1.055	F	-0.055	No
6	Valley Blvd. at Mission Dr.	Corridor Signal Synchronization and Adaptive Control	0.515	A	*	No
7	Valley Blvd. at Rio Hondo Ave.	Corridor Signal Synchronization and Adaptive Control	0.531	A	*	No
8	Valley Blvd. at Temple City Blvd.	Corridor Signal Synchronization and Adaptive Control	0.979	E	-0.082	No
9	Walnut Grove Ave. at Marshall St.	Corridor Signal Synchronization and Adaptive Control	1.332	F	0.348	**Yes**
10	Rosemead Blvd. at Marshall St.	Corridor Signal Synchronization and Adaptive Control	0.951	E	-0.048	No
11	Rosemead Blvd. at Glendon Way	Corridor Signal Synchronization and Adaptive Control	0.905	E	-0.047	No
12	Temple City Blvd. at Loftus Dr.	N/A	0.799	C	**	No
13	Del Mar Ave. at Hellman Ave.	Corridor Signal Synchronization and Adaptive Control	0.858	D	-0.074	No
14	San Gabriel Blvd. at Hellman Ave.	Corridor Signal Synchronization and Adaptive Control	0.914	E	-0.071	No
15	Walnut Grove Ave. at Hellman/Ramona	Corridor Signal Synchronization and Adaptive Control	0.889	D	-0.006	No
16	Rosemead Blvd. at Telstar Ave.	Corridor Signal Synchronization and Adaptive Control	0.831	D	-0.046	No
17	Rosemead Blvd. at Whitmore St.	Corridor Signal Synchronization and Adaptive Control	0.642	C	*	No
18	New Ave. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	0.816	D	-0.063	No
19	Del Mar Ave. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	0.848	D	-0.045	No
20	San Gabriel Blvd. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	0.978	E	-0.071	No
21	Walnut Grove Ave. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	0.909	E	-0.002	No
22	San Gabriel Blvd. at Rush St./Potrero Grande	N/A	0.587	A	**	No
23	Walnut Grove Ave. at Rush St.	N/A	0.641	B	**	No
24	Walnut Grove Ave. at Landis View Ln.	N/A	0.490	A	**	No
25	Walnut Grove Ave. at San Gabriel Blvd.	No feasible mitigation	0.923	E	0.091	No
26	San Gabriel Blvd. at SR-60 WB Ramps	N/A	0.945	E	**	No
27	Town Center Dr. at SR-60 EB Ramps	N/A	0.628	B	**	No
28	San Gabriel Blvd. at Town Center Dr.	N/A	0.750	D	**	No

** These intersections would not have significant traffic impacts. These locations would be included in the synchronized corridors, for necessity of corridor completeness. There would continue to be an absnece of impacts at these locations after implementation*

*** These intersections would not require mitigation measures, and they would not be included within the recommended sychronization corridors.*

Table 3-~~9~~10
Post-Synchronization and Roadway Improvement Operations at Study Intersections – PM Peak

	Intersection	Recommended Mitigation Measure	Future With Mitigation Conditions Year (2025) V/C	LOS	Diff.	V/C Impact?
1	Walnut Grove Ave at Mission Dr.	Corridor Signal Synchronization and Adaptive Control	0.771	C	-0.051	No
2	Rosemead Blvd. at Lower Azusa Rd.	Corridor Signal Synchronization and Adaptive Control	0.842	D	-0.078	No
3	Rosemead Blvd. at Mission Dr.	Corridor Signal Synchronization and Adaptive Control	1.055	F	-0.017	No
4	Walnut Grove Ave, at Valley Blvd.	Corridor Signal Synchronization and Adaptive Control	1.071	F	-0.007	No
5	Rosemead Blvd. at Valley Blvd.	Corridor Signal Synchronization and Adaptive Control	1.023	F	-0.017	No
6	Valley Blvd. at Mission Dr.	Corridor Signal Synchronization and Adaptive Control	0.514	B	*	No
7	Valley Blvd. at Rio Hondo Ave.	Corridor Signal Synchronization and Adaptive Control	0.829	D	*	No
8	Valley Blvd. at Temple City Blvd.	Corridor Signal Synchronization and Adaptive Control	0.842	D	-0.065	No
9	Walnut Grove Ave. at Marshall St.	Corridor Signal Synchronization and Adaptive Control	1.486	F	0.452	**Yes**
10	Rosemead Blvd. at Marshall St.	Corridor Signal Synchronization and Adaptive Control	1.007	F	-0.012	No
11	Rosemead Blvd. at Glendon Way	Corridor Signal Synchronization and Adaptive Control	0.798	C	-0.055	No
12	Temple City Blvd. at Loftus Dr.	SB left turn lane	0.952	E	**	No
13	Del Mar Ave. at Hellman Ave.	Corridor Signal Synchronization and Adaptive Control	0.798	C	-0.072	No
14	San Gabriel Blvd. at Hellman Ave.	Corridor Signal Synchronization and Adaptive Control	0.806	D	-0.086	No
15	Walnut Grove Ave. at Hellman/Ramona	Corridor Signal Synchronization and Adaptive Control	1.107	F	-0.001	No
16	Rosemead Blvd. at Telstar Ave.	Corridor Signal Synchronization and Adaptive Control	0.956	E	-0.069	No
17	Rosemead Blvd. at Whitmore St.	Corridor Signal Synchronization and Adaptive Control	0.731	D	*	No
18	New Ave. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	0.913	E	-0.009	No
19	Del Mar Ave. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	0.984	E	-0.022	No
20	San Gabriel Blvd. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	1.023	F	-0.087	No
21	Walnut Grove Ave. at Garvey Ave.	Corridor Signal Synchronization and Adaptive Control	1.043	F	0.008	No
22	San Gabriel Blvd. at Rush St./Potrero Grande	N/A	0.776	C	**	No
23	Walnut Grove Ave. at Rush St.	N/A	0.741	C	**	No
24	Walnut Grove Ave. at Landis View Ln.	N/A	0.507	A	**	No
25	Walnut Grove Ave. at San Gabriel Blvd.	No feasible mitigation	1.069	F	0.066	**Yes**
26	San Gabriel Blvd. at SR-60 WB Ramps	N/A	0.921	E	**	No
27	Town Center Dr. at SR-60 EB Ramps	N/A	0.649	B	**	No
28	San Gabriel Blvd. at Town Center Dr.	N/A	0.778	C	**	No

** These intersections would not have significant traffic impacts. These locations would be included in the synchronized corridors, for necessity of corridor completeness. There would continue to be an absnece of impacts at these locations after implementation*

*** These intersections would not require mitigation measures, and they would not be included within the recommended sychronization corridors.*

Demand and Alternative Mode Enhancements

As an alternative to physical roadway improvements, Rosemead must begin actively promoting a diversity of trip modes to and from local developments, the use of transit for a higher proportion of local and commuter trips, and encouragement of trip management programs at the individual development level. Such actions have been included in the list of implementation goals and policies within this Element.

The potential for the reduction of vehicle trip generation from commercial developments is described below for each of these categories:

- Promoting a diversity of trip modes: All potential trip modes including passenger vehicles, walking, bicycling, and transit must be considered in the evaluation of major development projects within Rosemead. As major roadway projects are considered in the future, the provision of bicycle lanes should be considered where additional lanes or on-street parking would normally be provided. Provision of these facilities must be balanced, however, with the management of congestion and the parking needs of adjacent land uses.

- Promoting higher use of transit: Rosemead is served by a basic network of regional transit lines and the local shuttle lines operated by the City. A movement of transit's role within Rosemead into a viable mode of local and commuter travel must occur. The City should develop a centralized transit center that includes a bus transfer center that links local routes with commuter routes to downtown Los Angeles and other major job centers. A park-and-ride facility could also be a part of the larger transit center development. In-lieu mitigation measures should be considered for major developments, where contributions would be made toward the establishment or frequency increase of transit service to and from those developments, providing support to transit development as new development occurs.

- Promoting the use of trip management programs: Trip generation can often only be effectively managed at the source. Transportation Demand Management (TDM) programs have been used for many years in local jurisdictions as an avenue to provide in-lieu mitigation measures for commercial developments. Resources are allocated by the developer to subsidization of transit passes, the promotion of carpooling and alternate trip modes, and the infusion of transit awareness into the workplace. The City should begin requiring TDM

programs where physical traffic mitigation measures are infeasible or where roadway widening at the associated loss of parking or sidewalk areas would be undesirable. Post-implementation monitoring of trip reduction targets must be tied to development approvals when TDM plans are involved.

Trips by bicycle can be encouraged by both on-street and off-street facilities. On-street facilities would include striped and signed (Class II) bicycles lanes on cross-town routes that overlap with major roadways and bicycle loops/sensors at traffic lights. Off-street facilities can include bicycle racks and kiosks with bicycle route maps at small public facilities or private developments, up to bicycle enclosures, showers/lockers, and bicycle rentals at large facilities.

The existing bicycle route network within Rosemead, and the potential future bicycle network, is illustrated within **Figure 3-6**. This potential bicycle lane network is for illustrative purposes only, but provides an example of how a bicycle network can be spaced across the city while providing access to most residential neighborhoods and commercial districts. Ideally, bicycle lanes would be placed on low-volume roadways that traverse the City.

The potential routes would need further study, to determine if parking or travel lanes can be removed or adjusted to provide for the bicycle facilities, or if future roadway widening and improvements can include such facilities in the approved cross-sections. The study would examine whether arterials or continuous but lower-volume collector roadways would be appropriate for the provision of bicycle facilities.

X 2017 GPA 17-001 ~~APRIL 13, 2010~~

Figure 3-6 -
Existing Bicycle Routes and Potential Future Routes

This page intentionally left blank.

X 2017 GPA 17-001 ~~APRIL 13, 2010~~

Controlling Truck Traffic Through Routes

The existing truck route network within Rosemead provides for truck access to local businesses, and to some extent, provides routes for trucks to travel through the City to other destinations.

Where truck traffic is intruding on areas where walking trips and other modes are being promoted, it should be prohibited. Where truck traffic is impeding resident access to neighborhoods, other roadway facilities, or the freeways, access routes should be reconsidered.

Truck route locations and the potential adverse traffic impacts that would result from a consolidation of routes on specific corridors should be examined in more detail in a special study, which on completion would serve as an update to the Circulation Element. Truck route signage should also be studied and updated as necessary as part of the special study.

Goals and Policies

Based on the issues and potential solutions presented within this Circulation Element update document, the following goals and policies were developed to guide implementation of the identified solutions.

Goal 1:	**Maintain efficient vehicular and pedestrian movements throughout the City.**
Policy 1.1:	Annually monitor and review the function of Rosemead's primary roadway system to identify any major capacity bottlenecks.
Policy 1.2:	Annually review and update, via special study, truck route designations within the City.
Policy 1.3:	Assure that traffic studies for individual developments, and traffic studies conducted for sectors of the community and specific plans by the City, make every effort to provide LOS D operations or better on arterial roadways and collector roadways if a nexus to the project exists.
Policy 1.4:	Preparation of a traffic impact report shall be required for major development projects located

	in designated mixed-use areas, which generate trips that would meet a predetermined trip threshold.
Policy 1.5:	Encourage the development of Transportation Demand Management (TDM) programs for all major office and commercial developments.
Policy 1.6:	Cooperate with neighboring jurisdictions to craft resolutions to regional traffic problems. Special emphasis should be devoted to Rosemead Boulevard, Valley Boulevard, Garvey Avenue, and San Gabriel Boulevard.
Policy 1.7:	Identify appropriate improvements to the Del Mar Avenue at Garvey Avenue intersection for the relief of congestion, while supporting transit use and walking, as individual area mixed-use developments are reviewed.

Goal 2:	**Development of infrastructure and service to support alternatives modes of travel.**
Policy 2.1:	To identify areas of traffic spillover as new developments occur, monitor traffic patterns in residential neighborhoods that are adjacent to commercial or industrial corridors.
Policy 2.2:	The provision of Class II (striped and signed) bicycle lanes along minor arterial or collector roadway corridors during roadway re-construction projects should be evaluated and implemented if feasible.
Policy 2.3:	Formal transit improvements should be considered when bus stops are adjacent to development projects and within roadway re-construction corridors. Amenities such as shelters, lighting, bus schedule kiosks, and similar amenities should be considered and implemented as feasible.
Policy 2.4:	Transportation Demand Management (TDM) programs should be actively promoted for major projects as in-lieu mitigation measures, where physical traffic mitigations are either infeasible or undesirable to the City.

Policy 2.5:	All site plans for new commercial or industrial development shall be reviewed for the provision of pedestrian connectivity to sidewalks and nearby bus stops, and the provision of bicycle and racks and transit information for larger projects.
Policy 2.6:	Walkable areas of the city, such as in the downtown area or the proposed mixed-use districts, should be reviewed for ways to improve pedestrian access (driveway access point reductions, buffers between roadways and sidewalks, crosswalks, etc.).
Policy 2.7:	Promote the linking of local public transit routes with that of adjacent jurisdictions and other transit agencies.
Policy 2.8	Include safe and convenient bicycle and pedestrian access in all transportation improvement projects. Ensure that non-motorized transportation systems are connected and not interrupted by impassable barriers, such as freeways and include amenities such as secure bicycle parking.

Goal 3:	**Vehicular traffic associated with commercial and industrial uses should not intrude upon adjacent residential neighborhoods.**
Policy 3.1:	Develop neighborhood traffic control plans for those neighborhoods experiencing spillover traffic impacts that may result from intensification of commercial or industrial areas.
Policy 3.2:	Annually review on-street parking in neighborhoods adjacent to the downtown area and mixed-use districts, and develop parking and control plans for those areas adversely affected by spillover traffic and parking.
Policy 3.3:	Require that traffic studies for individual developments along commercial corridors examine the potential impacts on nearby residential roadway segments. Consider residential parking permit programs if necessary to mitigate potential area parking impacts.

Policy 3.4:	Develop standards for significant impacts to residential roadways, and include these standards within the adopted traffic study guidelines for the City.
Policy 3.5:	Discourage the use of local residential roadways as through routes. This type of traffic movement shall be discouraged through traffic calming planning that involves the local residents.

Goal 4:	**Provide quality commercial and industrial development with adequate parking for employees and visitors.**
Policy 4.1:	Private and public parking shall be provided in sufficient amount to adequately meet local needs and to minimize congestion on arterial streets.
Policy 4.2:	Conduct periodic reviews of parking code standards and evaluate the standards for adequacy and applicability to changing development trends within the city.
Policy 4.3:	Require projects in revitalization/redevelopment areas to provide adequate off-street parking, even in re-use projects.
Policy 4.4:	Establish in-lieu parking fees for downtown areas. The City could utilize these fees to build parking lots or structures as needed, or to create a designated parking district.

Implementation Actions

The following implementation actions put the Circulation Element policies and plans into practice for City elected officials, staff and the public. Each action relates directly to one or more policies established within the Circulation Element update.

Goal 1:	**Maintain efficient vehicular and pedestrian movements throughout the city.**
Action 1.1	Adopt an ordinance establishing the street classification changes as described within the Circulation Element.
Action 1.2	Identify feasible near-term roadway improvements that fulfill identified Circulation Element measures, and incorporate those improvements into the next update to the five-year Capital Improvements Program (CIP).
Action 1.3	Make every feasible effort to provide LOS D operations or better on arterial roadways and collector roadways.
Action 1.4	Require TDM plans as a mitigation strategy component within the City traffic impact study guidelines.
Action 1.5	Prohibit truck traffic on local and collector streets unless such streets provide the only access to a site.
Action 1.6	Conduct a citywide study of truck routes to determine if truck routes can be consolidated without creating adverse impacts due to concentrations of truck traffic.
Action 1.7	Evaluate the appropriateness of identification signage on truck routes, including truck route turn signs at major intersections.
Action 1.8	Study alternatives for improving circulation in the vicinity of Rosemead Square including the addition of travel lanes on Rosemead Boulevard through prohibition of parking and a possible redesign of the adjacent ramp approaches at the I-10/Rosemead Boulevard interchange.

Goal 2: **Development of infrastructure and services to support alternative modes of travel.**

Action 2.1 Develop neighborhood traffic control plans for those neighborhoods experiencing spillover traffic impacts that may result from intensification of commercial or industrial areas.

Action 2.2 Conduct a study of the potential for the inclusion of bicycle lanes along major roadway corridors. If such facilities cannot be included along commercial thoroughfares, bicycle lanes on adjacent parallel but minor roadways should be considered.

Action 2.3 Develop a Long-Range Transportation Plan for transit service within Rosemead, which evaluates potential locations for a centralized transit center and park-and-ride facility. The center should tie in regional local and commuter transit lines and the City transit shuttle.

Action 2.4 Require Transportation Demand Management (TDM) programs for major projects as in-lieu mitigation measures, where physical traffic mitigations are either infeasible or undesirable to the City.

Action 2.5 Design guidelines and roadway improvement policies within the downtown area and the planned mixed-use district should promote the reduction of driveway access points, the provision of buffer space or objects between roadways and sidewalks, and provide for safe mid-point crosswalks, as needed and as feasible within available right-of-way and within existing roadway/control configurations.

Action 2.6 Collaborate with local transit agencies to:

- Develop programs and educate employers about employee rideshare (carpooling) and transit.
- Establish mass transit mechanisms for the reduction of worker-related and nonwork related vehicle trips.

Action 2.7 Work with AQMD and other agencies to receive grants for alternative modes of transportation and improved traffic flow.

Action 2.8 In conjunction with measures that encourage public transit, ride sharing, bicycling and walking, implement circulation improvements that reduce vehicle idling. For example, coordinate controlled intersections so that traffic passes more efficiently through congested areas.

Action 2.9 Create an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling and walking. Before funding transportation improvements that increase vehicle miles traveled, consider alternatives such as increasing public transit or improving bicycle or pedestrian travel routes.

Action 2.10 Consider giving funding preference to investment in public transit over investment in infrastructure for private automobile traffic.

Action 2.11 Consider providing public transit incentives, including free and reduced fare areas.

Action 2.12 Consider adopting a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation. For example, reduce parking for private vehicles while increasing options for alternative transportation; eliminate minimum parking requirements for new buildings; "unbundle" parking (require that parking is paid for separately and is not included in rent for residential or commercial space); and set appropriate pricing for parking.

Goal 3: Vehicular traffic associated with commercial and industrial uses should not intrude upon adjacent residential neighborhoods.

Action 3.1 Require evaluation of potential parking overflow onto adjacent residential roadways for traffic and parking studies for new commercial and industrial developments.

Action 3.2 Consider programs to prohibit on-street parking for demand generated by commercial and industrial activities, using permit programs and related signage for affected local streets.

Action 3.3 Periodically review on-street parking in neighborhoods adjacent to revitalization/redevelopment districts and develop parking and control plans for those areas adversely affected by spillover traffic and parking.

Goal 4: Provide quality commercial and industrial development with adequate parking for employees and visitors.

Action 4.1 Require that any re-use of commercial or industrial redevelopment or reuse project must demonstrate that adequate on-site parking and loading will be provided for the proposed use.

Action 4.2 Examine potential on-street parking demand within the immediate vicinity of proposed projects as part of the parking analyses conducted for projects in the mixed-use and downtown districts.