Section 5.4
Traffic and Circulation

5.4.1 PURPOSE

The Circulation Element is a primary resource for circulation policy decisions within the City of Artesia. Artesia's circulation system includes a hierarchy of local streets and major arterial roadways and, therefore, must coordinate with other transportation agencies, including the Los Angeles County Metropolitan Transportation Authority (LACMTA) and Caltrans. Regional coordination is essential to the successful implementation of the Circulation Plan. Regional traffic uses require coordination with adjoining cities and other agencies.

This section addresses the City of Artesia' existing traffic conditions, the impacts of future traffic growth, planned physical improvements, and additional improvements to accommodate growth. This section is based upon the City of Artesia's General Plan Circulation and Mobility Element.

5.4.2 EXISTING REGULATORY SETTING

The City of Artesia (City) is bordered by the City of Norwalk to the north, and the City of Cerritos to the south, east, and west. Circulation issues and travel patterns, likewise, extend beyond the Artesia City limits. Arterial roadways extend through the City and beyond the City boundaries into neighboring cities. The land use decisions and traffic patterns in nearby jurisdictions have the potential to affect the quality of traffic flow and mobility in the City, and conversely, traffic conditions and decisions made by the City 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 course of this analysis.

RELATED PLANS AND PROGRAMS

Congestion Management Program (CMP)

In June 1990, California voters approved Proposition 111, which established a nine percent per gallon gas tax, staged over a five-year period, for the purpose of funding transportation-related improvements statewide. In order to be eligible for the revenues associated with Proposition 111, the Congestion Management Program (CMP) legislation (originally AB 471, amended by 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 LACMTA adopted its most recent CMP in 2004.

The goal of the CMP is to promote a more coordinated approach to land use and transportation decisions. The law requires that the traffic generated by individual development projects be analyzed for potential impacts to the regional roadway system. According to the CMP, projects which meet the following criteria are required to be evaluated:

- All CMP arterial monitoring intersections, including monitored freeway on- or off-ramp intersections, where the proposed project will add 50 or more trips during either the AM or PM weekday peak hours (of adjacent street traffic).

- Mainline freeway monitoring locations where the project will add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The San Gabriel River Freeway (I-605) and the Artesia Freeway (State Route 91) located near the City designated in the Los Angeles County Congestion Management Program (LACMP). There are no intersections in the City designated as CMP monitoring intersections.

Highway Performance Monitoring System (HPMS)

The Highway Performance Monitoring System (HPMS) is a Federally-mandated inventory system and planning tool designed to assess the nation's highway system. HPMS is used as a management tool by state and Federal governments and local agencies to analyze the system's condition and performance. The HPMS data are used for allocation of Federal funds, identification of travel trends and future forecasts, Environmental Protection Agency air quality conformity tracking, and biennial reports to the United States Congress on the state of the nation's highways. The HPMS is administered by Caltrans, with additional technical data provided by local agencies.

Long Range Transportation Plan (LRTP)

The Long Range Transportation Plan (LRTP), prepared by MTA, is the blueprint for implementing future transportation improvements in Los Angeles County. It is a program of recommended transportation projects that assists decision-makers in understanding the options that are available for improving the transportation system. The LRTP recommends a balanced transportation program with a strong emphasis on public transit to meet the region's growing travel demands.

Regional Transportation Plan (RTP)

Under Federal law, SCAG must prepare a Regional Transportation Plan (RTP), which demonstrates how the region will meet Federal mandates, particularly air quality requirements. The RTP must be approved by Federal agencies in order to receive Federal transportation funds. Only projects and programs included in the RTP are eligible for Federal funding.

Regional Mobility Plan (RMP)

The Regional Mobility Plan (RMP) is part of an overall regional planning process that 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 elements: Growth Management, Transportation Demand Management, Transportation System Management, and Facilities Development. 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). The primary goal of the RMP is to improve transportation mobility levels.

Access Services

Access Services is a State-mandated local governmental agency created by Los Angeles County's public transit agencies to administer and manage the delivery of regional American with Disabilities Act (ADA) paratransit service. Access Services was established by 44 public fixed route transit operators in Los Angeles County. It is governed by a nine-member board appointed by the Los Angeles County municipal fixed route operators, the Los Angeles County local fixed route operators, the City of Los Angeles, the County of Los Angeles, the Transportation Corridor Representatives of the Los Angeles branch of the League of Cities, the Los Angeles County Commission on Disabilities, and the Coalition of Independent Living Centers. Access Services promotes access to all modes of transportation and provides quality ADA paratransit service on behalf of public transit agencies in Los Angeles County, including those serving Artesia.

METHODOLOGY

Most transportation related plans and programs are established with the goal of maintaining acceptable operating Level of Service (LOS) on the City's transportation system. Level of service is a qualitative indicator that is used to describe the prevailing operating conditions on a roadway. It is a comprehensive measure that is representative of the various levels of congestion and delay experienced by motorists. Level of service ranges from LOS A (excellent conditions) to LOS F (extreme congestion). Operation conditions street segments are evaluated using standard analysis methodologies, which result in number values and correspond to LOS letter designations. The acceptable LOS for roadways in the City of Artesia is LOS D.

Future Traffic Volumes

The methodology for evaluating future traffic volumes on the roadway segments in Artesia is based on the following major premises:

1. The Circulation Element is consistent with all other Elements of the General Plan, particularly the Land Use Element, such that there is an effective balance between the available transportation capacity and the travel generated by the build-out land uses.

2. The effects of increased traffic in the City due to growth and development in neighboring communities is taken into consideration. While "through" traffic is not encouraged, its presence must be recognized in order to ensure the Circulation Element is responsive.

3. 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.

A multi-step process was used, based on the following premises:

- The rate of traffic growth in Artesia is based on the general traffic volume growth factors listed in the Guidelines for CMP Transportation Impact Analysis in the 2004 Los Angeles County Congestion Management Program (LACMP).

- A growth rate of 0.7 percent per year was used to factor existing traffic volumes from 2007 to the planning horizon year (2020).

The traffic associated with development on the City's vacant or underdeveloped parcels was estimated and added to the background future traffic volumes. Further details are presented below.

5.4.3 EXISTING ENVIRONMENTAL SETTING

REGIONAL ACCESS

Exhibit 3-1, *Regional Location*, illustrates the City's regional setting and indicates the City is well served by regional freeways. Regional access to the City is provided via the Artesia Freeway (SR-91) and the San Gabriel River Freeway (I-605). The Artesia Freeway (SR-91), an east-west route, traverses the northern portion of the City. The San Gabriel River Freeway (I-605) provides north-south regional circulation beyond the City's jurisdiction.

LOCAL ACCESS

The City's circulation needs are served by a traditional grid system of north-south and east-west arterials, with approximately 0.5-mile spacing and signals at each arterial intersection. Smaller collector and neighborhood streets connect neighborhoods and commercial land uses to the arterial street system. The major transportation corridors of significant importance to the City are Pioneer Boulevard, Artesia Boulevard, 183rd Street, and South Street. All arterials extend through and beyond the boundaries of the City.

ROADWAY FUNCTIONAL CLASSIFICATION SYSTEM

The existing regional and local roadway network in Artesia is a hierarchical system of highways and local streets developed to provide regional traffic movement and local access. The following discussion provides a description of the functional classification of the facilities within the City.

An existing series of major and secondary streets and highways in the City and surrounding urban metropolitan area connect local neighborhood areas with adjacent communities and the region. The General Plan identifies a hierarchy of streets providing routes and road types consistent with those found throughout Los Angeles County. There are no scenic highways designated within the Artesia City boundaries.

The Artesia street system consists of the following six basic functional classes of roads incorporated in the City's street/road standards:

Freeways. A four or six lane divided arterial highway with full control of access and with grade separations at intersections. As the highest type of road facility, freeways provide maximum service and safety for through traffic. Freeways serve as the principal arterials of the inter- and intra-state system of highways, carrying traffic between cities, traffic generators, and points of interest. Freeway capacity is typically 67,000 ADT for a four (4) lane urban freeway and 100,000 ADT for six (6) lanes. (Assumes ten (10) percent peak hour, 60 percent directional 2,000 vehicles/hour lane capacity).

Strategically located within the northern portion of the City's corporate boundary, SR-91 provides convenient access east west to beach cities and Riverside, respectively. Outside the City, one-half mile to the west in the City of Cerritos, the I-605 offers access to the region in a north south direction.

Primary Highway (Major). A divided four-lane road, 100-foot right-of-way, with intersections at grade and partial control of access. Primary Highways serve as the highest type of facility carrying local traffic within communities. With emphasis on through traffic carrying capability, these roads serve as principal access routes to shopping areas, places of employment, community centers, recreational areas, and other places of assembly. Primary Highways include Artesia Boulevard. Primary Highway capacity is projected at 30,000 ADT.

Secondary Highway. An undivided four lane road, 80-foot right-of-way, with intersections at grade, and partial control of access. Secondary Highways serve as a secondary type of arterial facility carrying local through traffic within communities. These highways frequently serve as access to shopping areas, employment centers, recreational areas, residential areas, and places of assembly. Secondary Highways include Gridley Road. Secondary Highway capacity is projected at 20,000 ADT.

Primary Arterial Highway. Primary Arterial Highways in the City include Pioneer Boulevard and South Street. Primary Arterial Highway capacity is 25,000 ADT.

Secondary Arterial Highway. An undivided, four-lane road with intersections at grade and partial control of access. Secondary Arterial Highways serve as a secondary type of arterial facility carrying local through traffic within communities. These highways frequently serve as access to shopping areas, employment centers, recreational areas, residential areas, and places of assembly. Secondary Arterial Highways include Norwalk Boulevard, 166th Street, and 183rd Street. Secondary Arterial Highway capacity is 20,000 ADT.

Collector Road. A two lane undivided road with intersections at grade and designed to take a minimum interference of traffic from driveways. Collector Roads provide principal access to residential areas or connect streets of higher classifications to permit adequate traffic circulation. Collector Roads include 186th Street, 187th Street, and Elaine Avenue. Collector Road capacity is projected at 5,000 ADT. Traffic capacity for this road category is limited not by the physical capacity of the road section, but rather by the desirability of maintaining an acceptable traffic level, which will not adversely affect residential neighborhood qualities.

These existing roadway classes are illustrated on the *Circulation System Exhibit* (Page 60) of the 1993 General Plan Circulation and Public Infrastructure Element. Other roads, such as minor streets, access roads, private roads, and alleys, are not depicted due to their insignificant levels of traffic volumes.

In addition to these six basic functional classes of roads, Artesia recognizes County standards for lesser streets that serve particular types of land uses and for alleys. Table 5.4-1, *Right-of-Way and Roadway Widths*, lists these street types and their widths.

Table 5.4-1
Right-of-Way and Roadway Widths

Type of Street	Right-of-Way (Feet)	Roadway (Feet)
Residential Entrance from General Plan Highways, Collector Streets, Streets Adjacent to Schools, Multiple Residential Streets	63	40
Interior Local Streets (1 or 2 Family Residential	60	36
Cul-de-Sac Streets (Residential)	58	34
Industrial and Commercial Streets	80	64
Cul-de-Sac Streets (Industrial and Commercial)	64	46
Alleys	30	30
Source: RBF Consulting, City of Artesia General Plan Update Circulation and Mobility Element, July 20, 2010.		

EXISTING VOLUMES AND LEVELS OF SERVICE

The travel patterns in the City of Artesia are to a large extent influenced by the location of employment and population centers outside the City limits. These factors tend to create a significant travel demand on the City's highways and arterials. In addition, intra-city vehicle movement is significantly affected by the peak periods from commercial activities in the Los Cerritos Shopping Center.

Fifteen (15) roadway segments were selected for the evaluation of current traffic conditions in the City, and 24-hour traffic counts were conducted at the selected roadway segments. The evaluation methodology and analysis results are presented below.

Table 5.4-2, *Roadway Segment Analysis for Existing Conditions*, indicates the roadway segment analysis for existing conditions. All of the study area roadway segments are operating at LOS D or better under existing conditions.

Table 5.4-2
Roadway Segment Analysis for Existing Conditions

Street Segment	Existing Classification (Number of Lanes)	LOS E (Capacity)	Existing Conditions		
			ADT	V/C	LOS
Alburtis Avenue					
North of 183rd Street	Collector (2)	8,000	3,127	0.391	A
Pioneer Boulevard					
North of SR-91	Primary Arterial (4)	40,000	24,491	0.612	B
SR-91 to Artesia Boulevard	Primary Arterial (4)	40,000	32,581	0.815	D
Artesia Boulevard to 183rd Street	Primary Arterial (4)	40,000	22,325	0.558	A
183rd Street to 186th Street	Primary Arterial (4)	40,000	16,410	0.410	A
186th Street to 187th Street	Primary Arterial (4)	40,000	16,821	0.421	A
187th Street to 188th Street	Primary Arterial (4)	40,000	14,142	0.354	A
188th Street to South Street	Primary Arterial (4)	40,000	15,225	0.381	A
South of South Street	Primary Arterial (4)	40,000	16,637	0.416	A
Norwalk Boulevard					
South of South Street	Secondary Arterial (4)	30,000	24,472	0.816	D
176th Street					
West of Pioneer Boulevard	Collector (2)	8,000	4,500	0.563	A
183rd Street					
East of Norwalk Boulevard	Secondary Arterial (4)	30,000	14,219	0.474	A
South Street					
West of Pioneer Boulevard	Primary Arterial (4)	40,000	22,889	0.572	A
Pioneer Boulevard to Norwalk Boulevard	Primary Arterial (4)	40,000	24,087	0.602	B
East of Norwalk Boulevard	Primary Arterial (4)	40,000	23,438	0.586	A

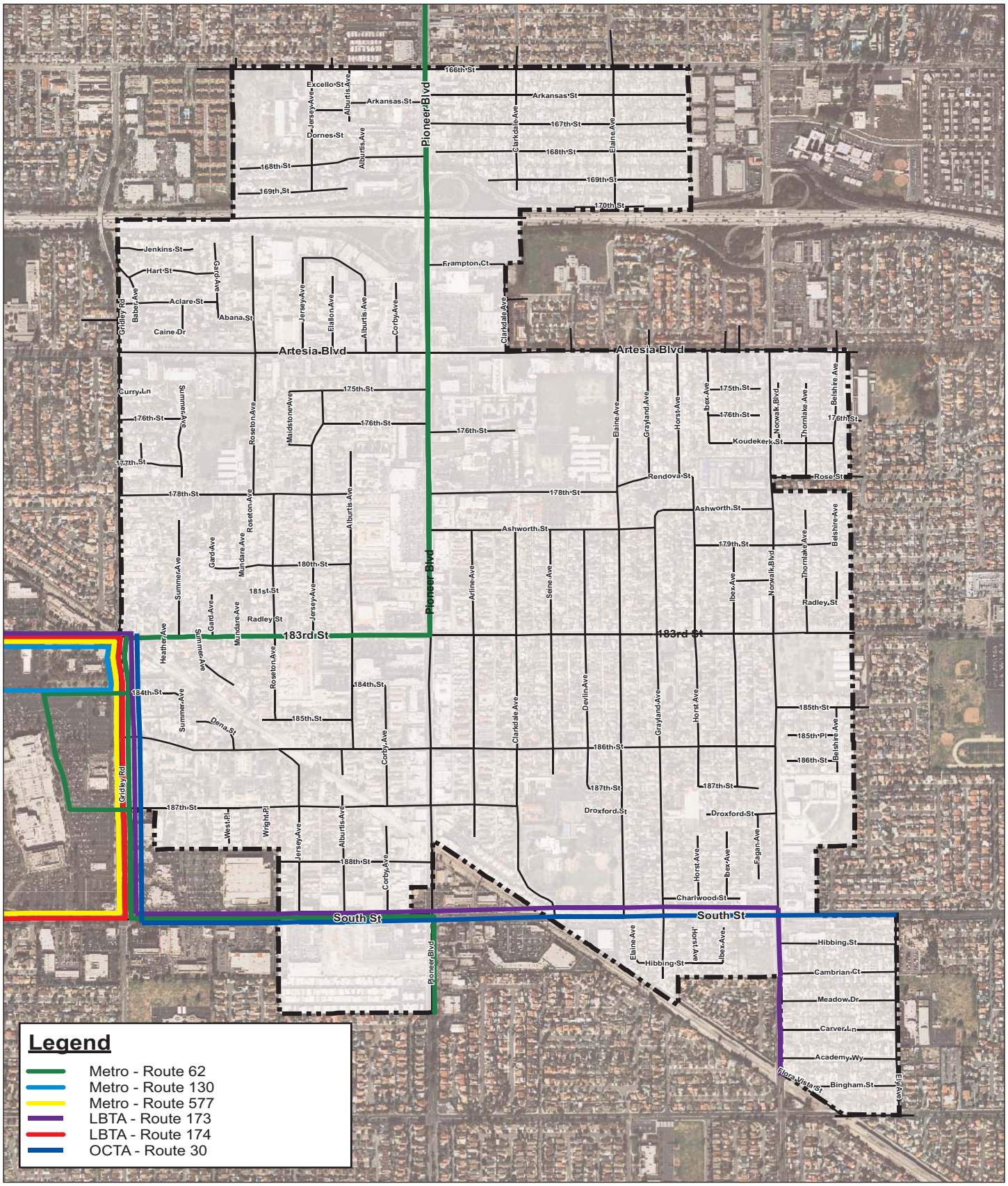
Note: LOS capacity thresholds are based on the San Diego Association of Governments (SANDAG) Congestion Management Program (CMP) Traffic Impact Study Guidelines.

Source: RBF Consulting, *City of Artesia General Plan Update Circulation and Mobility Element*, July 20, 2010.

PUBLIC TRANSIT

Public bus service is provided to Artesia by the Metropolitan Transportation Authority (MTA), the Orange County Transportation Authority (OCTA), the Long Beach Transit District, and the Norwalk Transit District. Expanded service and improved intercity routes make such alternative transportation accessible and inexpensive. Exhibit 5.4-1, *Bus Routes*, illustrates the City's bus routes.

The City of Artesia offers free-of-charge transportation service, the "Artesia Express," to senior citizens (60 years of age or older), and individuals with disabilities who are Artesia residents.
The Los Angeles County 2008 Long Range Transportation Plan, developed by Metro, identifies an opportunity to construct "environmentally-friendly high-speed transit" along the "Santa Ana West Branch" ROW from Union Station to Orange County that passes through Artesia. Currently the ROW is not being utilized for rail service. Construction of a commuter rail line would provide additional options for Artesia residents, providing a convenient connection to Downtown Los Angeles and Orange County.



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ARTESIA GENERAL PLAN UPDATE
PROGRAM ENVIRONMENTAL IMPACT REPORT

Bus Routes

Exhibit 5.4-1

BIKEWAYS

Currently, there are no designated bikeways within the City. However, there are Class II (bike lanes) adjacent to the City in the following locations:

- Pioneer Boulevard, south of 195th Street;
- 195th Street, east of Bloomfield; and
- South Street, east of Bloomfield.

There are Class I bike paths to the west of the City along the San Gabriel River and to the east of the City along Coyote Creek. The County Bicycle Transportation Strategic Plan identifies the opportunity to connect these bikeways through the creation of a new bikeway in Artesia.

The Los Angeles County 2008 Long Range Transportation Plan identifies an opportunity to construct a Class I bikeway along the "Santa Ana West Branch" ROW that passes through Artesia, in addition to the potential for developing transit along that ROW. This would create an off-street bikeway connection between the San Gabriel River and Coyote Creek bikeways. The Cerritos Bikeway System Route Map identifies this as a future Class I bike path.

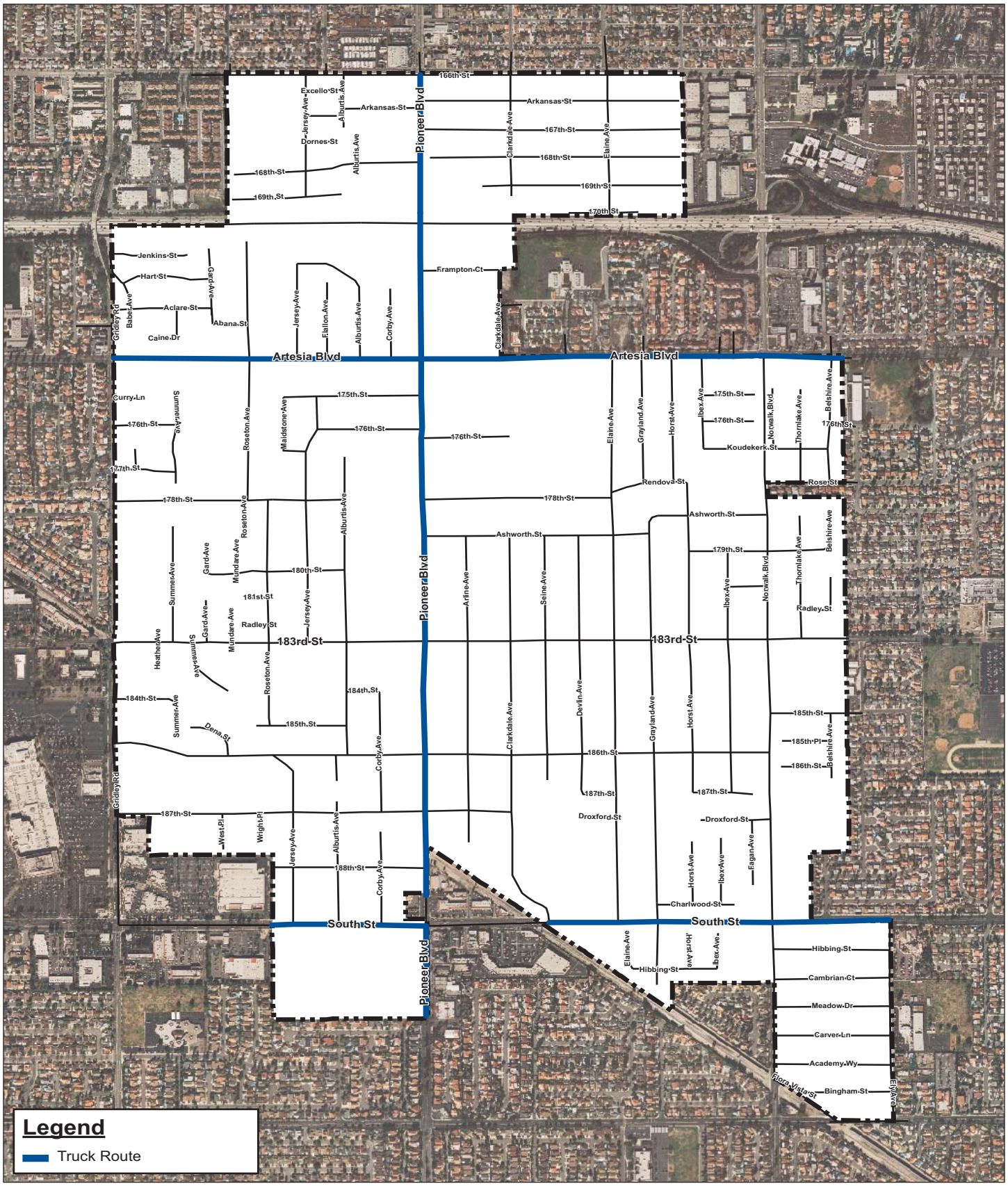
The Cerritos Bikeway System Route Map also shows future bikeways (Class II and III) along Artesia Boulevard between the San Gabriel River and Coyote Creek, with a gap through the City of Artesia. Other bikeways on this map that border on Artesia include:

- Future Class III bike route on Gridley from 166th Street to Del Amo Boulevard;
- Existing Class II bike lane on Pioneer Boulevard south of the railway ROW;
- Future Class III bike route on Norwalk Boulevard south of the ROW; and
- Existing Class III bike route on 195th Street between Pioneer Boulevard and Bloomfield Avenue that connects to the Coyote Creek bikeway via Class II bike lane.

Near the Artesia City limits, an existing Class II bike lane on South Street starts at Bloomfield Avenue and leads eastward to another access point on the Coyote Creek bikeway.

TRUCK ROUTES

The City has designed three roadways as truck routes to provide for the regulated movement of trucks through the City: Artesia Boulevard; Pioneer Boulevard; and South Street. Exhibit 5.4-2, *Truck Routes*, illustrates the City's truck routes. The designation of these roadways 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. The designation of truck routes does not prevent trucks from using other roads or streets to load or unload when such deviations are reasonable and necessary.



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ARTESIA GENERAL PLAN UPDATE
PROGRAM ENVIRONMENTAL IMPACT REPORT

Truck Routes

Exhibit 5.4-2

5.4.4 SIGNIFICANCE THRESHOLDS AND CRITERIA

Appendix G of the *CEQA Guidelines* contains the *Initial Study Environmental Checklist Form* used during preparation of the Project Initial Study; refer to Appendix 12.1, *Initial Study/Notice of Preparation*. The Checklist includes questions relating to traffic and circulation, which have been utilized as thresholds of significance in this Section. Accordingly, a significant environmental impact would occur if the Project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;

- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

- Result in inadequate emergency access;

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities; and/or

- Result in inadequate parking capacity.

Based on these significance thresholds and criteria, the Project's effects have been categorized as either "effects found not to be significant" or "potentially significant impact." Feasible mitigation measures, which could avoid or minimize potentially significant impacts are identified. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a "significant unavoidable impact."

5.4.5 PROJECT IMPACTS AND MITIGATION MEASURES

❑ GENERAL PLAN UPDATE POLICIES

The Circulation and Mobility Element Goals and Policies are outlined in Section 3.4.6, *Proposed General Plan Goals and Policies*. Additionally, the following Policies and Policy Actions are relevant to traffic and circulation, and have been proposed in the General Plan Update:

COMMUNITY DEVELOPMENT AND DESIGN ELEMENT

Land Use

Community Policy LU 1.3: Encourage active and inviting pedestrian-friendly street environments that include a variety of uses within commercial and mixed-use areas.

Policy Action LU 1.3.1: Enhance access, safety and the streetscape experience for pedestrians, bicyclists and transit riders; and focus improvements in areas with the highest need.

Policy Action LU 2.1.1: Maintain standards for circulation, noise, setbacks, buffer areas, landscaping and architecture to ensure compatibility between different uses.

COMMUNITY RESOURCES AND WELLNESS ELEMENT

Air Quality and Climate Change

Policy Action AQ 1.1.2: Continue to implement the provisions of the Transportation Demand Management Ordinance.

Policy Action AQ 1.2.1: Promote and encourage ridesharing activities within the community.

Policy Action AQ 2.1.1: Encourage alternate modes of transportation, including but not limited to light rail, vanpooling, carpooling, pedestrian walkways, and bicycling.

Policy Action AQ 2.1.2: Encourage alternative commute patterns.

Policy Action AQ 2.1.3: Consider alternative work schedules for City employees to reduce employee driving.

Policy Action AQ 2.1.4: Coordinate with neighboring jurisdictions to create an integrated system of bike routes through such improvements as signage, additional bicycle lanes and paths, and additional bicycle racks.

Policy Action AQ 2.1.5: Coordinate efforts to increase pedestrian activity through improvements that make walking more safe, convenient, and enjoyable, including sidewalks, accessibility ramps, benches, traffic-calming measures, landscaping, and convenient and safe transit stops.

Policy Action AQ 2.1.6: Coordinate with regional agencies to provide convenient access to commuter-rail and other transit opportunities.

Community Policy AQ 2.2: Promote a balance of residential, commercial, institutional and recreational uses with adjacencies that reduce vehicle miles traveled.

Policy Action AQ 2.2.1: Encourage mixed use developments that combine land uses such as residential, commercial, institutional and recreational uses, thereby improving convenience and reducing trip generation.

Policy Action AQ 2.2.2: Encourage infill development projects that create or support job centers and transportation nodes.

Policy Action AQ 2.2.3: Increase residential and commercial densities around transit facilities and major corridors.

SUSTAINABILITY ELEMENT

Urban Design

Community Policy SUS 3.5: Prioritize transit-oriented development within the city in accordance with SB375 and other planning initiatives from the State and Federal governments.

Transportation

COMMUNITY GOAL SUS 5: Reduce congestion within the City and maximize alternative forms of transportation.

Community Policy SUS 5.1: Decrease vehicle miles traveled by increasing per vehicle ridership and decreasing the number of trips by autos and trucks.

Policy Action SUS 5.1.1: Encourage alternative commute patterns.

Policy Action SUS 5.1.2: Wherever possible, encourage opportunities for "park-once" habits for business patrons. Reduce current subsidies to auto commuting by reducing parking required for new transit-oriented or mixed-use developments—with convenient parking reserved for carpoolers, bicycles, customers and guests.

Policy Action SUS 5.1.3: Consider alternative work schedules for City employees to reduce employee driving.

Policy Action SUS 5.1.4: Coordinate with neighboring jurisdictions to create an integrated system of bike routes, through such improvements as signage, additional bicycle lanes and paths, and additional bicycle racks.

Policy Action SUS 5.1.5: Improve walkability within the City with such elements as pedestrian-friendly streets and urban trails to link neighborhoods with recreation, business and civic areas.

Policy Action SUS 5.1.6: Coordinate efforts to increase pedestrian activity through improvements that make walking more safe, convenient, and enjoyable, including sidewalks, accessibility ramps, benches, traffic-calming measures, landscaping, and convenient and safe transit stops.

Policy Action SUS 5.1.7: Coordinate with regional agencies to provide convenient access to commuter-rail and other transit opportunities.

Community Policy SUS 5.2: Decrease congestion on local and regional roadways to improve safety, reduce emissions and maintain mobility.

Policy Action SUS 5.2.1: Prioritize development and implementation of a traffic signal synchronization and optimization program.

Environmental and Public Health

Policy Action SUS 6.1.3: Seek to ensure that a variety of amenities (e.g., park, restaurant, grocery, drug store, etc.) are located within ½ mile of all residents, and promote safe pedestrian and bike access.

❑ EFFECTS FOUND NOT TO BE SIGNIFICANT

In accordance with Section 15128, *Effects Not Found To Be Significant*, of the *CEQA Guidelines*, the following briefly discusses the reasons that various possible significant effects of the Project were determined not to be significant and were therefore not discussed in detail.

Threshold: *Would the Project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.*

The City of Artesia is 99 percent developed and any projected, future developments would primarily involve infill and redevelopment. Therefore, the proposed General Plan Update would not cause a change air traffic patterns, including either an increase in traffic levels or a change in location, which would result in substantial safety risks.

Threshold: *Would the Project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

The proposed changes to roadway classifications would not alter the City's current discretionary review process, which ensures compliance with minimum roadway and intersection design standards. Additionally, there are no design features and/or incompatible uses anticipated with any future developments. Notwithstanding, through the City's development review process, future developments would be evaluated to determine the appropriate land use permit for authorizing their use and the conditions for their establishment and operation. At a minimum, compliance with relevant Artesia Municipal Code (AMC) standards would be required.

Therefore, the proposed General Plan Update would not substantially increase hazards due to design feature or incompatible uses. A less than significant impact would occur in this regard.

All future development proposals would be evaluated on a case-by-case basis for adequate circulation and traffic flow. Access to development sites would be required to comply with all City design standards and would be reviewed by the City and the Los Angeles County Fire Department to ensure that inadequate design features or incompatible uses do not occur. The City and the Los Angeles County Fire Department would review future development, in order to ensure that they are designed to meet adopted standards and provide adequate emergency access. Therefore, implementation of the proposed General Plan Update would not result in significant impacts involving inadequate design features or incompatible uses.

Threshold: *Would the Project result in inadequate emergency access.*

All future development would be evaluated to determine the appropriate land use permit for authorizing their use and the conditions for their establishment and operation. At a minimum, future development would be subject to compliance with the AMC's access requirements, in order to ensure that adequate emergency access is provided. Therefore, the proposed General Plan Update would not result in inadequate emergency access and a less than significant impact would occur in this regard.

Threshold: *Would the Project result in inadequate parking capacity.*

The AMC specifies the parking requirements for residential and non-residential developments, in order to ensure that all land uses provide adequate off-street parking facilities, loading areas, and vehicle movement areas. Through the City's development review process, all future development would be evaluated, in order to ensure compliance with AMC standards. Therefore, the proposed Project would not result in inadequate parking capacity and a less than significant impact would occur in this regard.

❑ POTENTIALLY SIGNIFICANT IMPACTS

TRAFFIC LOAD AND STREET SYSTEM

■ **THE PROPOSED GENERAL PLAN UPDATE COULD CONFLICT WITH AN APPLICABLE PLAN, ORDINANCE, OR POLICY ESTABLISHING MEASURES OF EFFECTIVENESS FOR THE PERFORMANCE OF THE CIRCULATION SYSTEM.**

Impact Analysis:

Proposed Roadway Classifications

The General Plan Update proposes to modify the City's roadway functional classification system to accommodate the future circulation needs. The proposed Artesia street system would consist of six basic functional classes of roads incorporated in the City's street/road standards. The six

basic types, cross-sections, and level of service thresholds are detailed in Table 5.4-3, *Proposed Street Classifications and Level of Service Thresholds*.

Table 5.4-3
Proposed Street Classifications and Level of Service Thresholds

Street Classification	Lanes	Cross Sections[1] (Curb-to-Curb/Right-of-Way)	Daily Level of Service (LOS)[1]				
			A	B	C	D	E
Primary Highway/ Primary Arterial	6	102' - 108' / 122' – 128'	25,000	35,000	50,000	55,000	60,000
Primary Highway/ Primary Arterial	4	78' - 82' / 98' – 102'	15,000	21,000	30,000	35,000	40,000
Secondary Highway / Secondary Arterial	4	64' – 72' / 84' – 92'	10,000	14,000	20,000	25,000	30,000
Collector (with TWLTL)[2]	2	50' – 70'	5,000	7,000	10,000	13,000	15,000
Collector (no TWLTL)	2	40' / 60'	2,500	3,500	5,000	6,500	8,000

1. Street cross-sections and LOS thresholds are based on the San Diego Association of Governments (SANDAG) Congestion Management Program (CMP) Traffic Impact Study Guidelines.
2. TWLTL = Two-Way Left-Turn Lane (continuous lane painted in center median)

Source: RBF Consulting, *City of Artesia General Plan Update Circulation and Mobility Element*, July 20, 2010.

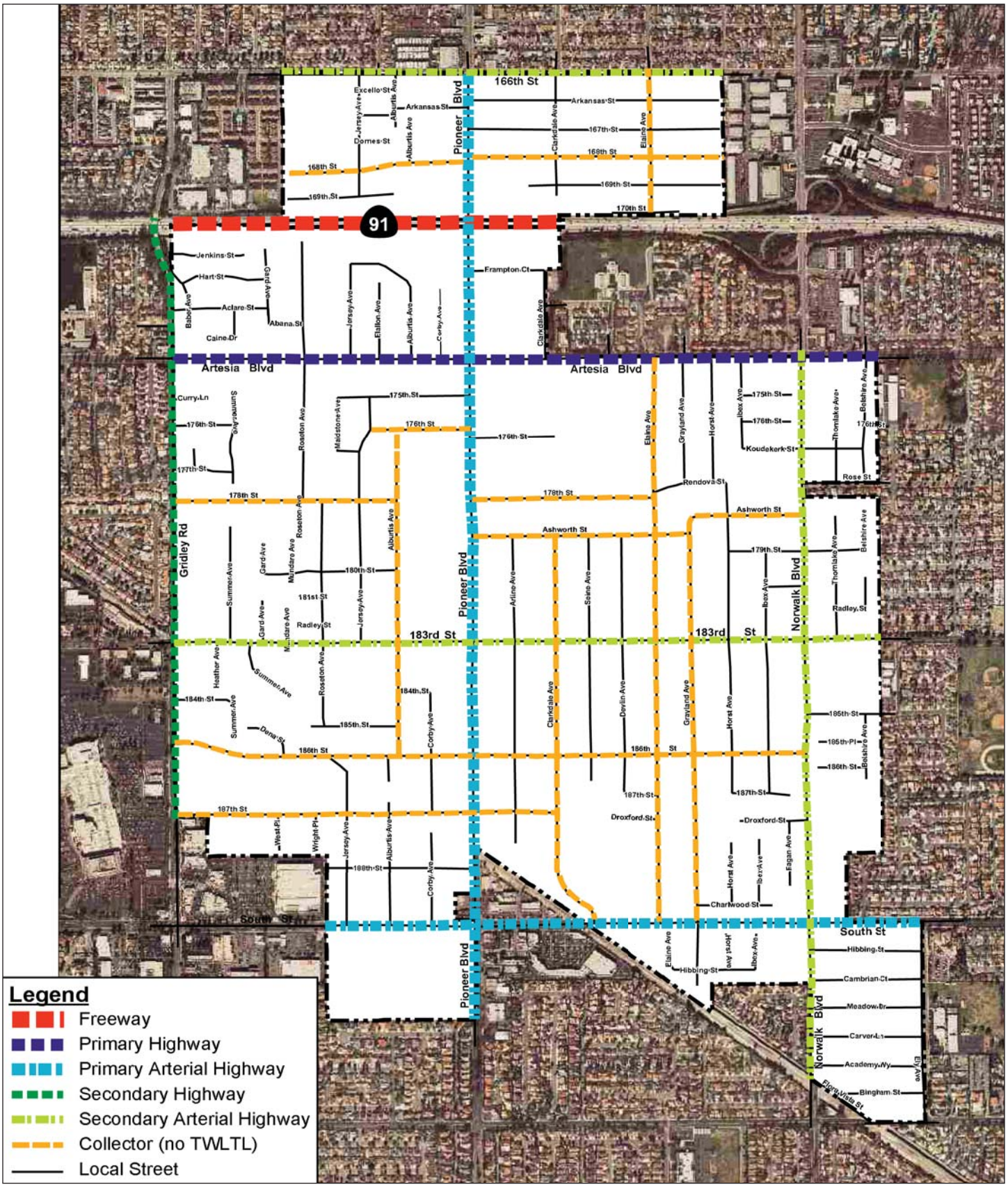
Additionally, the proposed roadway classification system is illustrated on Exhibit 5.4-3, *Proposed Street Classifications*, and described, as follows:

Freeways. A four or six lane divided arterial highway with full control of access and with grade separations at intersections. As the highest type of road facility, freeways provide maximum service and safety for through traffic. Freeways serve as the principal arterials of the inter- and intrastate system of highways, carrying traffic between cities, traffic generators, and points of interest.

Strategically located within the northern portion of the corporate boundary of the City, the 91 Freeway provides convenient access east-west to beach cities and Riverside, respectively. Within one-half mile to the west of the City in Cerritos, the 605 Freeway offers access to the region in a north-south direction.

Freeway capacity is typically 67,000 ADT for a 4 lane urban freeway and 100,000 for 6 lanes.

Primary Highway/Primary Arterial Highway. A divided six- or four-lane road with intersections at grade and partial control of access. Primary Highways and Primary Arterial Highways serve as the highest types of facilities carrying local traffic within communities, with emphasis on through traffic carrying capability. These roads serve as principal access routes to shopping areas, places of employment, community centers, recreational areas, and other places of assembly. Primary Highways include Artesia Boulevard. Primary Arterial Highways in the City include Pioneer Boulevard and South Street.



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07/10 • JN 10-105039

ARTESIA GENERAL PLAN UPDATE
PROGRAM ENVIRONMENTAL IMPACT REPORT

Proposed Street Classifications

Exhibit 5.4-3

Secondary Highway/Secondary Arterial Highway. An undivided four-lane road with intersections at grade and partial control of access. Secondary Highways and Secondary Arterial Highways serve as secondary types of arterial facilities carrying local through traffic within communities. These highways frequently serve as access to shopping areas, employment centers, recreational areas, residential areas, and places of assembly. Secondary Highways include Gridley Road. Secondary Arterial Highways include Norwalk Boulevard, 166th Street, and 183rd Street.

Collector Road. A two lane undivided road with intersections at grade and designed to take a minimum interference of traffic from driveways. Collector Roads provide principal access to residential areas or connect streets of higher classifications to permit adequate traffic circulation. Collector Roads include 186th Street, 187th Street, and Elaine Avenue.

Future Land Use Trip Generation

Artesia is generally fully developed, although some parcels are still vacant, or are underdeveloped and have the potential for further development. Table 5.1-3, *Comparison of General Plan Update and Existing Conditions*, compares the General Plan Update's anticipated growth in residential and non-residential uses to existing 2010 conditions. As indicated in Table 5.1-3, the General Plan Update would increase the City's existing housing inventory by 338 DU and non-residential floor area by approximately 416,017 SF.

Buildout Volumes

The City's build-out circulation system is assumed to be the same network that is currently in place. The volume of trips that would be generated under buildout conditions was calculated and distributed on the surrounding road network; refer to Table 5.4-4, *Roadway Segment Analysis for Buildout Conditions*.

Exhibit 5.4-4, *Roadway Service Level of Service Impacts*, illustrates the locations of the impacted roadway segments.

Buildout Daily Traffic Conditions

Roadway LOS was determined for the build-out year using the same methodology as that used for the analysis of existing conditions. Table 5.4-4 outlines the roadway segment analysis for projected traffic conditions at buildout of the future land use development anticipated in the General Plan Land Use Element. Review of Table 5.4-4 indicates that all study roadways would continue to operate at LOS D or better under buildout conditions, with the exception of two segments: Pioneer Boulevard (SR-91 to Artesia Boulevard); and Norwalk Boulevard (south of South Street).

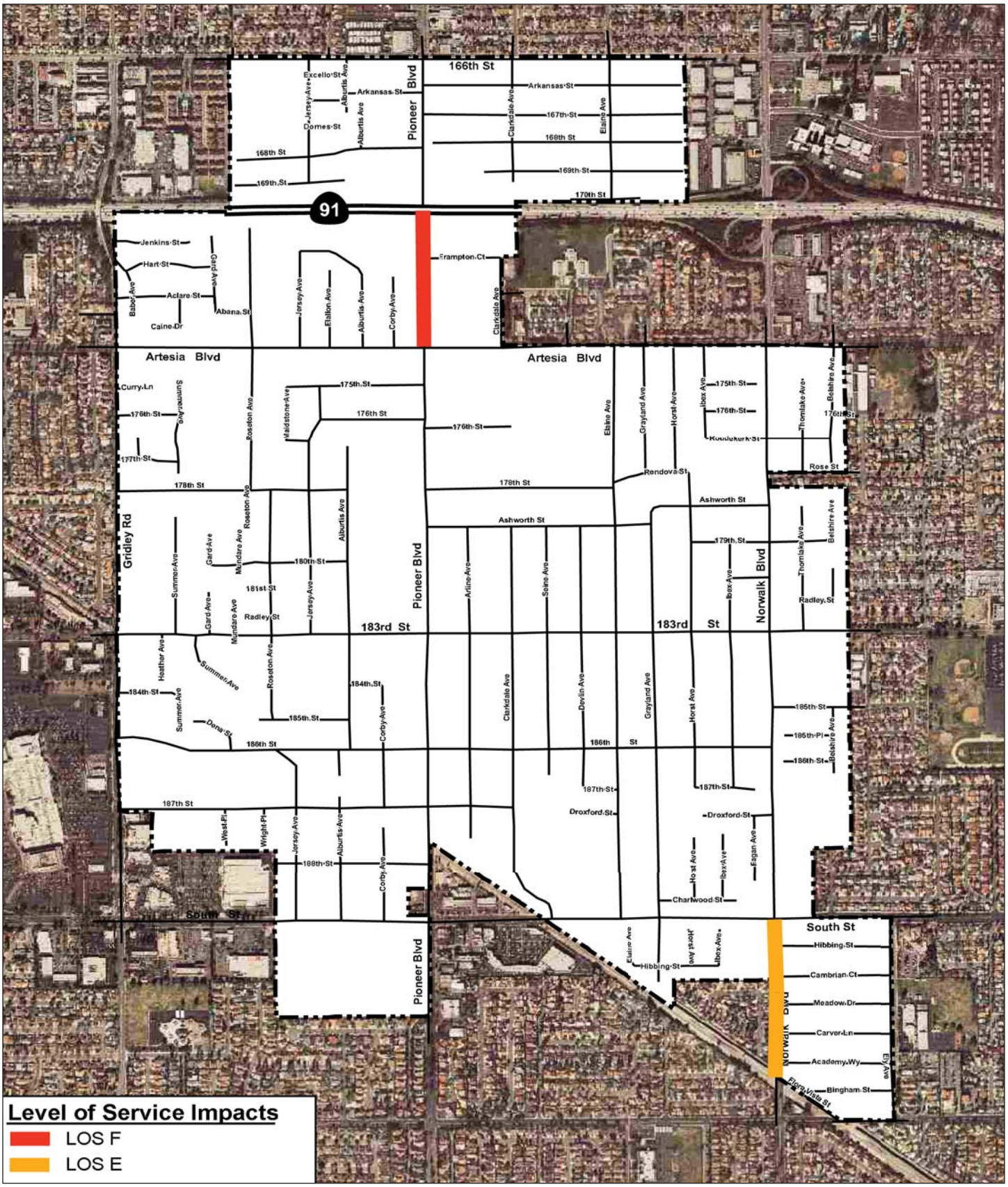
Table 5.4-4
Roadway Segment Analysis for Buildout Conditions

Street Segment	LOS E (Capacity)	Existing Conditions			Buildout Conditions		
		ADT	V/C	LOS	ADT	V/C	LOS
Alburtis Avenue							
North of 183rd Street	8,000	3,127	0.391	A	3,773	0.472	A
Pioneer Boulevard							
North of SR-91	40,000	24,491	0.612	B	29,335	0.733	C
SR-91 to Artesia Boulevard	40,000	32,581	0.815	D	**41,593**	**1.040**	**F**
Artesia Boulevard to 183rd Street	40,000	22,325	0.558	A	28,699	0.717	C
183rd Street to 186th Street	40,000	16,410	0.410	A	21,468	0.537	A
186th Street to 187th Street	40,000	16,821	0.421	A	21,781	0.545	A
187th Street to 188th Street	40,000	14,142	0.354	A	18,477	0.462	A
188th Street to South Street	40,000	15,225	0.381	A	19,657	0.491	A
South of South Street	40,000	16,637	0.416	A	18,951	0.474	A
Norwalk Boulevard							
South of South Street	30,000	24,472	0.816	D	**28,273**	**0.942**	**E**
176th Street							
West of Pioneer Boulevard	8,000	4,500	0.563	A	5,146	0.643	B
183rd Street							
East of Norwalk Boulevard	30,000	14,219	0.474	A	16,198	0.540	A
South Street							
West of Pioneer Boulevard	40,000	22,889	0.572	A	26,957	0.674	B
Pioneer Boulevard to Norwalk Boulevard	40,000	24,087	0.602	B	27,833	0.696	B
East of Norwalk Boulevard	40,000	23,438	0.586	A	26,854	0.671	B

Note: Deficient level of service indicated in **bold**.
(1) Los capacity thresholds are based on the San Diego Association of Governments (SANDAG) Congestion Management Program (CMP) Traffic Impact Study Guidelines.

Buildout Daily Traffic Conditions Mitigated

As concluded above, the LOS would be below the acceptable threshold of LOS D for the specified segments of Pioneer and Norwalk Boulevards. The goals and objectives of the Circulation Element are to implement proposed circulation improvements and provide for maintenance and future improvements to the circulation system as necessary. Traffic volumes would increase gradually over time and would require monitoring in order to determine the timing for implementing the necessary improvements to achieve LOS D or better. With monitoring of the traffic growth, the City would be able to plan and accommodate the necessary improvement when the levels of congestion are reached and the improvement becomes essential. To the extent that future development contributes to the need for the improvement, a fair-share contribution to the cost of the improvement can be made a condition of approval for future developments.



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07/10 • JN 10-105039

ARTESIA GENERAL PLAN UPDATE
PROGRAM ENVIRONMENTAL IMPACT REPORT

Roadway Level of Service Impacts

Exhibit 5.4-4

All future development would be subject to compliance with the General Plan Update Policies and Policy Actions outlined above, which would ensure that adequate transportation facilities are available to meet the demands created by the new development. With implementation of the recommended mitigation, and continued compliance with the proposed General Plan Update Policies and Policy Actions, the proposed General Plan Update would not cause an increase in traffic volumes, which would be substantial in relation to the existing traffic load and capacity of the street system, and a less than significant impact would occur in this regard.

Mitigation Measures:

TR-1 The City shall monitor traffic growth along Pioneer Boulevard (SR-91 to Artesia Boulevard) and Norwalk Boulevard (south of South Street) on an ongoing basis, in order to determine timing for implementation of the improvements necessary to achieve a LOS D or better.

TR-2 To the extent that future development contributes to the need for improvements to Pioneer Boulevard (SR-91 to Artesia Boulevard) and Norwalk Boulevard (south of South Street), a fair-share contribution to the cost of the improvements shall be made a condition of approval for future developments.

Level of Significance: Less Than Significant With Mitigation Incorporated.

CONSISTENCY WITH CMP, AQMP, AND RMP

- **IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE COULD CONFLICT WITH AN APPLICABLE PLAN, ORDINANCE, OR POLICY ESTABLISHING MEASURES OF EFFECTIVENESS FOR THE PERFORMANCE OF THE CIRCULATION SYSTEM.**

Impact Analysis: The City of Artesia is required to demonstrate compliance with the Los Angeles County Congestion Management Program (LACMP). I-605 and SR-91 are the only routes in or near the City of Artesia designated in the Los Angeles County Congestion Management Program (LACMP). There are no intersections in Artesia designated as CMP monitoring intersections.

The CMP is directly linked to transportation issues, with requirements that all new developments mitigate their traffic impacts on the surrounding street system. The CMP includes issues such as LOS standards, coordination with other jurisdictions, TDM ordinances and application, monitoring conditions, and mitigation of impacts. The Air Quality Management Plan (AQMP) supplements the CMP program, although its primary focus is on achieving and maintaining air quality standards. The goal of the Regional Mobility Plan (RMP) is to improve transportation mobility levels, with the intent of giving priority to all transit (bus and rail) and ride sharing (HOV) projects over mixed-flow highway capacity expansion projects.

There is a potential for short-term impacts to Air Quality Management Plan (AQMP) at project specific levels. Analyses would be conducted at the project specific level to determine the short-term impacts, if any. Mitigation measures and monitors would be implemented to mitigate the project-specific short-tem impacts and reduce the long-term impacts to less than significant levels; refer to Section 5.5, *Air Quality*.

Overall, these programs acknowledge that land use, transportation, and air quality issues are all interrelated. The requirements under each of these programs ensure a safe and efficient transportation system, which is the primary goal of the Circulation Element of the proposed General Plan Update. Therefore, implementation of the proposed General Plan Update would result in less than significant impacts regarding consistency with the CMP, AQMP, or RMP. In addition, General Plan Update would be in furtherance of CMP, AQMP, and RMP objectives.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant.

TRANSIT SYSTEMS

- **IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE COULD CONFLICT WITH ADOPTED TRANSIT PLANS, GUIDELINES, POLICIES, OR STANDARDS.**

Impact Analysis: Potential impacts to transit service/facilities could include disruptions to existing transit service, interference with planned transit facilities, conflicts with adopted transit systems plans, guidelines, policies, or standards, and creation of demand for public transit beyond the available capacity.

Existing Transit Service. Exhibit 5.4-1, *Bus Routes*, illustrates the bus routes in Artesia. The proposed General Plan Update would not interfere with access to any of these routes. The proposed Project would enhance transit services by improving circulation and access within the City. Further, the proposed General Plan Update would not cause any significant impacts along the roadway segments that serve the transit routes. Therefore, impacts to existing transit service would be less than significant in this regard.

Planned Transit Service. The Project area is currently served by bus transit. There are no planned transit facilities beyond those that currently exist within the City. However, the General Plan Update proposes strategies to reduce vehicle miles traveled be promoting a balance of residential, commercial, institutional, and recreational uses with adjacencies that reduce vehicle miles traveled. To this end, the General Plan Update proposes to increase residential densities around bus transit facilities and major corridors. Thus, impacts to planned transit service would be less than significant.

Adopted Transit System Plans, Guidelines, Policies, or Standards. The General Plan Update establishes various Goals, Policies, and Actions regarding transit, as outline above. The General Plan Update would accommodate other forms of transportation, beyond the automobile, within the City. As stated, bus lines currently serve the City. The project proposes strategies to improve transit service and pedestrian access within the City. Overall, the City would encourage pedestrian and bicycle activity, as well as the use of public transit. Impacts would be less than significant in this regard.

Demand for Public Transit Service. The proposed General Plan Update would increase population and employment in the City, thus, increasing the demand for transit service. Although this incremental growth in transit trips is anticipated, the amount of transit trips generated would be accommodated within existing capacity provided. Impacts would be less than significant in this regard. Potential impacts would be further minimized following compliance with General Plan Update Policies and Policy Actions outlined above, which would support alternative transportation (public transit) and ensure that public transportation needs are accounted for, as development occurs.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant.

BICYCLE ROUTES

- **IMPLEMENTATION OF THE PROPOSED GENERAL PLAN UPDATE COULD CONFLICT WITH ADOPTED PLANS, GUIDELINES, POLICIES, OR STANDARDS RELEVANT TO BICYCLE PATHS.**

Impact Analysis: As discussed above, there are no designated bikeways within the City. Therefore, implementation of the proposed General Plan Update would not impact an existing facility. Notwithstanding, the General Plan Update has specified as a Goal to increase awareness and use of alternate forms of transportation to circulate in the City and to/from surrounding communities. To this end, the General Plan Update proposes Policies and Policy Actions that encourage bicycling as an alternative mode of transportation in the City. Namely, Policy Action CIR 4.2.4 requires that alternate modes of transportation be encouraged, including but not limited to light rail, vanpooling, carpooling, pedestrian walkways, bicycling, and Transportation Demand Management plans and programs. Policy Action SUS 5.1.4 requires coordination with neighboring jurisdictions to create an integrated system of bike routes, including signage, additional bicycle lanes and paths, and additional bicycle racks. Implementation of the proposed General Plan Update would not conflict with adopted policies, plans, or programs supporting alternative transportation (i.e., bicycle routes) and a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation is required.

Level of Significance: Less Than Significant.

5.4.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Traffic and Circulation impacts associated with implementation of the proposed General Plan Update would be less than significant following compliance with the proposed Policies, Policy Actions, and recommended mitigation measures.

5.4.7 SOURCES CITED

City of Artesia, *City of Artesia General Plan 1993*, 1993.

RBF Consulting, *City of Artesia General Plan Update*, July 20, 2010.