

# CHAPTER 4

## CIRCULATION ELEMENT

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### 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 Cerritos. 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 THE 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

### 3.1 RELATIONSHIP TO OTHER PLANS

#### Congestion Management Program (CMP)

In June 1990, California voters approved Proposition 111, which established a 9 percent per gallon gas tax, staged over a 5-year period, for the purpose of funding transportation-related improvements statewide. In order to be eligible for the revenues associated with Proposition 111, the CMP legislation (originally AB 471, amended to AB 1791) requires urbanized counties in California to adopt a Congestion Management Program. For the County of Los Angeles, the authorized CMP agency is the Los Angeles County Metropolitan Transportation Authority (LACMTA).

The MTA adopted its first CMP in 1992, and in 2002, adopted its sixth plan since the requirement was established in 1990. The goal of the CMP is to promote a more coordinated approach to land use and transportation decisions.

The CMP for Los Angeles County is comprised of a specific system of arterial roadways plus all freeways. A total of 164 intersections are identified for monitoring on the system in the County.

The goal of the CMP is to promote a more coordinated approach to land use and transportation decisions. As part of the requirements for the CMP, a traffic study may be required of certain developments. The Los Angeles County CMP Traffic Impact Analysis (TIA) Requirements state that a TIA will be required for CMP purposes for all proposed developments requiring an Environmental Impact Report (EIR), and analysis is required at all CMP monitored intersections through which the project will generate 50 or more peak hour trips. Based on the list of arterials monitoring stations listed in the CMP, there are no arterial stations in the City.

The City of Cerritos will be required to show continued compliance with the countywide Congestion Management Program (CMP). The CMP also requires traffic studies to analyze all CMP freeway monitoring locations where the proposed project adds 150 or more trips in either direction during the AM or PM peak hours. In the City of Cerritos, the Artesia Freeway (SR-91) and the San Gabriel River Freeway (I-605) are the only CMP facilities on the CMP Highway System. Compliance with the CMP provisions include:

- Continued land use coordination through the utilization of standardized traffic impact analysis methodologies,
- Implementation and enforcement of Transportation Demand Management (TDM) strategies,
- Maintenance of transit service standards,
- Demonstrated transportation modeling consistency with the Countywide computer model,
- Monitoring of CMP highway system levels of service,
- Development of level of service deficiency plans where applicable,
- Development of a five-year capital improvement program, and
- Monitoring and conformance with all CMP provisions.

### **SCAG 1989 Air Quality Management Plan**

The goal of Southern California Association of Governments (SCAG) 1989 Air Quality Management Plan (AQMP) is to set forth a 20-year action program for meeting improved National Air Quality Standards in the South Coast Air Basin by the year 2007. The South Coast Air Quality Management District (SCAQMD) is the local air quality agency that establishes local air quality goals. A focus on Transportation Demand Management (TDM) throughout the 1980's and early 1990's was designed to reduce peak hour traffic through carpooling, vanpooling, transit and parking incentives,

provision of at-work support services, and other programs. As a result of this focus, most cities in Los Angeles County have adopted a Trip Reduction or Emissions Reduction Ordinance. Section 10.34 of the City of Cerritos Municipal Code references the City's Mobile Source Air Pollution Reduction Ordinance, in pursuit of the SCAG and the SCAQMD goals.

### Regional Mobility Plan

The primary goal of the Regional Mobility Plan (RMP) is to improve transportation mobility levels. The RMP is part of an overall regional planning process and is linked directly to SCAG's Growth Management Plan, the Housing Allocation Process and the South Coast Air Quality Management District's Air Quality Management Plan. The RMP consists of four separate elements:

- Growth Management,
- Transportation Demand Management,
- Transportation System Management, and
- Facilities Development.

The intent of the RMP is to give priority to all transit (bus and rail) and ride sharing (HOV) projects over mixed-flow highway capacity expansion projects. Transit and ridesharing facilities are exempt from conformity review. Some other projects exempt from conformity assessment include:

- Modification to ramps/interchanges,
- Ramp metering projects,
- Signals and/or intersection improvements, and
- Primary and interstate system safety projects.

The active participation of local governments in transportation conformity is important to ensure that there is consistency between local general plans and the conformity criteria described in the regional Air Quality Management Plan (AQMP).

### Regional Coordination

As reflected in many of the Circulation Element components, regional coordination is essential to the successful implementation of the Circulation Plan. Several of the area roadways required to accommodate buildout traffic flows extend beyond the City's jurisdiction. The solution to this and other regional related traffic problems will require close coordination of traffic issues with adjoining cities and other agencies, particularly the City of Artesia, the County of Los Angeles, Caltrans District 7 and other communities within the area.

## 3.2 EXISTING CONDITIONS

Cerritos shares borders with the Cities of Norwalk and Santa Fe Springs on the north, Bellflower and Lakewood on the west, La Mirada, Buena Park and La Palma on the east and southeast and Lakewood on the south. In addition, the City of Cerritos “wraps around” the City of Artesia, surrounding it on three sides. Much of the City’s eastern border is also contiguous with the boundary between the County of Los Angeles and Orange County. Many of the arterial roadways through the City of Cerritos extend beyond the city boundaries into neighboring cities. Circulation issues and travel patterns, likewise, extend beyond the Cerritos 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 Cerritos, and conversely, traffic conditions and decisions made by the City of Cerritos can affect its neighbors. Impacts to the City’s circulation system resulting from land use decisions and circulation system improvements in adjacent jurisdictions were considered during the preparation of the Circulation Element.

### 3.2.1 REGIONAL ACCESS

The City of Cerritos is well served by area freeways. The Artesia Freeway (SR-91) provides east-west regional circulation, cutting through the north and central parts of the City. The San Gabriel River Freeway (I-605) provides for north-south regional travel on the west side of the City. The Santa Ana Freeway (I-5) provides for diagonal northwest to southeast travel, with an interchange just north of the City of Cerritos.

Palo Verde Avenue (at the western boundary of the city), Studebaker Road, Gridley Road, Pioneer Boulevard, Norwalk Boulevard, Bloomfield Avenue, Shoemaker Avenue, Carmenita Road, Marquardt Avenue and Valley View Avenue (at the eastern boundary of the City) are north-south arterials in the City of Cerritos. Studebaker Road, Pioneer Boulevard, Norwalk Boulevard, Bloomfield Avenue and Carmenita Road have full or partial interchanges with SR-91.

East-west arterials that extend through and beyond the City limits are Alondra Boulevard (at the northern boundary of the City), 166<sup>th</sup> Street, Artesia Boulevard, 183<sup>rd</sup> Street, South Street, 195<sup>th</sup> Street and Del Amo Boulevard (at the southern boundary of the City). Alondra Boulevard, South Street and Del Amo Boulevard have interchanges with I-605. A westbound entrance ramp to SR-91 is located on 183<sup>rd</sup> Street. South Street/Orangethorpe Avenue has a full access interchange with SR-91 about one-half mile east of the city limits of Cerritos in neighboring La Palma in Orange County.

### 3.2.2 LOCAL ACCESS

The City of Cerritos' circulation needs are served by a traditional grid system of north-south and east-west arterials, with approximately ½-mile spacing, and signals at each arterial intersection. Smaller collector and neighborhood streets connect neighborhoods and commercial land uses to the arterial street system. Because the City of Artesia is surrounded on three sides by the City of Cerritos and a small area of the southern portion of the City of Norwalk is flanked by the City of Cerritos on both the east and the west, a number of the arterials in the City of Cerritos extend through the Cities of Artesia and Norwalk, both north-south and east-west.

The City of Cerritos has two primary areas where well-established destination activity centers generate substantial traffic demands, both local and regional. The first is the Los Cerritos Center and Cerritos Auto Square area, on the west side of the City. Regional access to this area is provided by the I-605 Freeway, South Street and Studebaker Road. The second is the Cerritos Center for the Performing Arts and Cerritos Towne Center area in the heart of the City. Regional access to this area is provided by the SR-91 Freeway, Bloomfield Avenue and Artesia Boulevard. Infrastructure improvements have been made, as necessary, to accommodate peak traffic flows in these areas.

### 3.2.3 ROADWAY FUNCTIONAL CLASSIFICATION SYSTEM

The City of Cerritos 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: (1) it provides access to adjacent land uses, and (2) 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 Cerritos, use a functional classification system. The classification 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. The City of Cerritos uses a functional classification system that references and is consistent with "the standards followed by the Los Angeles County Road Department," (now part of the Department of Public Works). The following street classifications have been identified:

- Major: 100 feet of right-of-way;
- Secondary: 80 feet of right-of-way; and
- Local Collector: 60 feet of right-of-way.

In Cerritos, the street system has been developed in a grid pattern, with most streets running in a north-south or east-west orientation. Major highways are spaced at one-mile intervals, with secondary highways at half-mile intervals between them.

In general, the roadways designated as Major arterials currently provide two or three through lanes in each direction, with a center divider, and bike lanes, parking lanes, or right-turn auxiliary lanes. These roadways provide access to the regional freeway system, and continue beyond the City boundaries to provide regional access to surrounding cities.

Secondary arterials provide two through lanes in each direction, either without a center divider and with bike or parking lanes, or with a center divider and without bike or parking lanes, and functionally provide access for several local roadways to an arterial roadway. Collector streets have one through travel lane in each direction. With limited exceptions, the Secondary Arterials and Collector Streets in the City of Cerritos generally do not extend beyond the City limits, making them better suited for local, intra-city travel.

Table CIR-1, *1988 General Plan Functional Roadway Classification*, and Exhibit CIR-1, *Functional Roadway Classifications (1988 General Plan)*, indicate the existing functional classification for the arterial roadways in the City of Cerritos, the total number of lanes for each arterial, and whether a center divider is provided.

### 3.2.4 PUBLIC TRANSPORTATION SERVICES

The City of Cerritos is well served by public transit systems. The City provides two local city transit services – Cerritos on Wheels (COW) and Cerritos Dial-a-Ride. In addition, the Los Angeles County Metropolitan

Transportation Authority (LACMTA), the Orange County Transportation Authority (OCTA), Long Beach Transit (LBT) and Norwalk Transit (NT) all operate routes that extend into or through the City of Cerritos. The City's COW services, as well as the routes of the other operators, converge at Los Cerritos Center, making it possible for passengers to transfer from one route to another and from one transit operator to another. LACMTA buses provide a connection to Metrolink service in Fullerton. LBT buses provide connections to the Metro Green Line in Norwalk and the Metro Blue Line in Long Beach. NT also provides a connection to the Metro Green Line in Norwalk and to the Norwalk/Santa Fe Springs Metrolink Station.

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LEGEND



Major Arterial



Secondary Arterial



Collector

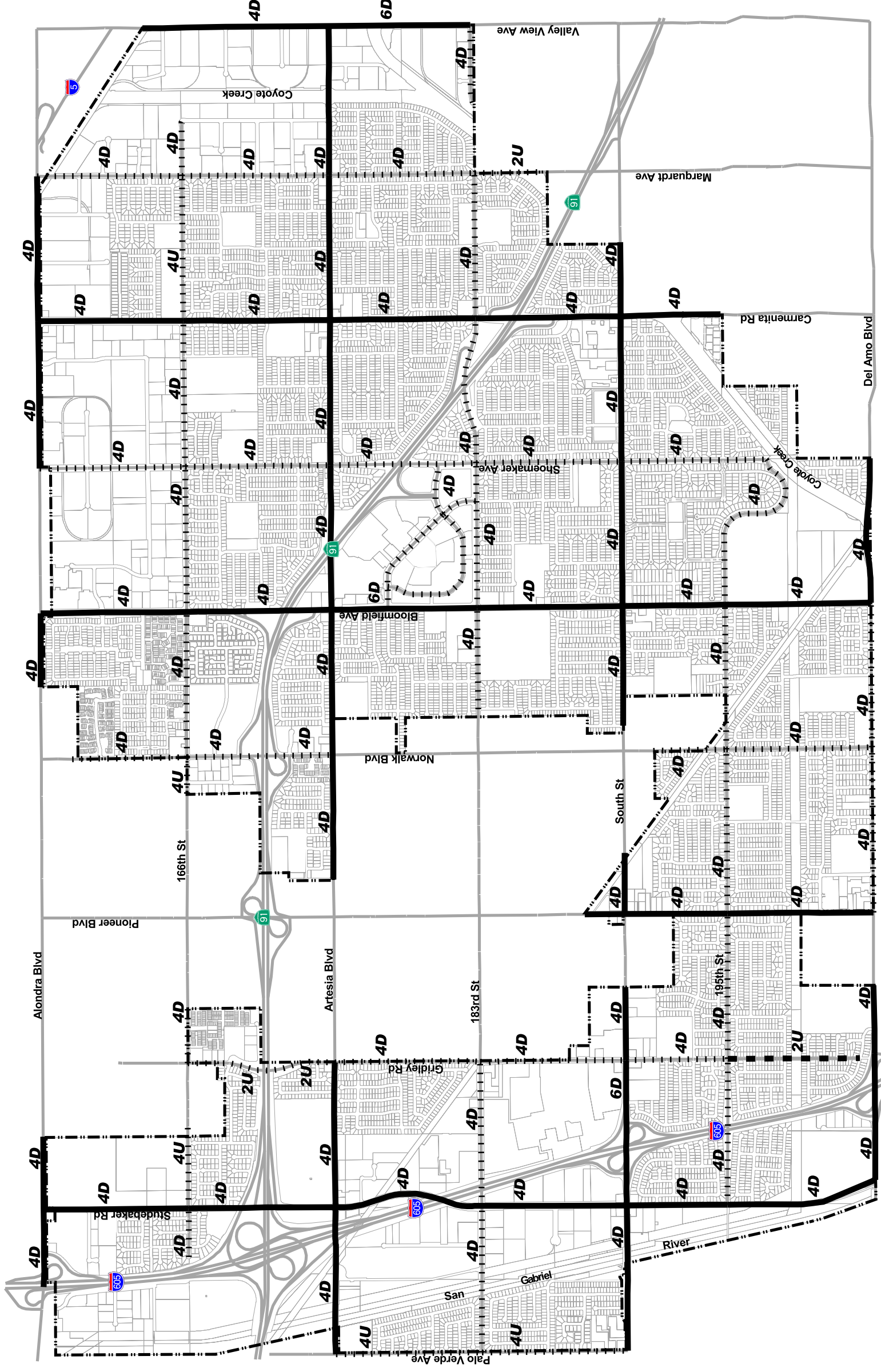


Cerritos Limits



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Functional Roadway Classifications (1988 General Plan)

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Exhibit CIR-2, *Public Transportation Services*, illustrates the bus routes currently operated by the City and other transit operators.

Table CIR-1  
1988 General Plan Functional Roadway Classifications

Arterial	Functional Classification	Existing Roadway Lanes
Alondra Boulevard	Major	4 divided
166 <sup>th</sup> Street	Secondary	4 divided
Artesia Boulevard	Major	4 divided
183 <sup>rd</sup> Street	Secondary	4 divided
South Street	Major	4 to 6 divided
195 <sup>th</sup> Street	Secondary	4 divided
Del Amo Boulevard	Major	4 divided
Palo Verde Avenue	Secondary	4 divided
Studebaker Road	Major	4 divided
Gridley Road	Secondary	4 divided
Pioneer Boulevard	Major	4 divided
Norwalk Boulevard	Secondary	4 divided
Bloomfield Boulevard	Major	4 to 6 divided
Shoemaker Avenue	Secondary	4 divided
Carmenita Road	Major	4 divided
Marquardt Avenue	Secondary	4 divided
Valley View Avenue	Major	4 to 6 divided
Park Plaza Drive	Secondary	2 to 4 undivided
Towne Center Drive	Secondary	4 undivided

Exhibit CIR-2, *Public Transportation Services*, illustrates the bus routes currently operated by the City and other transit operators.

### 3.2.5 BICYCLE AND PEDESTRIAN FACILITIES

Bicycle lanes and bicycle routes are provided on a number of roadways within the City of Cerritos. The bike system provides bicyclists with connections between neighborhoods, parks, schools and other neighborhood and recreational facilities. Most City bikeways are Class II – on-street bike lanes marked in the curb or parking lane on selected city streets. In addition to the City's on-street bike system, the regional bicycle trails along the San Gabriel River and Coyote Creek Channels provide regional bikeways for avid bicycle enthusiasts. The City does not currently have a formal Bicycle Master Plan, or a program to implement new bikeways (Class 1 bicycle facilities) or to designate additional bike lanes.

Sidewalks are provided on all arterial roadways and on most residential streets. The City's circulation system has been designed to ensure that adequate facilities are provided for pedestrian circulation, especially in the vicinity of schools, parks, major retail facilities and other locations with high levels of pedestrian activity. The City of Cerritos does not currently have a formal Pedestrian Master Plan.

### 3.2.6 TRUCK ROUTES

The City of Cerritos has designated selected roadways as truck routes to provide for the regulated movement of trucks through the City. The designation of truck routes is intended to route truck traffic to those streets where they would cause the least amount of neighborhood intrusion and where noise and other impacts would not be considered nuisances. Roadways providing access to the freeways are the most likely candidates for truck route designation. The designated truck routes in Cerritos are illustrated in Exhibit CIR-3, *Truck Routes*. The designation of truck routes does not prevent trucks from using other roads or streets to make deliveries or for other reasons as defined in the Vehicle Code of the State of California.

## 3.3 ANALYSIS OF EXISTING OPERATING CONDITIONS

### 3.3.1 DAILY TRAFFIC CONDITIONS

#### Level of Service Definition for Roadways

Congestion is a result of a street network that carries traffic volumes in excess of the network's designed capacity. A roadway's capacity is primarily a function of the number of lanes provided to carry traffic volumes, and whether or not the roadway is divided with a median or center turn lane. The more lanes provided, the more capacity the roadway has to accommodate traffic demand. Table CIR-2, *Daily Roadway Capacity by Roadway Type*, is a summary of theoretical daily traffic-carrying capacity for each of the roadway types.

The daily capacity of a roadway is dependent on a number of variables, including the type of intersection controls, signal timing, the presence and frequency of driveways, on-street parking, the percentage of the daily traffic in the peak hour, the directionality of traffic in the peak hour and other factors. The daily capacity provides a general guideline as to the adequacy or deficiency of the roadway system.

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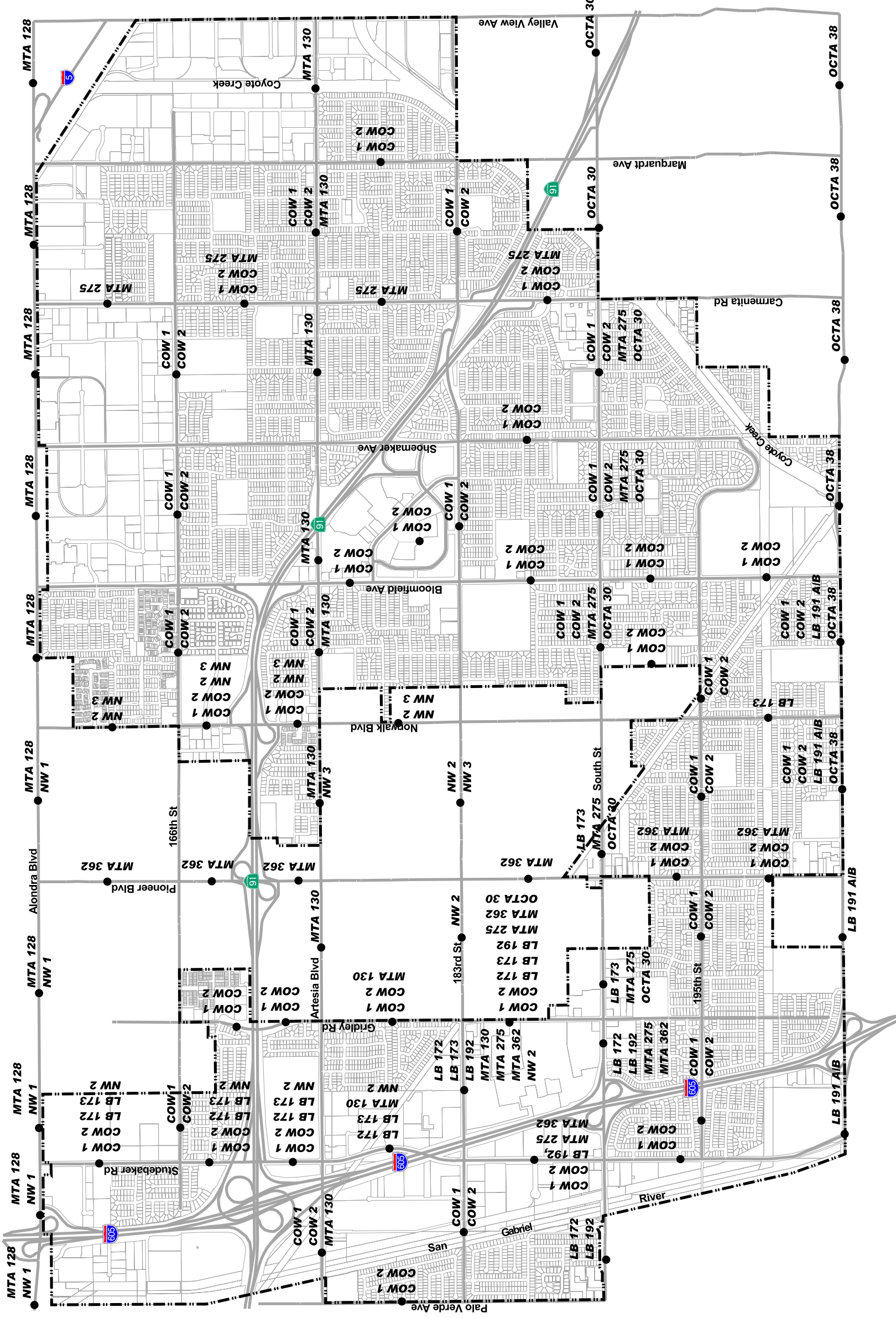
**LEGEND**

- COW XX = Cerritos on Wheels Route
- LB XX = Long Beach Transit Route
- MTA XX = Los Angeles County Metropolitan Transportation Authority Route
- OCTA XX = Orange County Transit Authority Route
- NW XX = Norwalk Transit Route



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# CERRITOS GENERAL PLAN

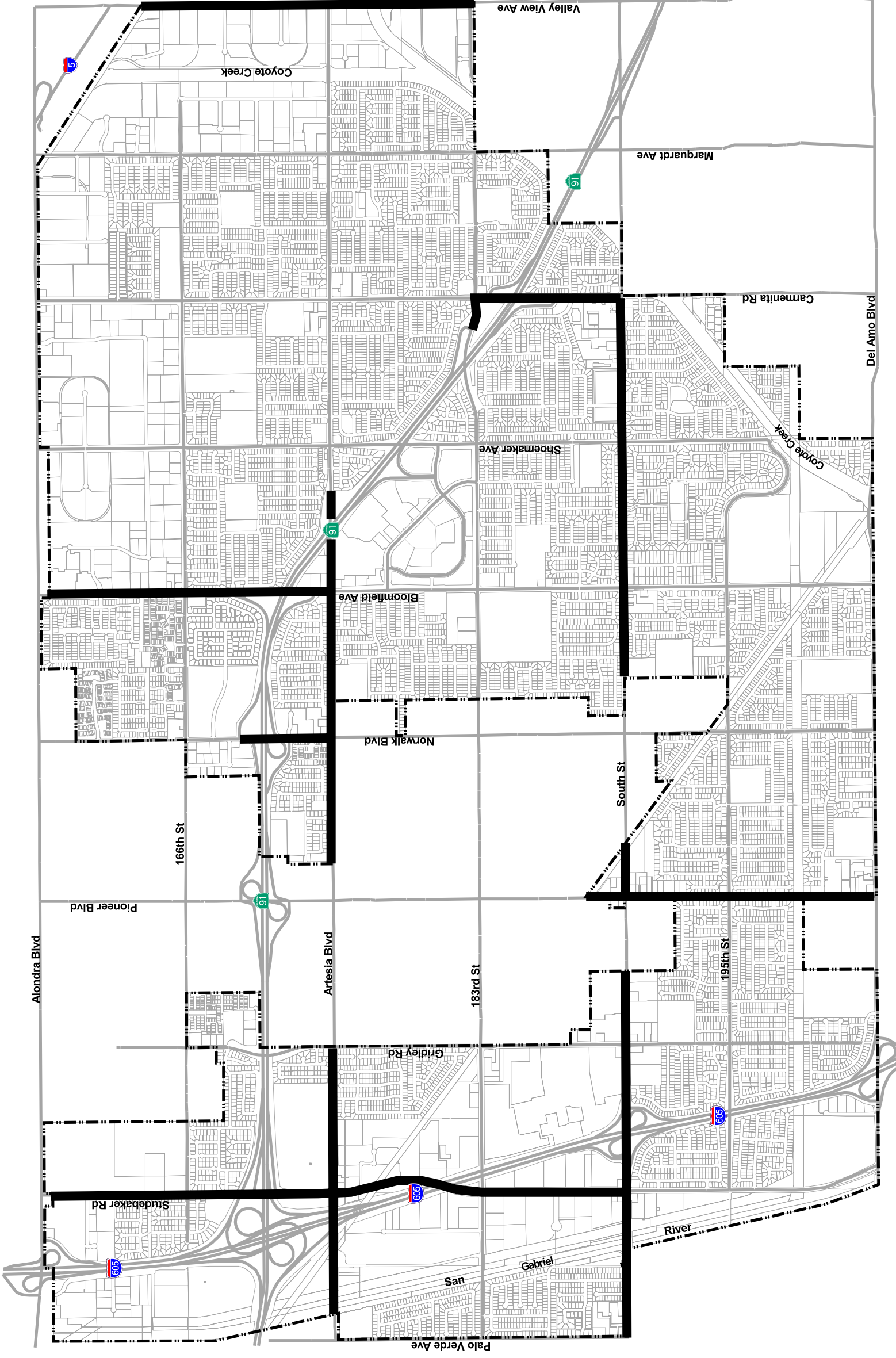
## LEGEND

- Designated Truck Routes
- Cerritos Limits



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**Table CIR-2**  
Daily Roadway Capacity by Roadway Type

Roadway Type	Estimated Daily Capacity <sup>1</sup>
6-Lane Divided	53,000 vpd
4-Lane Divided	40,400 vpd
4-Lane Undivided	31,000 vpd
2-Lane Undivided	10,000 vpd

<sup>1</sup> Estimated daily capacity for Level of Service (LOS) E, expressed as vehicles per day (vpd).

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, A through F, which describe conditions ranging from “ideal” to “worst” as defined in Table CIR-3, Level of Service Descriptions.

**Table CIR-3**  
Level of Service Descriptions

Level of Service	Description of Operation	Range of V/C Ratios
A	Describes primarily free-flow conditions at average travel speeds. Vehicles are seldom impeded in their ability to maneuver in the traffic stream. Delays at intersections are minimal.	0.00 - 0.60
B	Represents reasonably unimpeded operations at average travel speeds. The ability to maneuver in the traffic stream is slightly restricted and delays are not bothersome	0.61 - 0.70
C	Represents stable operations, however, ability to change lanes and maneuver may be more restricted than LOS B and longer queues are experienced at intersections.	0.71 - 0.80
D	Congestion occurs and a small change in volumes increases delays substantially.	0.81 - 0.90
E	Severe congestion occurs with extensive delays and low travel speeds occur.	0.91 - 1.00
F	Characterizes arterial flow at extremely low speeds and intersection congestion occurs with high delays and extensive queuing.	> 1.00

As shown in Table CIR-3, traffic conditions are best when the daily traffic volumes on a roadway are less than 60 or 70 percent of the theoretical capacity of the roadway, while extreme congestion and delays can be expected when the daily traffic volumes approach or exceed 100 percent of the roadway capacity. The threshold Level of Service for the City of Cerritos is LOS "D" for planning purposes.

### Existing Traffic Conditions on Roadways

Daily roadway traffic counts were taken city-wide in 1998. Based on historical traffic volume data from 1987 and 1993, the growth in ADT on most roadway segments has typically been less than one percent, and would account for regional traffic passing through Cerritos. Therefore, the 1998 data is considered to be representative of existing (2001) conditions. Existing daily traffic volumes on roadway segments are presented in Exhibit CIR-4, 2001 Daily Roadway Segment Traffic Volumes. Existing traffic volumes were compared to roadway capacity to assess existing levels of service. For each roadway segment, the daily capacity was determined in accordance with the current facility type and existing number of lanes, and a V/C ratio was computed. The resulting volumes and associated V/C ratios and LOS are summarized in Table CIR-4, Level of Service on Roadway Segments, Existing Conditions.

The data in Table CIR-4 indicates that all roadway segments currently operate at LOS D or better. Traffic operations on a vast majority of the roadway segments would be characterized as LOS A or B.

### 3.3.2 PEAK HOUR TRAFFIC CONDITIONS

#### Level of Service Definition for Intersections

Intersections are analyzed using the Intersection Capacity Utilization (ICU) methodology as specified by the Los Angeles County 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. 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 Table CIR-5, Intersection Level of Service and Corresponding ICU Values.

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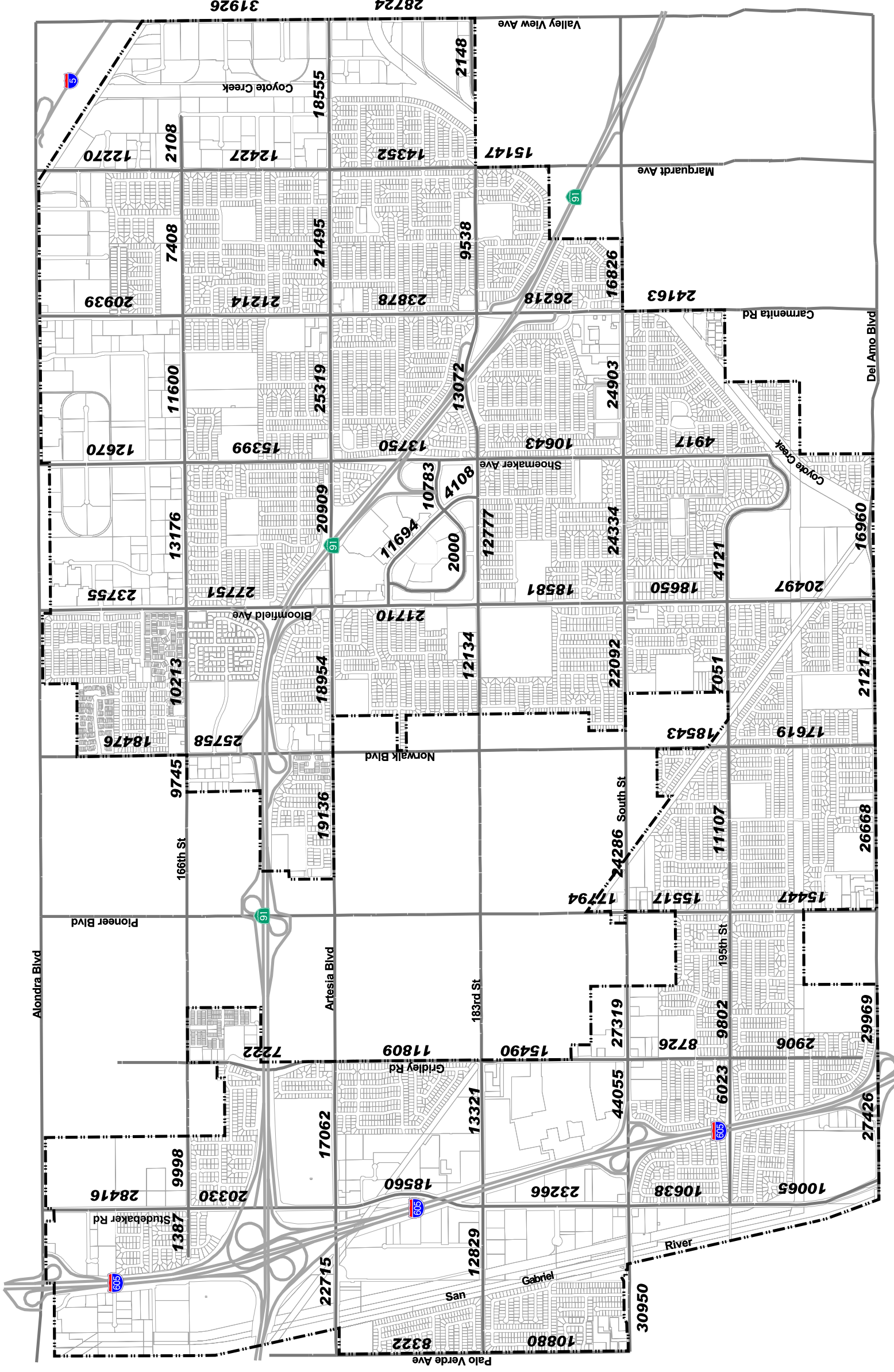
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X,XXX = Daily Traffic Volume  
(Number of Vehicles)



NOT TO SCALE

Source: Kimley-Horn and Associates, Inc.



## 2001 Daily Roadway Segment Traffic Volumes

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Table CIR-4  
Level of Service on Roadway Segments, Existing Conditions

Location	Classification <sup>1</sup>	Los "E" Capacity	Daily Traffic	V/C <sup>2</sup>	LOS <sup>3</sup>
<b>Artesia Boulevard</b>					
Palo Verde to Studebaker	Major 4D	40,400	22,715	0.56	A
Studebaker to Gridley	Major 4D	40,400	17,062	0.42	A
Gridley to Norwalk	Major 4D	40,400	19,136	0.47	A
Norwalk to Bloomfield	Major 4D	40,400	18,954	0.47	A
Bloomfield to SR-91	Major 4D	40,400	18,061	0.45	A
SR-91 to Shoemaker	Major 4D	40,400	18,613	0.46	A
Shoemaker to Carmenita	Major 4D	40,400	25,319	0.63	B
Carmenita to Marquardt	Major 4D	40,400	21,495	0.53	A
Marquardt to Valley View	Major 4D	40,400	18,555	0.46	A
<b>Bloomfield Avenue</b>					
North of 166 <sup>th</sup>	Major 4D	40,400	23,755	0.59	A
166 <sup>th</sup> to 91 Freeway	Major 4D	40,400	27,751	0.69	B
91 Freeway to Artesia	Major 6D	53,000	24,060	0.45	A
Artesia to Towne Center Drive	Major 6D	53,000	25,027	0.47	A
Towne Center Drive to 183 <sup>rd</sup>	Major 4D	40,400	22,174	0.55	A
183 <sup>rd</sup> to South Street	Major 4D	40,400	18,581	0.46	A
South Street to 195 <sup>th</sup>	Major 4D	40,400	18,650	0.46	A
195 <sup>th</sup> to Del Amo	Major 4D	40,400	20,497	0.51	A
<b>Carmenita Road</b>					
North of 166 <sup>th</sup>	Major 4D	40,400	20,939	0.52	A
166 <sup>th</sup> to Artesia	Major 4D	40,400	21,214	0.53	A
Artesia to 183 <sup>rd</sup>	Major 4D	40,400	23,878	0.59	A
183 <sup>rd</sup> to 91 Freeway	Major 4D	40,400	26,218	0.65	B
South of South Street	Major 4D	40,400	24,163	0.60	A
<b>Del Amo Boulevard</b>					
East of Studebaker	Major 4D	40,400	27,426	0.68	B
West of Mapes	Major 4D	40,400	29,969	0.74	C
Pioneer to Norwalk	Major 4D	40,400	26,668	0.66	B
Norwalk to Bloomfield	Major 4D	40,400	21,217	0.53	A
East of Bloomfield	Major 4D	40,400	16,960	0.42	A
<b>Gridley Road</b>					
North of Artesia	Secondary 4D	36,000	7,222	0.20	A
Artesia to 183 <sup>rd</sup>	Secondary 4D	36,000	11,809	0.33	A
183 <sup>rd</sup> to South Street	Secondary 4D	36,000	15,490	0.43	A
South Street to 195 <sup>th</sup>	Secondary 4D	36,000	8,726	0.24	A
195 <sup>th</sup> to Del Amo	Secondary 4D	36,000	2,906	0.08	A
<b>Marquardt Avenue</b>					
North of 166 <sup>th</sup>	Secondary 4D	36,000	12,270	0.34	A
166 <sup>th</sup> to Artesia	Secondary 4D	36,000	12,427	0.35	A
Artesia to 183 <sup>rd</sup>	Secondary 4D	36,000	14,352	0.40	A
South of 183 <sup>rd</sup>	Secondary 4D	36,000	15,147	0.42	A

Table CIR-4 - Continued  
Level of Service on Roadway Segments, Existing Conditions

Location	Classification <sup>1</sup>	Los "E" Capacity	Daily Traffic <sup>4</sup>	V/C <sup>2</sup>	LOS <sup>3</sup>
<b>Norwalk Boulevard</b>					
North of 166 <sup>th</sup>	Secondary 4D	36,000	18,476	0.51	A
166 <sup>th</sup> to 91 Freeway	Secondary 4D	36,000	25,758	0.72	C
91 Freeway to Artesia	Secondary 4D	36,000	25,261	0.70	B
North of 195 <sup>th</sup>	Secondary 4D	36,000	18,543	0.52	A
South of 195 <sup>th</sup>	Secondary 4D	36,000	17,619	0.49	A
<b>Palo Verde Avenue</b>					
Artesia to 183 <sup>rd</sup>	Secondary 4U	31,000	8,322	0.27	A
North of South Street	Secondary 4U	31,000	10,880	0.35	A
<b>Park Plaza Drive</b>					
West of Towne Center Drive	Secondary 4U	31,000	2,000	0.06	A
West of Shoemaker	Secondary 4U	31,000	10,783	0.35	A
<b>Pioneer Boulevard</b>					
North of South Street	Major 4D	40,400	17,794	0.44	A
South Street to 195 <sup>th</sup>	Major 4D	40,400	15,517	0.38	A
South of 195 <sup>th</sup>	Major 4D	40,400	15,447	0.38	A
<b>Shoemaker Avenue</b>					
North of 166 <sup>th</sup>	Secondary 4D	36,000	12,670	0.35	A
166 <sup>th</sup> to Artesia	Secondary 4D	36,000	15,399	0.43	A
Artesia to Park Plaza	Secondary 4D	36,000	13,750	0.38	A
Park Plaza to 183 <sup>rd</sup>	Secondary 4D	36,000	10,026	0.28	A
183 <sup>rd</sup> to South Street	Secondary 4D	36,000	10,643	0.30	A
South of South Street	Secondary 4D	36,000	4,917	0.14	A
<b>South Street</b>					
West of Studebaker	Major 4D	40,400	30,950	0.77	C
Studebaker to 605 Freeway	Major 6D	53,000	40,130	0.76	C
605 Freeway to Gridley	Major 6D	53,000	44,055	0.83	D
East of Gridley	Major 6D	53,000	27,319	0.52	A
East of Pioneer	Major 4D	40,400	24,286	0.60	A
West of Bloomfield	Major 4D	40,400	24,334	0.60	A
Shoemaker to Carmenita	Major 4D	40,400	24,903	0.62	B
East of Carmenita	Major 4D	40,400	16,826	0.42	A
<b>Studebaker Road</b>					
Alondra to 166 <sup>th</sup>	Major 4D	40,400	28,416	0.70	B
166 <sup>th</sup> to 91 Freeway	Major 4D	40,400	20,330	0.50	A
91 Freeway to Artesia	Major 4D	40,400	25,495	0.63	B
Artesia to 183 <sup>rd</sup>	Major 4D	40,400	18,560	0.46	A
183 <sup>rd</sup> to South Street	Major 4D	40,400	23,266	0.58	A
South Street to 195 <sup>th</sup>	Major 4D	40,400	10,638	0.26	A
South of 195 <sup>th</sup>	Major 4D	40,400	10,065	0.25	A

Table CIR-4 - Continued  
Level of Service on Roadway Segments, Existing Conditions

Location	Classification <sup>1</sup>	Los "E" Capacity	Daily Traffic	V/C <sup>2</sup>	LOS <sup>3</sup>
<b>Towne Center Drive<sup>5</sup></b>					
Bloomfield to Park Plaza E	Secondary 4U	31,000	11,694	0.38	A
Park Plaza E to 183 <sup>rd</sup>	Secondary 4U	31,000	4,108	0.13	A
<b>Valley View Avenue</b>					
North of Artesia	Major 4D	40,400	31,392	0.78	C
Artesia to 183 <sup>rd</sup>	Major 6D	53,000	28,724	0.54	A
<b>166<sup>th</sup> Street</b>					
West of Studebaker	Secondary 4U	31,000	1,387	0.04	A
East of Studebaker	Secondary 4U	31,000	9,998	0.32	A
West of Norwalk	Secondary 4U	31,000	9,745	0.31	A
Norwalk to Bloomfield	Secondary 4D	36,000	10,213	0.28	A
Bloomfield to Shoemaker	Secondary 4D	36,000	13,176	0.37	A
Shoemaker to Carmenita	Secondary 4D	36,000	11,600	0.32	A
Carmenita to Marquardt	Secondary 4U	31,000	4,782	0.15	A
East of Marquardt	Secondary 4U	31,000	2,108	0.07	A
<b>183<sup>rd</sup> Street</b>					
Palo Verde to Studebaker	Secondary 4D	36,000	12,829	0.36	A
Studebaker to Gridley	Secondary 4D	36,000	13,321	0.37	A
West of Bloomfield	Secondary 4D	36,000	12,134	0.34	A
Bloomfield to Shoemaker	Secondary 4D	36,000	12,777	0.35	A
Shoemaker to Carmenita	Secondary 4D	36,000	13,072	0.36	A
Carmenita to Marquardt	Secondary 4D	36,000	9,538	0.26	A
Marquardt to Valley View	Secondary 4D	36,000	2,148	0.06	A
<b>195<sup>th</sup> Street</b>					
Studebaker to Gridley	Secondary 4D	36,000	6,023	0.17	A
Gridley to Pioneer	Secondary 4D	36,000	9,802	0.27	A
Pioneer to Norwalk	Secondary 4D	36,000	11,107	0.31	A
Norwalk to Bloomfield	Secondary 4D	36,000	7,051	0.20	A
Bloomfield to Shoemaker	Secondary 4U	31,000	4,121	0.13	A
<sup>1</sup> "Major" or "Secondary" designations are per the City's 1988 General Plan. Number of Lanes are for total of both directions as they exist in 2001. "D" means "Divided," or that there is a center divider, "U" means "Undivided," or no center divider. <sup>2</sup> Volume-to-Capacity ratio. <sup>3</sup> Level of Service per V/C ranges in Table CIR-3. <sup>4</sup> 1998 data is considered representative of 2001 existing conditions, given that growth on most roadway segments in the City has been less than one percent, and based on historical traffic volume data from 1987 and 1993. <sup>5</sup> New daily traffic volumes for Towne Center Drive were taken in 2001.					

Table CIR-5  
Intersection Level of Service and  
Corresponding ICU Values

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

### Intersection Capacity Analysis

Sixteen (16) intersections were selected for analysis. The selection of the 16 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 16 intersections selected for analysis are summarized on Table CIR-6, Intersection Analysis – 2001 Conditions. Morning and evening peak hour traffic counts were conducted at each study intersection in September 2001, and the existing peak hour Level of Service at those intersections is summarized on Table CIR-6.

Review of Table CIR-6 indicates that, with the exception of one intersection, all study intersections are operating at LOS D or better under existing conditions. One intersection is currently operating at LOS E:

- ❑ South Street and Carmenita Road: PM peak hour.

## 4.0 DESCRIPTION OF THE CIRCULATION PLAN

### 4.1 ANALYSIS OF BUILDOUT TRAFFIC CONDITIONS

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. The buildout year is assumed to be Year 2020. 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.



Table CIR-6  
Intersection Analysis – 2001 Conditions

Intersection		Existing Conditions <sup>1</sup>			
		AM Peak Hour		PM Peak Hour	
#	Name	ICU	LOS	ICU	LOS
1	South Street at Palo Verde Avenue	0.63	B	0.79	C
2	South Street at Studebaker Road	0.67	B	0.72	C
3	183 <sup>rd</sup> Street at Studebaker Road	0.52	A	0.66	B
4	Del Amo Blvd. at Pioneer Blvd.	0.82	D	0.74	C
5	Gridley Road at South Street	0.69	B	0.72	C
6	183 <sup>rd</sup> Street at Bloomfield Avenue	0.83	D	0.66	B
7	Bloomfield Ave. at SR-91 EB off-ramp	0.73	C	0.68	B
8	Bloomfield Ave. at SR-91 WB on-ramp	0.63	B	0.54	A
9	South Street at Carmenita Road	0.65	B	0.94	E
10	Carmenita Road at SR-91 EB off-ramp	0.63	B	0.70	B
11	Carmenita Road at SR-91 WB off-ramp	0.71	C	0.64	B
12	Artesia Boulevard at Carmenita Road	0.82	D	0.85	D
13	Artesia Boulevard at Bloomfield Avenue	0.53	A	0.65	B
14	South Street at I-605 NB ramps	0.47	A	0.77	C
15	South Street at I-605 SB ramps	0.61	B	0.62	B
16	183 <sup>rd</sup> Street at Shoemaker Avenue	0.62	B	0.41	A

<sup>1</sup> Based on peak hour traffic counts conducted in September 2001.

#### 4.1.1 METHODOLOGY

The methodology for evaluating future traffic volumes on the roadway segments and at intersections in Cerritos 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 Cerritos 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 built out to its designated capacities, and is assumed to be the 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.

#### 4.1.2 BUILDOUT TRAFFIC PROJECTIONS

While the City of Cerritos is generally fully developed, some parcels 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 under-developed and vacant parcels. The remaining potential development on these parcels of interest in Cerritos is estimated to consist of approximately 2.77 million square feet of development in underutilized parcels, and 1.15 million square feet development on vacant parcels.

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 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. The average growth for the street network was calculated from daily traffic volumes that were obtained from the City.

#### 4.1.3 BUILDOUT TRAFFIC CONDITIONS ON ROADWAYS

Forecasted daily traffic volumes are presented on Exhibit CIR-5, *Buildout (2020) Daily Roadway Segment Traffic Volumes*. Forecasted operating conditions for Buildout Year 2020 are presented in Table CIR-7, *Level of Service on Roadway Segments, Buildout Conditions (2020)*. Review of Table CIR-7 indicates that all roadway segments would continue to operate at LOS D or better at buildout, with the exception of the following two roadway segments:

- ❑ South Street west of Studebaker Avenue, LOS E; and
- ❑ South Street between I-605 and Gridley Avenue, LOS E.

In both cases, these roadways are Major Arterials, and are adjacent to or near a freeway interchange. The forecasted LOS E conditions on these segments are reflective of the regional function these roadways provide.

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CERRITOS  
GENERAL PLAN

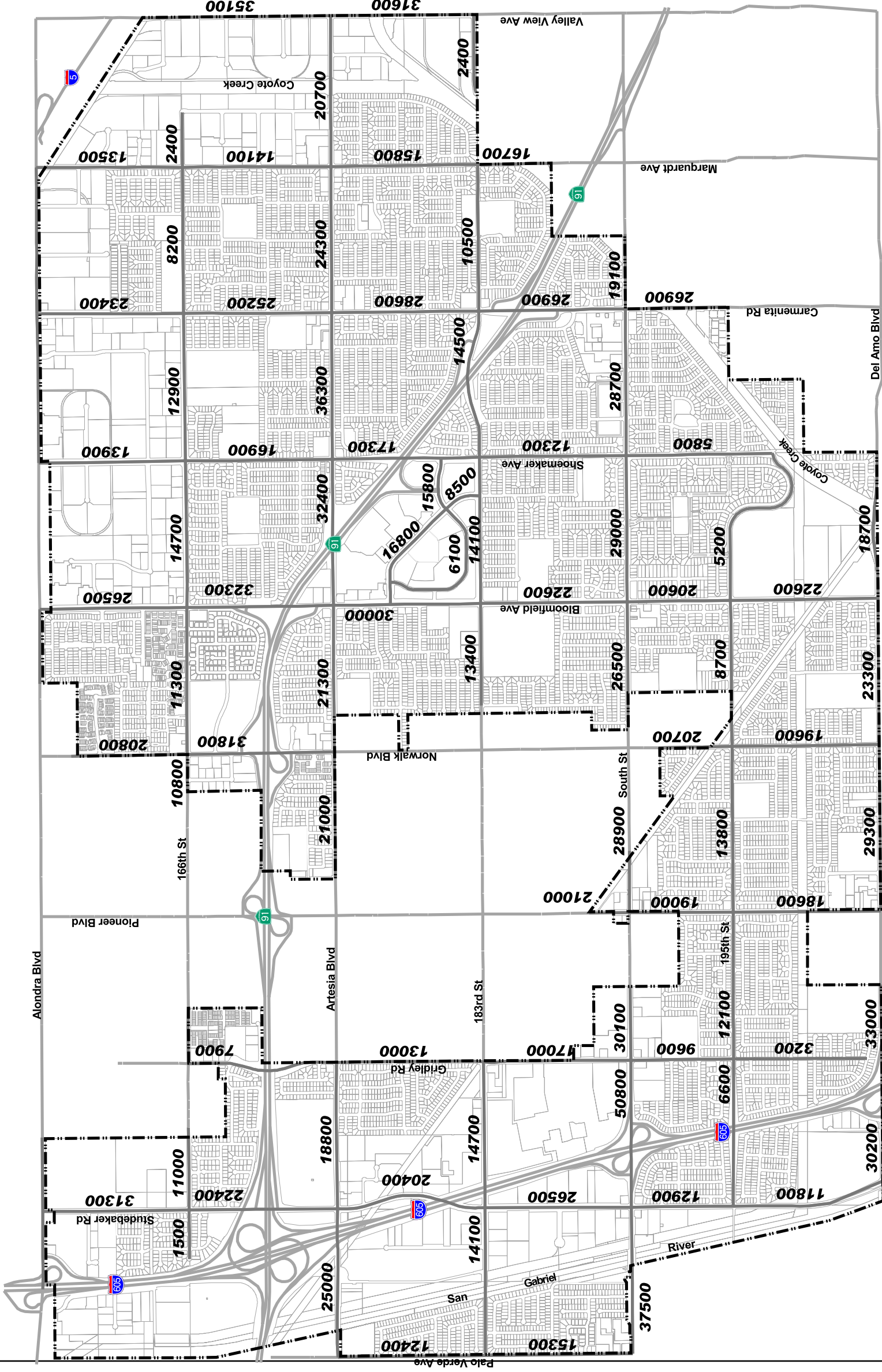
LEGEND

X,XXX = Daily Traffic Volume  
(Number of Vehicles)



NOT TO SCALE

Source: Kimley-Horn and Associates, Inc.



# Buildout (2020) Daily Roadway Segment Traffic Volumes

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Table CIR-7  
Level of Service on Roadway Segments, Buildout Conditions (2020)

Location	Classification <sup>1</sup>	LOS "E" Capacity	Daily Traffic	V/C <sup>2</sup>	LOS <sup>3</sup>
<b>Artesia Boulevard</b>					
Palo Verde to Studebaker	Major 4D	40,400	25,000	0.62	B
Studebaker to Gridley	Major 4D	40,400	18,800	0.47	A
Gridley to Norwalk	Major 4D	40,400	21,000	0.52	A
Norwalk to Bloomfield	Major 4D	40,400	21,300	0.53	A
Bloomfield to SR-91	Major 4D	40,400	31,800	0.79	C
SR-91 to Shoemaker	Major 4D	40,400	32,400	0.80	C
Shoemaker to Carmenita	Major 4D	40,400	36,300	0.90	D
Carmenita to Marquardt	Major 4D	40,400	24,300	0.60	A
Marquardt to Valley View	Major 4D	40,400	20,700	0.51	A
<b>Bloomfield Avenue</b>					
North of 166 <sup>th</sup>	Major 4D	40,400	26,500	0.66	B
166 <sup>th</sup> to 91 Freeway	Major 4D	40,400	32,300	0.80	C
91 Freeway to Artesia	Major 6D	53,000	32,800	0.62	B
Artesia to Towne Center Drive	Major 6D	53,000	30,000	0.57	A
Towne Center Drive to 183 <sup>rd</sup>	Major 4D	40,400	26,800	0.66	B
183 <sup>rd</sup> to South Street	Major 4D	40,400	22,600	0.56	A
South Street to 195 <sup>th</sup>	Major 4D	40,400	20,600	0.51	A
195 <sup>th</sup> to Del Amo	Major 4D	40,400	22,600	0.56	A
<b>Carmenita Road</b>					
North of 166 <sup>th</sup>	Major 4D	40,400	23,400	0.58	A
166 <sup>th</sup> to Artesia	Major 4D	40,400	25,200	0.62	B
Artesia to 183 <sup>rd</sup>	Major 4D	40,400	28,600	0.71	C
183 <sup>rd</sup> to 91 Freeway	Major 4D	40,400	30,500	0.75	C
South of South Street	Major 4D	40,400	26,900	0.67	B
<b>Del Amo Boulevard</b>					
East of Studebaker	Major 4D	40,400	30,200	0.75	C
Gridley to Pioneer	Major 4D	40,400	33,000	0.82	D
Pioneer to Norwalk	Major 4D	40,400	29,300	0.73	C
Norwalk to Bloomfield	Major 4D	40,400	23,300	0.58	A
East of Bloomfield	Major 4D	40,400	18,700	0.46	A
<b>Gridley Road</b>					
North of Artesia	Secondary 4D	36,000	7,900	0.22	A
Artesia to 183 <sup>rd</sup>	Secondary 4D	36,000	13,000	0.36	A
183 <sup>rd</sup> to South Street	Secondary 4D	36,000	17,000	0.47	A
South Street to 195 <sup>th</sup>	Secondary 4D	36,000	9,600	0.27	A
195 <sup>th</sup> to Del Amo	Secondary 4D	36,000	3,200	0.09	A
<b>Marquardt Avenue</b>					
North of 166 <sup>th</sup>	Secondary 4D	36,000	13,500	0.38	A
166 <sup>th</sup> to Artesia	Secondary 4D	36,000	14,100	0.39	A
Artesia to 183 <sup>rd</sup>	Secondary 4D	36,000	15,800	0.44	A
South of 183 <sup>rd</sup>	Secondary 4D	36,000	16,700	0.46	A

Table CIR-7 - Continued  
Level of Service on Roadway Segments, Buildout Conditions (2020)

Location	Classification <sup>1</sup>	LOS "E" Capacity	Daily Traffic	V/C <sup>2</sup>	LOS <sup>3</sup>
<b>Norwalk Boulevard</b>					
North of 166 <sup>th</sup>	Secondary 4D	36,000	20,800	0.58	A
166 <sup>th</sup> to 91 Freeway	Secondary 4D	36,000	31,800	0.88	D
91 Freeway to Artesia	Secondary 4D	36,000	28,400	0.79	C
North of 195 <sup>th</sup>	Secondary 4D	36,000	20,700	0.58	A
South of 195 <sup>th</sup>	Secondary 4D	36,000	19,600	0.54	A
<b>Palo Verde Avenue</b>					
Artesia to 183 <sup>rd</sup>	Secondary 4U	31,000	12,400	0.40	A
183 <sup>rd</sup> to South Street	Secondary 4U	31,000	15,300	0.49	A
<b>Park Plaza Drive</b>					
West of Towne Center Drive	Secondary 4U	31,000	6,100	0.20	A
West of Shoemaker	Secondary 4U	31,000	15,800	0.51	A
<b>Pioneer Boulevard</b>					
South Street to 195 <sup>th</sup>	Major 4D	40,400	19,000	0.47	A
South of 195 <sup>th</sup>	Major 4D	40,400	18,600	0.46	A
North of South Street	Major 4D	40,400	21,800	0.54	A
<b>Shoemaker Avenue</b>					
North of 166 <sup>th</sup>	Secondary 4D	36,000	13,900	0.39	A
166 <sup>th</sup> to Artesia	Secondary 4D	36,000	16,900	0.47	A
Artesia to Park Plaza	Secondary 4D	36,000	17,300	0.48	A
Park Plaza to 183 <sup>rd</sup>	Secondary 4D	36,000	15,700	0.44	A
183 <sup>rd</sup> to South Street	Secondary 4D	36,000	12,300	0.34	A
South of South Street	Secondary 4D	36,000	5,800	0.16	A
<b>South Street</b>					
West of Studebaker	Major 4D	40,400	37,500	0.93	E**
Studebaker to 605 Freeway	Major 6D	53,000	47,900	0.90	D
605 Freeway to Gridley	Major 6D	53,000	50,800	0.96	E**
East of Gridley	Major 6D	53,000	30,100	0.57	A
East of Pioneer	Major 4D	40,400	28,900	0.72	C
West of Bloomfield	Major 4D	40,400	26,500	0.66	B
Bloomfield to Shoemaker	Major 4D	40,400	29,000	0.72	C
Shoemaker to Carmenita	Major 4D	40,400	28,700	0.71	C
East of Carmenita	Major 4D	40,400	19,100	0.47	A
<b>Studebaker Road</b>					
Alondra to 166 <sup>th</sup>	Major 4D	40,400	31,300	0.77	C
166 <sup>th</sup> to 91 Freeway	Major 4D	40,400	22,400	0.55	A
91 Freeway to Artesia	Major 4D	40,400	28,100	0.70	B
Artesia to 183 <sup>rd</sup>	Major 4D	40,400	20,400	0.50	A
183 <sup>rd</sup> to South Street	Major 4D	40,400	26,500	0.66	B
South Street to 195 <sup>th</sup>	Major 4D	40,400	12,900	0.32	A
South of 195 <sup>th</sup>	Major 4D	40,400	11,800	0.29	A

Table CIR-7 - Continued  
Level of Service on Roadway Segments, Buildout Conditions (2020)

Location	Classification <sup>1</sup>	LOS "E" Capacity	Daily Traffic	V/C <sup>2</sup>	LOS <sup>3</sup>
<b>Towne Center Drive</b>					
Bloomfield to Park Plaza E	Secondary 4U	31,000	16,800	0.54	A
Park Plaza E to 183 <sup>rd</sup>	Secondary 4U	31,000	8,500	0.27	A
<b>Valley View Avenue</b>					
North of Artesia	Major 4D	40,400	35,100	0.87	D
Artesia to 183 <sup>rd</sup>	Major 6D	53,000	31,600	0.60	A
<b>166<sup>th</sup> Street</b>					
West of Studebaker	Secondary 4U	31,000	1,500	0.05	A
Studebaker to Gridley	Secondary 4U	31,000	11,000	0.35	A
West of Norwalk	Secondary 4U	31,000	10,800	0.35	A
Norwalk to Bloomfield	Secondary 4D	36,000	11,300	0.31	A
Bloomfield to Shoemaker	Secondary 4D	36,000	14,700	0.41	A
Shoemaker to Carmenita	Secondary 4D	36,000	12,900	0.36	A
Carmenita to Marquardt	Secondary 4U	31,000	8,200	0.26	A
East of Marquardt	Secondary 4U	31,000	2,400	0.08	A
<b>183<sup>rd</sup> Street</b>					
Palo Verde to Studebaker	Secondary 4D	36,000	14,100	0.39	A
East of Studebaker	Secondary 4D	36,000	14,700	0.41	A
West of Bloomfield	Secondary 4D	36,000	13,400	0.37	A
Bloomfield to Shoemaker	Secondary 4D	36,000	14,100	0.39	A
Shoemaker to Carmenita	Secondary 4D	36,000	14,500	0.40	A
Carmenita to Marquardt	Secondary 4D	36,000	10,500	0.29	A
Marquardt to Valley View	Secondary 4D	36,000	2,400	0.07	A
<b>195<sup>th</sup> Street</b>					
Studebaker to Gridley	Secondary 4D	36,000	6,600	0.18	A
Gridley to Pioneer	Secondary 4D	36,000	12,100	0.34	A
Pioneer to Norwalk	Secondary 4D	36,000	13,800	0.38	A
Norwalk to Bloomfield	Secondary 4D	36,000	8,700	0.24	A
Bloomfield to Shoemaker	Secondary 4U	31,000	5,200	0.17	A
<sup>1</sup> "Major" or "Secondary" designations are per the City's 1988 General Plan. Number of Lanes are for total of both directions as they exist in 2001. "D" means "Divided," or that there is a center divider, "U" means "Undivided," or no center divider. <sup>2</sup> Volume-to-Capacity ratio. <sup>3</sup> Level of Service per V/C ranges in Table CIR-3.					
Note: Unacceptable LOS indicated as E** and F***					

## Recommended Improvements to Mitigate Impacts

Since the acceptable threshold for Level of Service is D, these two segments mentioned above are considered to be impacted. The segment of South Street and Studebaker Road is currently a four-lane divided roadway, and would need to be widened to six lanes in order to achieve the acceptable LOS threshold of D. However, this would require right-of-way take and would have undesirable impacts on adjacent land uses.

It should be noted that the projected traffic increases will be the result of buildout of nearby vacant and underutilized parcels within the City, as well as regional growth, and may not occur for some time, if at all. It is also important to note that the adjacent intersection of South Street and Studebaker Road is projected to operate at LOS D or better in both peak hours at buildout, indicating that appropriate intersection improvements exist to accommodate peak traffic volumes. Finally, a signal coordination system is in place along South Street, which provides traffic flow benefits that are not reflected in the daily V/C and LOS calculations. Based on these factors, upgrading South Street to a six-lane major would not necessarily be required. Rather, the City should monitor traffic growth, and be prepared to address unacceptable levels of congestion, should they occur.

The segment of South Street between I-605 and Gridley Avenue is already built to six lanes. The increase in traffic on this segment reflects high traffic demands due to new development, as well as increases in regional traffic destined for the freeway. Further widening on this roadway segment would have significant land use implications. Traffic control system improvements, such as signal coordination, to help expedite access to and from the freeway are already in place, and provide traffic flow benefits that are not reflected in the daily V/C and LOS calculations.

### 4.1.4 BUILDOUT TRAFFIC CONDITIONS AT INTERSECTIONS

The ICU analysis was conducted for buildout conditions, and the LOS was determined for each of the 16 intersections. The results are presented in Table CIR-8, *Intersection Levels of Service at Buildout (2020)*. The data in Table CIR-8 indicates that 13 of the 16 intersections analyzed would operate at LOS "D" or better under buildout conditions. Two intersections would operate at LOS "E" and one at LOS "F":

- ❑ 183<sup>rd</sup> Street at Bloomfield Avenue: LOS E in the AM peak hour;
- ❑ South Street at Carmenita Road: LOS F in the PM peak hour; and
- ❑ Artesia Avenue at Carmenita Road: LOS E in both the AM and PM peak hours.



Table CIR-8  
Intersection Levels of Service at Buildout (2020)

Intersection		ICU and LOS at Buildout <sup>1</sup>			
		AM Peak Hour		PM Peak Hour	
#	Name	ICU	LOS	ICU	LOS
1	South Street at Palo Verde Avenue	0.69	B	0.89	D
2	South Street at Studebaker Road	0.72	C	0.89	D
3	183 <sup>rd</sup> Street at Studebaker Road	0.57	A	0.73	C
4	Del Amo Blvd. at Pioneer Blvd.	0.90	D	0.86	D
5	Gridley Road at South Street	0.76	C	0.82	D
6	183 <sup>rd</sup> Street at Bloomfield Avenue	0.93	E	0.85	D
7	Bloomfield Ave. at SR-91 EB off-ramp	0.84	D	0.75	C
8	Bloomfield Ave. at SR-91 WB on-ramp	0.70	C	0.60	B
9	South Street at Carmenita Road	0.75	C	1.07	F
10	Carmenita Road at SR-91 EB off-ramp	0.71	C	0.79	C
11	Carmenita Road at SR-91 WB off-ramp	0.85	D	0.83	D
12	Artesia Boulevard at Carmenita Road	0.92	E	0.99	E
13	Artesia Boulevard at Bloomfield Avenue	0.59	A	0.77	C
14	South Street at I-605 NB ramps	0.52	A	0.89	D
15	South Street at I-605 SB ramps	0.72	C	0.76	C
16	183 <sup>rd</sup> Street at Shoemaker Avenue	0.71	C	0.52	A

<sup>1</sup> Based on existing (2001) traffic counts plus area growth plus traffic generated by development of vacant and underutilized parcels.

### Mitigation Measures for Intersections

Improvements were identified that would achieve Level of Service “D” under buildout conditions at the three impacted intersections. These improvements are:

- ❑ At 183<sup>rd</sup> Street and Bloomfield Avenue: The addition of a second westbound left-turn lane would improve the Level of Service from LOS E to LOS D.
- ❑ At South Street and Carmenita Road: The addition of a third southbound through lane, a third eastbound through lane, and a westbound through lane would improve the Level of Service from LOS F to LOS D.
- ❑ At Artesia Boulevard and Carmenita Road: the addition of a second eastbound left-turn lane and the striping of a northbound right-turn lane would improvement the level of service from LOS E to LOS D.

A summary of the buildout ICU and LOS values with the recommended improvements in place are presented in Table CIR-9, Summary of Buildout (2020) Intersection Operation After Mitigation. All recommended roadway and intersection improvements are depicted on Exhibit CIR-6, Recommended Roadway and Intersection Improvements.

**Table CIR-9**  
**Summary of Buildout (2020) Intersection Operation After Mitigation**

Intersection		Buildout Conditions After Mitigation			
		AM Peak Hour		PM Peak Hour	
#	Name	ICU	LOS	ICU	LOS
6	183 <sup>rd</sup> Street at Bloomfield Avenue	0.83	D	0.85	D
9	South Street at Carmenita Road	0.69	B	0.85	D
12	Artesia Boulevard at Carmenita Road	0.80	C	0.89	D

As previously noted, the projected traffic increases would be the result of buildout of nearby vacant and underutilized parcels within the City, as well as regional growth, and may not occur for some time, if at all. Based on these factors, upgrading the three “impacted” intersections would not necessarily be required. Rather, the City should monitor traffic growth, and be prepared to address unacceptable levels of congestion, should they occur.

## 4.2 RECOMMENDED ROADWAY CLASSIFICATIONS

The City’s 1988 General Plan contains the following street classifications:

- Major: 100 feet of right-of-way;
- Secondary: 80 feet of right-of-way; and
- Local Collector: 60 feet of right-of-way.

It is recommended that the City of Cerritos modify its roadway classification system to include the following:

- Major Arterial – 6-lane
- Major Arterial – 4-lane
- Secondary Arterial with center divider (four lanes)
- Secondary Arterial without center divider (four lanes)
- Local Collector

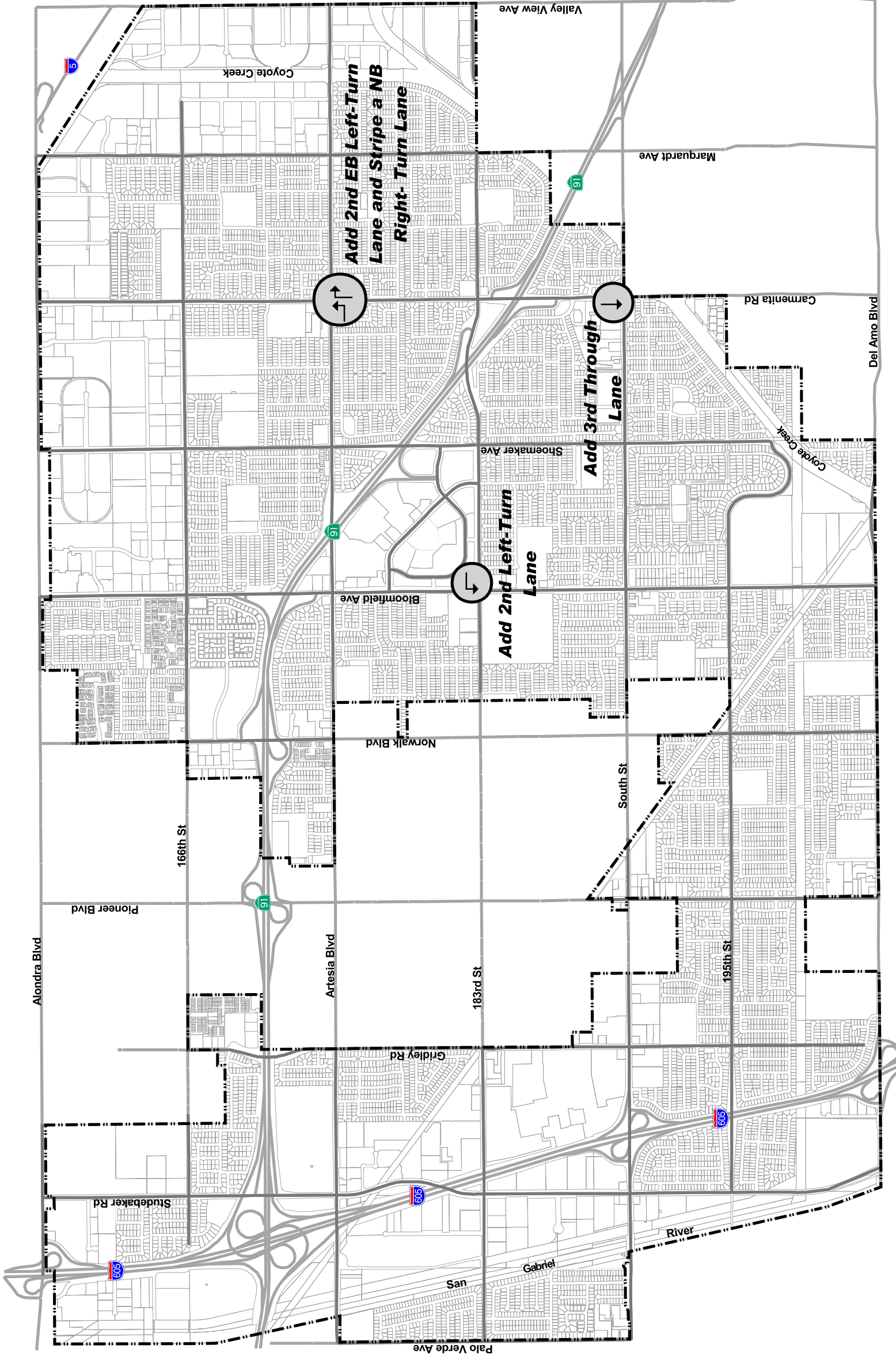
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Source: Kimley-Horn and Associates, Inc.



# Recommended Roadway and Intersection Improvements

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To accommodate traffic volume levels in the future will likely require the addition of lanes on some roadway segments. The City's current classification system does not have a roadway category that specifically reflects a six-lane configuration within a 100-foot right-of-way. Major Arterials with 100 feet of right-of-way (also referred to as "Primary" roadways in the City's Standard Plan document) are intended to be four-lane facilities. However, some Major Arterial roadway segments in the City, specifically sections of South Street, Bloomfield Avenue and Valley View Avenue, have been upgraded to six lanes. In some cases, the City has acquired additional right-of-way (more than 100 feet) to achieve this six-lane cross-section. In most cases, however, the six lanes have been accommodated within the 100-foot right-of-way by narrowing lanes or eliminating parking or bike lanes.

It is proposed that a "Major with six lanes" category be added to the City's classification system, and assigned to selected roadway segments. This category would have a right-of-way width of 120 feet. Assigning this designation to selected roadway segments would make it possible for the City to preserve or acquire additional right-of-way as development or re-development takes place along these Arterials. With additional right-of-way, the City can achieve desirable design standards with appropriate lane widths, center dividers and appropriate curb lane treatment.

#### 4.2.1 MAJOR ARTERIALS

Major Arterials would be four-lane or six-lane divided facilities that would carry the highest levels of traffic volumes in the City, mostly in excess of 40,000 to 50,000 vehicles per day (vpd). Major Arterials carry a large volume of intra-regional through traffic destined to and from major activity centers in the City, and to and from the freeway system. Frequent access to abutting land uses is discouraged.

- ❑ The right-of-way width for a 6-lane Major Arterial would be 100 feet. The LOS E capacity of a 6-lane Major would be 53,000 vpd.
- ❑ The right-of-way for a 4-lane Major Arterial would be 100 feet. The LOS E daily capacity of a 4-lane Major would remain at 40,400 vpd.

#### 4.2.2 SECONDARY ARTERIALS

Secondary arterials would be four-lane divided or undivided facilities capable of carrying up to 30,000 to 35,000 vehicles per day without serious traffic delays. They are designed to carry traffic between Major Arterials or to lesser thoroughfares and have right-of-way widths of 80 feet with 64 feet of roadway width curb to curb. The major difference between divided and undivided Secondary Arterials would be that the vehicle-carrying capacity for a divided facility would be higher than for an undivided facility. Most of

the roadways designated as Secondary roadways in the City of Cerritos have been improved to provide some form of center roadway divider for left-turn channelization. Adoption of this recommended classification will simply acknowledge the difference between the divided and undivided Secondary facilities in the City.

- ❑ The Secondary Divided Arterial would have two travel lanes in each direction, and a center roadway divider to provide separate channelization for left-turning vehicles. The daily LOS E capacity of a Secondary Divided Arterial would be 36,000 vpd.
- ❑ The Secondary Undivided Arterial would have two travel lanes in each direction, and no center divider. Parking lanes or bike lanes are usually provided. The daily LOS E capacity of Secondary Undivided Arterial would be 31,000 vpd.

Secondary Arterials are better suited than Major Arterials to serve adjacent land uses, and to carry traffic between adjacent neighborhoods, distributing traffic between local streets and Major Arterials. Side street access and driveways to individual properties are more frequent.

### 4.2.3 LOCAL STREETS

Local streets would be comprised of Collector and Residential streets. Collector streets are normally two lanes that functionally provide access for several local roadways to an arterial roadway. They are intended to collect and route local traffic to the higher classification roads. A Collector street usually has a roadway width of 40 feet within 60 feet of right-of-way.

Residential streets are not included in the basic circulation network contained in the Circulation Element, yet they constitute a major part of the road network in the City of Cerritos. They would have a right-of-way between 50 and 60 feet, with two travel lanes, parking lanes, sidewalk and parkway. The intent of the residential street system is simply to carry residential traffic from the neighborhoods to the higher classification street system.

With this revised classification system, some changes to the current roadway designations are recommended. The recommended classifications changes are illustrated in Exhibit CIR-7, Functional Roadway Classifications (2002 General Plan). Table CIR-10, Functional Roadway Classifications, summarizes roadway segments for which changes in classification are recommended.

Table CIR-10  
Functional Roadway Classifications

Roadway Segment	Current Classification	Current Number of Lanes	Recommended Classification
South Street, between Palo Verde Avenue and Studebaker Road	Major	4 lanes, divided	Major, 6-lane
South Street, between Studebaker Road and Gridley Road	Major	6 lanes, divided	Major, 6-lane
South Street, between Gridley Road and Pioneer Boulevard	Major	4 lanes, divided	Major, 6-lane
Artesia Boulevard, between Bloomfield Avenue and Shoemaker Avenue	Major	4 lanes, divided	Major, 6-lane
Bloomfield Avenue, between SR-91 EB ramp and Towne Center Drive	Major	6 lanes, divided	Major, 6-lane

#### 4.2.4 RECOMMENDED ROADWAY CROSS-SECTIONS

Right-of-way and travelway cross-sections for the recommended roadway classifications are presented in Exhibit CIR-8, Recommended Typical Sections for Arterials. Cross-sections for local streets are not shown because collector and residential streets are not considered to be a part of the Circulation Element.

### 5.0 PLANNING FACTORS, GOALS AND POLICIES

#### REDUCE THE EFFECTS OF REGIONAL TRAFFIC ON THE COMMUNITY

##### Planning Factor

Regional traffic does not recognize city boundaries. Cerritos is a city surrounded on all sides by urbanized communities. A comprehensive freeway system and a continuous grid street system in and around the City of Cerritos allows for the free flow of traffic between and through adjoining cities. The street system must be planned, designed and preserved to support the movement of all people and goods within and through the City in a safe and efficient manner, while maintaining a quality of life for residents. The design of the circulation system should provide a balance between economic development, regional mobility and the preservation of residential neighborhoods and community facilities.

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| <b>Goal</b>     | <i>CIR-1</i> | <i>Provide a safe and efficient regionally-oriented transportation system designed to channel non-local traffic and trucks onto the major arterial street system and discourage encroachment into community areas or residential neighborhoods.</i>                       |
| <b>Policies</b> | CIR-1.1      | Use the Circulation Element to guide detailed planning and implementation of the City's roadway system.   |
|                 | CIR-1.2      | Adopt street cross-section standards and ensure all new and upgraded roadway facilities are constructed or upgraded to meet City standards, where feasible.   |
|                 | CIR-1.3      | Provide adequate capacity on the Major Arterials to encourage through traffic to stay on the Major Arterial street system, and to discourage diversion onto the secondary and residential street system.  |
|                 | CIR-1.4      | Evaluate the City's truck routes to ensure that movement of truck traffic is accommodated by and confined to the designated streets to the greatest extent possible.  |
|                 | CIR-1.5      | Implement traffic signal coordination to enhance traffic flow, and reduce delay at signalized intersections. Coordinate with neighboring jurisdictions and Caltrans, as needed.   |
|                 | CIR-1.6      | Where deemed necessary, upgrade major arterial facilities to accommodate regional traffic demand, improve access to and from freeway ramp facilities and to facilitate truck movements.   |
| <b>Goal</b>     | <i>CIR-2</i> | <i>Provide and maintain a secondary network of arterial streets and local streets to accommodate the internal circulation needs of Cerritos' businesses and residents.</i>  |
| <b>Policies</b> | CIR-2.1      | Maintain the current City policy that specifically precludes through traffic on 183 <sup>rd</sup> Street at the easterly boundary of the City; Shoemaker Avenue at the southerly boundary of the City; and 195 <sup>th</sup> Street at the westerly boundary of the City. |



A CITY WITH VISION

# CERRITOS GENERAL PLAN

LEGEND



Major Arterial (6 lanes)



Major Arterial (4 lanes)



Secondary Arterial with Center Divider



Secondary Arterial with No Center Divider

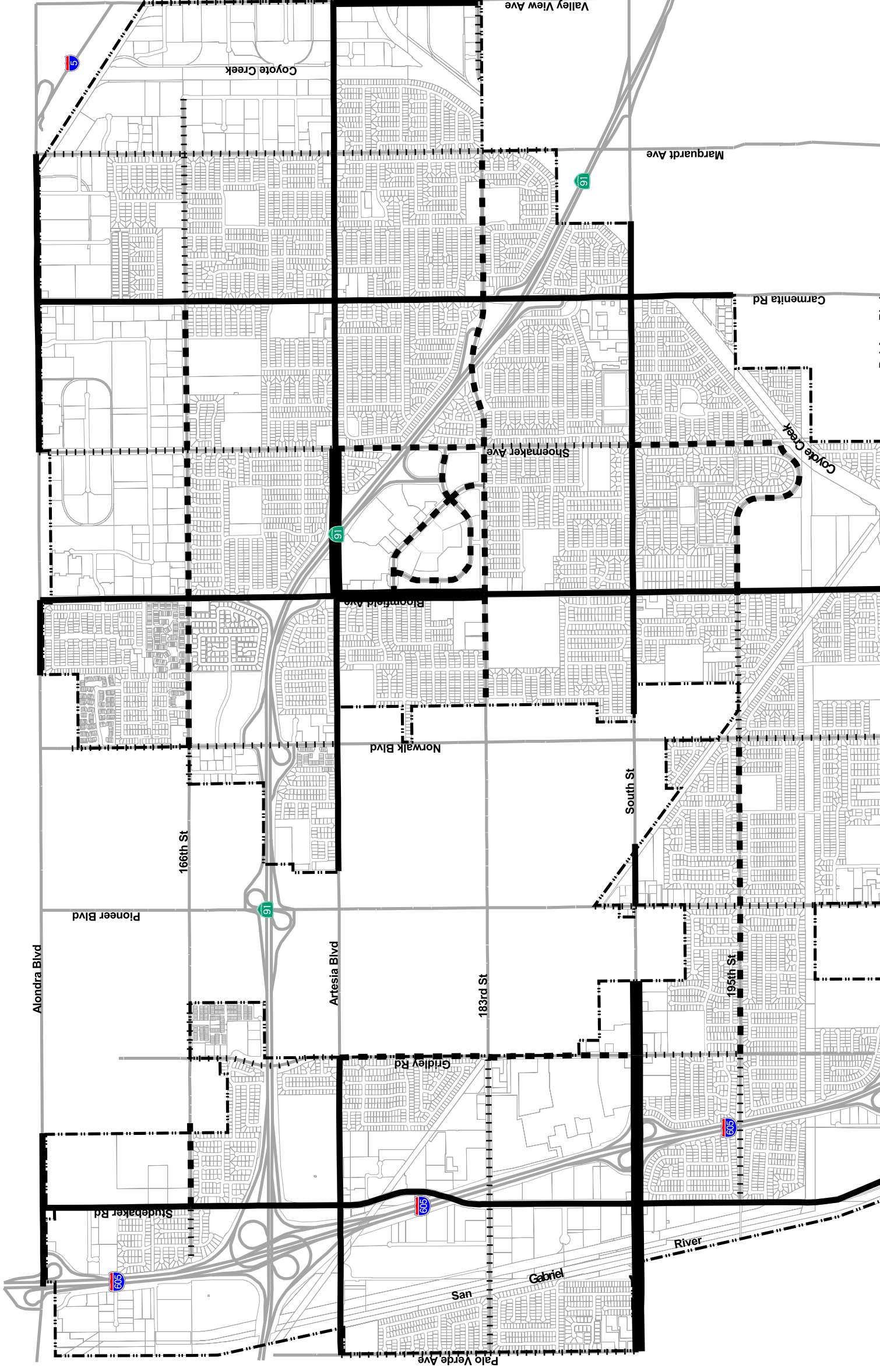


Cerritos Limits



NOT TO SCALE

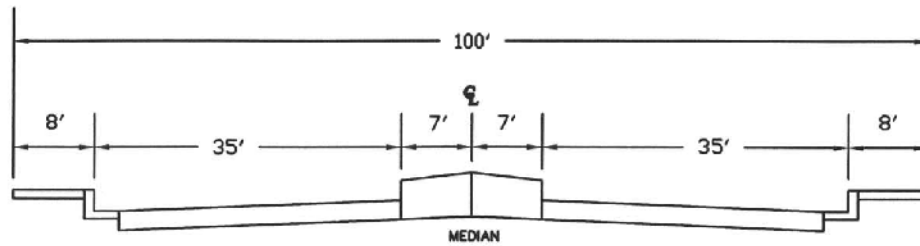
Source: Kimley-Horn and Associates, Inc.



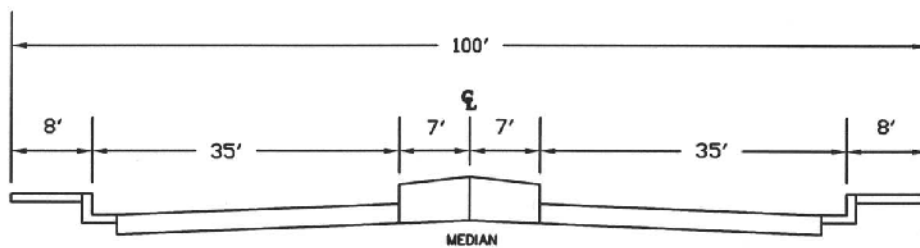
## Functional Roadway Classifications (2002 General Plan)

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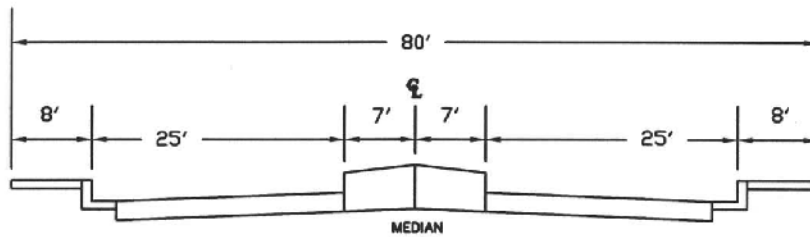
MAJOR ARTERIAL WITH SIX LANES



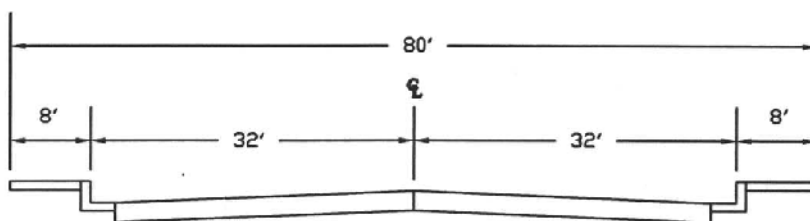
MAJOR ARTERIAL WITH FOUR LANES



SECONDARY ARTERIAL WITH CENTER DIVIDER



SECONDARY ARTERIAL WITH NO CENTER DIVIDER



Source: Kimley-Horn and Associates, Inc.

# Recommended Typical Sections For Arterials

- CIR-2.2 Make arterial or intersection improvements where necessary to accommodate traffic demand that would otherwise divert to secondary and local streets.
- CIR-2.3 Enforce speed restrictions throughout the City, especially on local streets.
- Goal**      CIR-3      *Influence the design of secondary and local streets to discourage through traffic in residential areas without inhibiting internal circulation within and between neighborhoods.*
- Policies**      CIR-3.1      Review vicinity of circulation plans of commercial development to minimize conflicts with residential neighborhoods.
- CIR-3.2      Develop mechanisms to periodically monitor local traffic at the neighborhood level.
- CIR-3.3      Encourage citizen notification of areas with through-traffic problems. Implement and evaluate turn restrictions or other measures to reduce or discourage problematic traffic movements or patterns.
- CIR-3.4      On an as-needed basis for identified problem areas, test and evaluate traffic calming solutions on neighborhood streets, such as curb lane striping, traffic diverters and street closures.
- CIR-3.5      Continue to implement arterial improvements to draw traffic off of local streets.

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**SAFETY**

**Planning Factor**

The efficient and safe movement of vehicular and non-motorized traffic on City streets is a concern of both City officials and residents of the community. Planning and design of the Circulation System needs to include policies to minimize safety hazards and encourage safe operating conditions on City streets.

C E R R I T O S   G E N E R A L   P L A N

**Goal**      *CIR-4      Enhance the safety of all motorists on the City street system.*

**Policies**      CIR-4.1      Identify and evaluate high-accident locations. Recommend and implement improvements to address deficiencies.

CIR-4.2      Evaluate and upgrade sub-standard intersections or roadway segments.

CIR-4.3      In coordination with the railroad companies, upgrade at-grade railroad crossings to improve timing, visibility and motorist safety.

CIR-4.4      Clearly sign City streets, including advance signing for intersections on Major Arterials, and overhead signs at signalized intersections.

CIR-4.5      Identify and, where feasible, remove distracting signage and sight-distance barriers.

CIR-4.6      Update and enforce a defensible city-wide speed limit program.

CIR-4.7      Continue to implement and maintain a red-light camera program to prevent traffic accidents at primary signalized intersections.

**Goal**      *CIR-5      Promote the safety of bicyclists and pedestrians on the public streets through street design and evaluation.*

**Policies**      CIR-5.1      Identify and address bicycle and pedestrian safety hazards, including mid-block crossings, missing or deficient sidewalks or bike lanes and unsafe intersections.

CIR-5.2      In cooperation with the ABC Unified School District, implement and maintain a "Recommended Routes to School" guide for parents.

CIR-5.3      Work cooperatively with the ABC Unified School District with regard to the location and procedures of crossing guards.

**TRANSPORTATION DEMAND MANAGEMENT/TRANSPORTATION SYSTEM MANAGEMENT**

**Planning Factor**

As the City reaches buildout, and surrounding cities continue to develop, it will become increasingly important to maximize the efficiency of the roadway network through the use of Transportation System Management (TSM) and Travel Demand Management (TDM) strategies.

**Goal**      *CIR-6*      *Reduce traffic demand through TDM measures, such as ridesharing programs, rideshare support services, shuttle services, bicycle and pedestrian system improvements, information dissemination and other trip reduction measures.*

- Policies**
- CIR-6.1      Implement land use and employment strategies to reduce the need for travel.
  - CIR-6.2      Promote ridesharing through publicity and provision of information to the public.
  - CIR-6.3      Require new development to incorporate design features which facilitate transit service and encourage transit ridership such as bus stop facilities, and efficient pedestrian paths through projects to transit stops.
  - CIR-6.4      Require mixed-use projects to provide an internal system of pedestrian and bicycle amenities, linking site uses and providing linkages to surrounding uses.
  - CIR-6.5      Encourage a mix of uses within a project, designed to maximize internal trip making, maximize the use of parking facilities and to promote a shift from auto use to pedestrian and bicycle modes of travel.
  - CIR-6.6      Encourage the provision of additional regional public transportation services and support facilities, including park-and-ride lots near the freeway interchanges and within village centers.
  - CIR-6.7      Investigate and encourage innovative transportation solutions to serve the community and/or the region.

C E R R I T O S G E N E R A L P L A N

- Goal**      *CIR-7*      *Using Transportation System Management strategies, improve the flow of traffic on City streets through means other than adding roadway capacity.*
- Policies**
- CIR-7.1      Require proper spacing and interconnect traffic signals where feasible to maximize the smooth progression of traffic flows and to minimize delay and stop and go conditions.
  - CIR-7.2      Implement time-of-day signal timing plans to be responsive to varying traffic patterns at different times of the day.
  - CIR-7.3      Discourage the provision of on-street (curbside) parking along principal arterial roadways (e.g., Studebaker Road at the Cerritos Auto Square) to minimize traffic conflicts and increase the traffic carrying capacity of these roadways.
  - CIR-7.4      Evaluate the use of protected-permissive left-turn phasing at appropriate intersections, to reduce vehicle delay during off-peak periods.
  - CIR-7.5      Promote the consolidation of parking and related circulation facilities, where appropriate, to minimize the number of ingress and egress points onto arterials.
- Goal**      *CIR-8*      *Strive to achieve a public transportation system which serves the needs of the community, is accessible to all and is a viable alternative to the single occupant vehicle.*
- Policies**
- CIR-8.1      Promote an increase in bus services offered, and a reduction in wait times within City limits.
  - CIR-8.2      Promote an increase in the use of public transit and para-transit services.
  - CIR-8.3      Provide adequate lane width and capacity, and reduce travel time on streets utilized by fixed-route transit.
  - CIR-8.4      Review new developments to include accommodations for Transportation Demand Management (TDM) programs, including public transportation and parking management.

- CIR-8.5 Integrate transit routes and stops into highway, pedestrian and bicycle circulation network.
- CIR-8.6 Participate in local and regional transit system/commuter-rail/transportation demand management planning and implementation activities to improve connections between the systems and ease of use of systems (i.e., reduced waiting times).
- CIR-8.7 Encourage the construction of improved bus stops as appropriate.

Related Goals and Policies: Refer to Goal CD-1, CD-2 and CD-4 and their associated policies in the Community Design Element. Goal CD-1 addresses community image, Goal CD-2 addresses streetscape design and Goal CD-4 addresses signage.

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## ROADWAY/PUBLIC RIGHT-OF-WAY AESTHETICS

### Planning Factor

The City of Cerritos takes pride in its high-quality of visual aesthetics throughout the City, including on its public street system. The inclusion of landscaped medians, streetscape furniture, a consistent sign program, and other features all serve to make the individual's travel through the City more pleasing.

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|-----------------|---|
| <b>Goal</b>     | <p><i>CIR-9 Plan and manage public rights-of-way and median islands to provide attractive streetscapes, while ensuring that street capacity, functionality, sight distance and public safety are not adversely affected.</i></p>  |
| <b>Policies</b> | <p>CIR-9.1 Provide attractive streetscapes in a cost-effective, low-maintenance manner.</p> <p>CIR-9.2 Develop and implement a consistent street and landmark signing program throughout the City.</p> <p>CIR-9.3 Maintain and replace street trees as needed to achieve their aesthetic purpose and avoid damage to streets and sidewalks.</p> |



- CIR-9.4 Provide street lights compatible with the character of existing neighborhoods.
- CIR-9.5 Design and maintain landscaped parkways, decorative median islands and entrance planters at freeway on-ramps and off-ramps.
- CIR-9.6 Select and locate landscape materials, streetscape furniture and public art in such a way so as to avoid blocking motorists' sight distance or impeding vehicular movement.
- CIR-9.7 For targeted major arteries and entryways to the City from the freeway system, develop a comprehensive landscape, signage and entryway plan to efficiently direct traffic to appropriate routes and destinations.
- CIR-9.8 Develop and maintain Design Guidelines to ensure attractive City signs, streetscapes and freeway frontages and compatibility with adjacent land uses.
- CIR-9.9 Develop and maintain a Street Furniture Master Plan.
- CIR-9.10 Develop an Arts in Public Spaces Master Plan to display public art in parkway and/or landscape medians as appropriate.

**Related Goals and Policies:** Refer to Goal CD-2 and its associated policies, which address streetscape design.



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