

City of Fullerton General Plan

CIRCULATION

TABLE OF CONTENTS

<u>SECTION</u>		<u>PAGE</u>
1	INTRODUCTION.....	C-1
	1.1 Purpose.....	C-1
	1.2 Overview.....	C-1
2	THE ARTERIAL HIGHWAY SYSTEM.....	C-2
	2.1 Functional Classifications.....	C-2
	2.2 Level of Service.....	C-4
	2.3 Existing Traffic Conditions.....	C-4
	2.3.1 Intersection Analysis.....	C-5
	2.4 Arterial Highway System Issues.....	C-5
	2.4.1 Relationship to Land Use Element.....	C-5
	2.4.2 Freeway Operations and Access.....	C-5
	2.4.3 Residential Street Traffic Control.....	C-7
3	THE ARTERIAL HIGHWAY SYSTEM PLAN.....	C-7
	3.1 Forecast Future Traffic Conditions.....	C-7
	3.2 Deficient Intersections and Future Improvements Required.....	C-9
	3.2.1 Intersection Improvement Plan Process.....	C-9
	3.2.2 Enhanced Capacity Intersection Concept.....	C-12
	3.3 Exception Intersections.....	C-14
	3.3.1 Downtown Fullerton.....	C-14
	3.3.2 Congestion Management Plan Intersections.....	C-14
	3.4 Congestion Management Plan/Measure M Implementation.....	C-14
	3.4.1 Congestion Management Program.....	C-15
	3.4.2 Measure M.....	C-15
4	ALTERNATIVE TRANSPORTATION PLAN.....	C-16
	4.1 Introduction.....	C-16
	4.2 Public Transit.....	C-16
	4.3 Fullerton Municipal Airport.....	C-19
	4.4 Bicycle Master Plan.....	C-19
	4.4.1 Existing Bikeway Facilities.....	C-21
	4.4.2 Bicycle Safety.....	C-21
	4.4.3 Bikeway Classifications.....	C-21
	4.4.4 Bikeway Design Standards.....	C-21
	4.4.5 Bicycle Facilities in Private Developments.....	C-22
	4.4.6 Bikeway Implementation and Construction.....	C-22

City of Fullerton General Plan

CIRCULATION

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
5 CIRCULATION ELEMENT GOALS, POLICIES AND PROGRAMS.....	C-24
Overall Approach.....	C-24
Non-Automobile Transportation.....	C-27
Public Transit.....	C-30
Airport Operations.....	C-31
Growth and Traffic Management.....	C-32

LIST OF EXHIBITS

<u>EXHIBIT</u>	<u>PAGE</u>
C-1 STUDY INTERSECTION LOCATIONS.....	C-6
C-2 CIRCULATION ELEMENT MAP.....	C-8
C-3 PROPOSED INTERSECTION IMPROVEMENT LOCATIONS.....	C-11
C-4 ENHANCED CAPACITY INTERSECTION RIGHT-OF-WAY.....	C-13
C-5 URBAN RAIL.....	C-18
C-6 MASTER PLAN OF BIKEWAYS.....	C-20

LIST OF TABLES

<u>TABLE</u>	<u>PAGE</u>
C-1 FUNCTIONAL CLASSIFICATIONS.....	C-3
C-2 PEAK HOUR LOS DESIGNATIONS.....	C-4
C-3 PROJECTED DEFICIENT INTERSECTION LOS WITH GENERAL PLAN BUILDOUT.....	C-10

CIRCULATION

I. INTRODUCTION

1.1 Purpose

The General Plan Circulation Element contains the City's overall transportation system plan. 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 continues to grow.

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 persons and goods throughout the City. The Element establishes official City policy which:

- Identifies facilities required to serve present and future vehicular and non-vehicular travel demand in the City;
- Identifies linkage between alternative modes of transportation and feasible alternative transit strategies;
- Identifies construction standards for circulation facilities; and
- Identifies strategies to implement the City's circulation system.

1.2 Overview

The Circulation Element describes existing circulation conditions in the City, establishes standards for implementation and future improvements in conjunction with planned growth, and provides a method for measuring system performance for future updates. The Element considers both the physical requirements of the transportation system (roadway facility type, number of lanes, etc.), operational issues such as the provision of transit services, and programs and policies which encourage use of alternatives transit modes.

The Circulation Element is organized in the following sections:

- **Arterial Highway System** - Provides an overview of the City's existing roadway system and the issues associated with vehicular traffic in the City.

- **Arterial Highway System Plan** - Includes a description of the forecast travel demand in the City at buildout and the circulation system measures necessary to serve that demand.
- **Alternative Transportation Plan** - Provides an overview of existing non-vehicular and alternative travel modes in the City and related issues. Includes an analysis of bikeways, public transit, and air travel. Also describes future alternative transportation needs and the strategies for implementation.
- **Goals, Policies and Programs** - Includes a description of the City's policies for placement, size and design of roadways, intersections, bikeways, sidewalks and other components of the circulation system, as well as implementation programs and strategies.

2 THE ARTERIAL HIGHWAY SYSTEM

2.1 Functional Classifications

The City's roadways are categorized into the following functional classifications:

1. An arterial highway network ("Major" and "Primary" arterials) which provides for through traffic movement between and across urban areas, along with limited direct access to abutting land uses, subject to controls of ingress, egress, and curb use.
2. A secondary highway network ("Secondary" arterials) which provides for traffic distribution between arterial and local residential streets, along with controlled access to abutting property.
3. A local street network ("local collector streets") which provides for direct access to abutting land uses and for local traffic movement.

The functional classification of each street is determined by anticipated future traffic volumes and implications of adjacent land uses. The classification of each roadway is designated so that the ultimate roadway capacity will support anticipated future traffic volumes at an acceptable level of service (LOS).

The four highway designations within Fullerton (major, primary, secondary arterial and local collector streets), as well as residential streets and truck routes are summarized in the following table. It is important to note that additional right-of-way may be required wherever an arterial highway coincides with an adopted route for an additional public facility (e.g., bikeways or recreational trails), or for a scenic highway.

The functional classification system is shown in Exhibit C-2 and is defined in greater detail in Section 4.9 of the General Plan EIR.

**TABLE C-1
FUNCTIONAL CLASSIFICATIONS**

Facility Type	Typical Daily Volume Accommodated		Designated Curb-to-curb Width	Designated Right-of-Way Width	Designated # of Through Lanes	Function
Major Arterial Highway	30,000	45,000	84 feet**	100 feet**	Six Divided	Carries both local traffic and non-local commuter traffic. Direct access to abutting land uses is discouraged.
Primary Arterial Highway	20,000	30,000	64 feet*	80 to 84 feet*	Four Divided	Similar to Major Arterial, but are designated where level of traffic is not enough to warrant a Major Arterial.
Secondary Arterial Highway	10,000	20,000	64 feet*	80 to 84 feet*	Four Undivided	Collects and routes traffic from the local street system to the arterial system. Some also serve as through routes. All provide more direct access than Majors or Primaries.
Local Collector Street	None	10,000	Varies	36-40 feet	Two	Collects and routes local traffic to the arterial system, with limited non-local through traffic.
Residential Street	None	Varies	Varies, typically 36 feet	Varies typically 50 to 60 feet	Two	Sole function is to serve abutting residential land uses. All dedicated residential streets, except for specially designated "rural streets," are designed to have sidewalks and curbs constructed within a right-of-way of between 50 to 60 feet. Residential streets under private ownership may differ from the City's normal design standards.
Truck Routes						These routes direct large trucks onto specially constructed roadways. The routes are typically distant from residential areas and other sensitive land uses. The only designated truck route within the City limits is Imperial Highway, thus drivers must use the shortest possible route to arrive at their destination from Imperial Highway. Traffic levels along Imperial Highway in 1993 ranged from 24,000 to 35,000 ADT.

* Designated widths provide for optimum lane widths and to satisfy A.D.A. access requirements.

** Minimum widths necessary to meet the criteria for major arterial capacity.

It is important to note that the volume ranges for the facility types overlap one another. There is no clear dividing line between facility types, which determines exactly when a roadway classification should be changed. Rather, many factors should be taken into account beyond traffic volumes, including roadway width, adjacent land uses, number of driveways, presence of on-street parking, proximity to freeways and intersection service levels. The ranges shown in Table C-1 are planning guides.

2.2 Level of Service

Level of service (LOS) is a qualitative measure describing operational conditions of a traffic stream or intersection in terms of congestion or delay experienced by traffic. Service levels range from A to F, with A representing excellent operating conditions and free flow, and F representing extreme congestion and delay. Table C-2 describes traffic level flow quality at different levels of service. This criterion is utilized for evaluating land use and circulation system changes, and is the basis for General Plan circulation recommendations.

TABLE C-2 PEAK HOUR LOS DESIGNATIONS	
LOS	Traffic Flow Quality
A	No physical restriction on operating speeds.
B	Stable flow with few restrictions on operating speed.
C	Stable flow with some restrictions on speed and lane changing due to higher volumes of traffic.
D	Approaching unstable flow conditions with little freedom to maneuver.
E	Absolute capacity of the road. Characterized by unstable flow, lower operating speeds than LOS D, and some momentary stoppages.
F	Forced flow operation (more traffic demand than there is capacity on the road) where the roadway acts as a storage area and many stoppages occur.

In Orange County, the goal for design capacity is to provide LOS C on arterial highway links with the intent of maintaining a level of service D through intersections. However, there is no official LOS standard for arterial links (which is the mid-block location). Instead, LOS standards are determined by intersection capacity to volume ratio. The City, as part of its 1994 General Plan Update, has determined LOS D is acceptable with the exception of Congestion Management Program intersections and certain intersections located in the historic downtown area, which have an acceptable LOS standard of E.

2.3 Existing Traffic Conditions

As part of the 1994 General Plan Update, an analysis of existing traffic conditions was undertaken. The analysis provides the base traffic conditions upon which future growth has been projected in order to determine future roadway needs.

A detailed description of the existing right-of-way configurations of the arterial system and study intersections in the City is found in the General Plan EIR.

2.3.1 Intersection Analysis

Signalized intersections are generally the most critical element affecting a roadway system's capacity. The most critical time period occurs when traffic flow reaches peak volume. This generally transpires during the morning and evening commute periods of 7-9 AM and 4-6 PM, Monday through Friday.

Fifty-nine intersections were analyzed for the AM and PM peak hour LOS as part of the existing conditions analysis. The 59 intersections represent the City's network of modeled intersections for ongoing traffic analysis. Exhibit C-1 identifies the study intersection locations.

Detailed LOS data for each of the 59 study intersections in the City as of October 1991 and September 1992, followed by a final check set in July 1993, are presented in the General Plan EIR. During the AM peak hour, 58 intersections operated at LOS D or better, while the intersection of the SR-57 Freeway Northbound Off-Ramp at Imperial Highway operated at LOS F. During the PM peak hour, 53 intersections operated at LOS D or better, while the following six intersections operated at LOS E or F:

- Harbor Boulevard/Imperial Highway (CMP Intersection)
- Harbor Boulevard/Bastanchury Road
- Brea Boulevard/Bastanchury Road
- Raymond Avenue/Orangethorpe Avenue
- State College Boulevard/Yorba Linda Boulevard
- State College Boulevard/Chapman Avenue

2.4 Arterial Highway System Issues

Some of the major issues of importance to the City with respect to the future transportation system are discussed below.

2.4.1 Relationship to Land Use Element

The arterial highway system of the City must have sufficient capacity to serve the expected number of trips to be generated by future growth. Results of analysis of the 1994 Land Use Plan on the 1981 Circulation Element Plan, assuming full buildout of that Plan, indicate that it could not accommodate projected trip growth at acceptable levels of service without additional improvements. At the same time, it is important not to "over design" the system with excessive roadway widths and rights-of-way which will interfere with the character of the City.

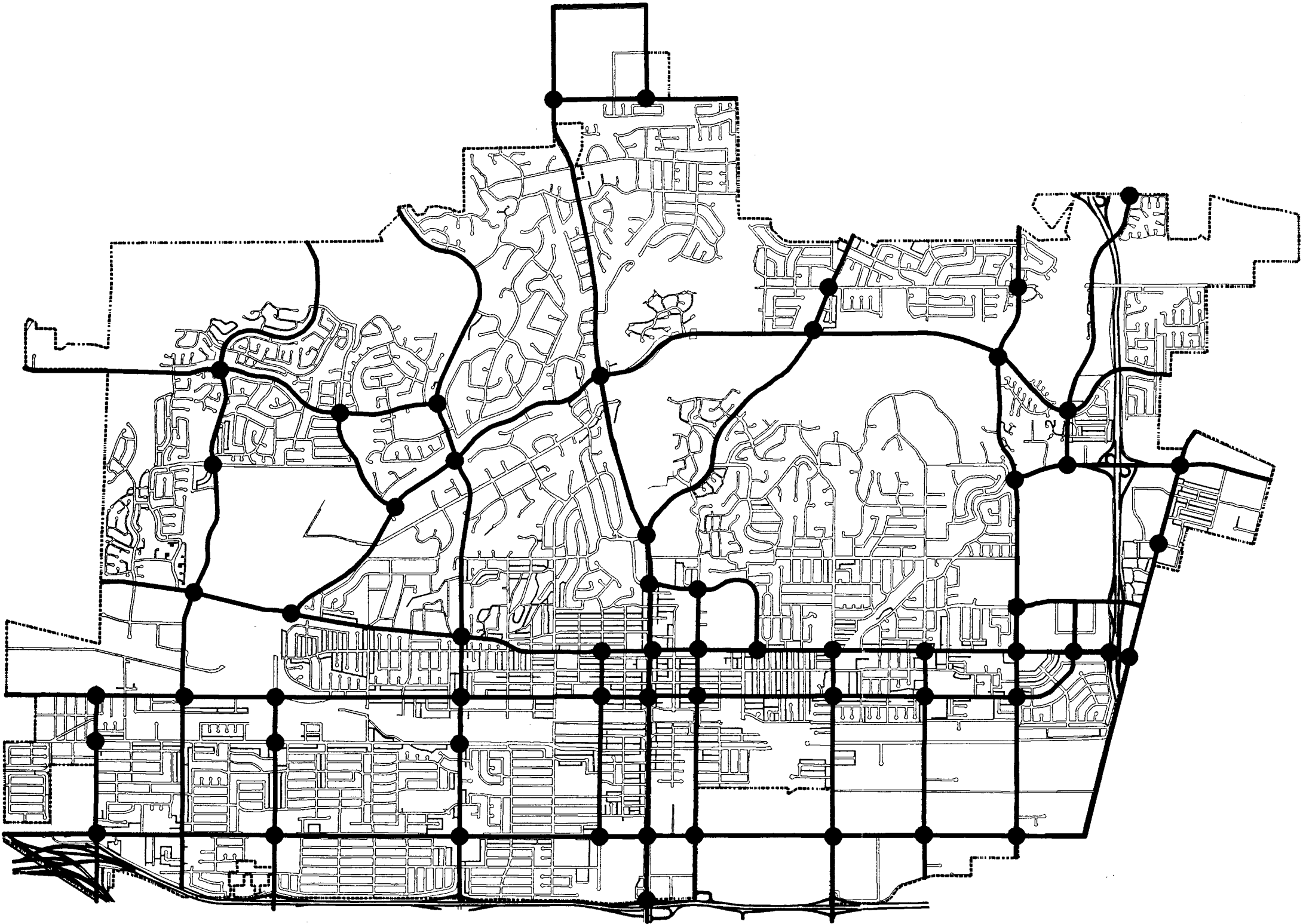
See Goals LU-4 and C5

2.4.2 Freeway Operations and Access



SR-91 and SR-57 serve thousands of commuters each day who do not live in Fullerton, and are crucial links for the region. Issues of concern include operational conditions on the freeways as well as traffic conditions on City-controlled arterials which connect to the freeway. Without proper planning of both the freeway and the arterial connections, congestion on ramps leading to and from the freeway could result, along with increased diversion of freeway traffic to City streets.

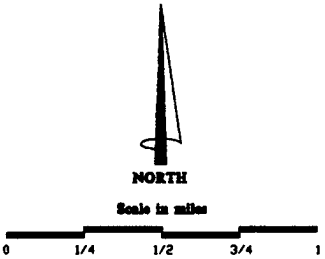
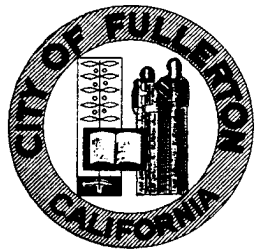
A second critical aspect of freeway capacity and ramp access has to do with the City's economic development strategy. Peak period congestion and inadequate ramp capacities become a disadvantage for those industrial and commercial enterprises that depend on freeway access for customers, suppliers and shipments. It will remain important, as the City completes its buildout and undertakes revitalization in the key Focus Areas, to upgrade connections between the freeways and the City's arterial highways.

STUDY INTERSECTIONS



LEGEND

-  Study Intersection
-  Arterial Highways



2.4.3 Residential Street Traffic Control

Ideally, local streets will only carry vehicles destined for land uses located along the local streets themselves. They should not be used as alternate routes to congested arterials nor as cut-through routes for drivers seeking shorter or faster paths. Traffic volume growth due to expanded population, employment, retail opportunities, auto ownership and other socioeconomic changes in recent years has resulted, however, in an increase in traffic volume on all types of roadway facilities. Congestion on arterials in turn, leads to driver diversion to local streets because they become more desirable travel options.

See Policy C-1.2

The City of Fullerton has recognized through traffic intrusion problems in several areas of the City. Emphasis has been on programs that add capacity to the arterial system.

3 THE ARTERIAL HIGHWAY SYSTEM PLAN

The arterial highway system plan is based on the Circulation Element goals, policies and programs, and is intended to provide adequate capacity to accommodate future traffic as development occurs in the City. It includes the Circulation Element Map (Exhibit C-2), which identifies the facilities intended to serve forecasted buildout traffic volumes, and a process to identify and mitigate future congestion as growth occurs over time. Since no new roadways beyond those called for in the Specific Plan areas are planned, and only limited widening projects will occur, the General Plan focuses on mitigating congestion at intersections projected to operate at deficient LOSs.

3.1 Forecast Future Traffic Conditions

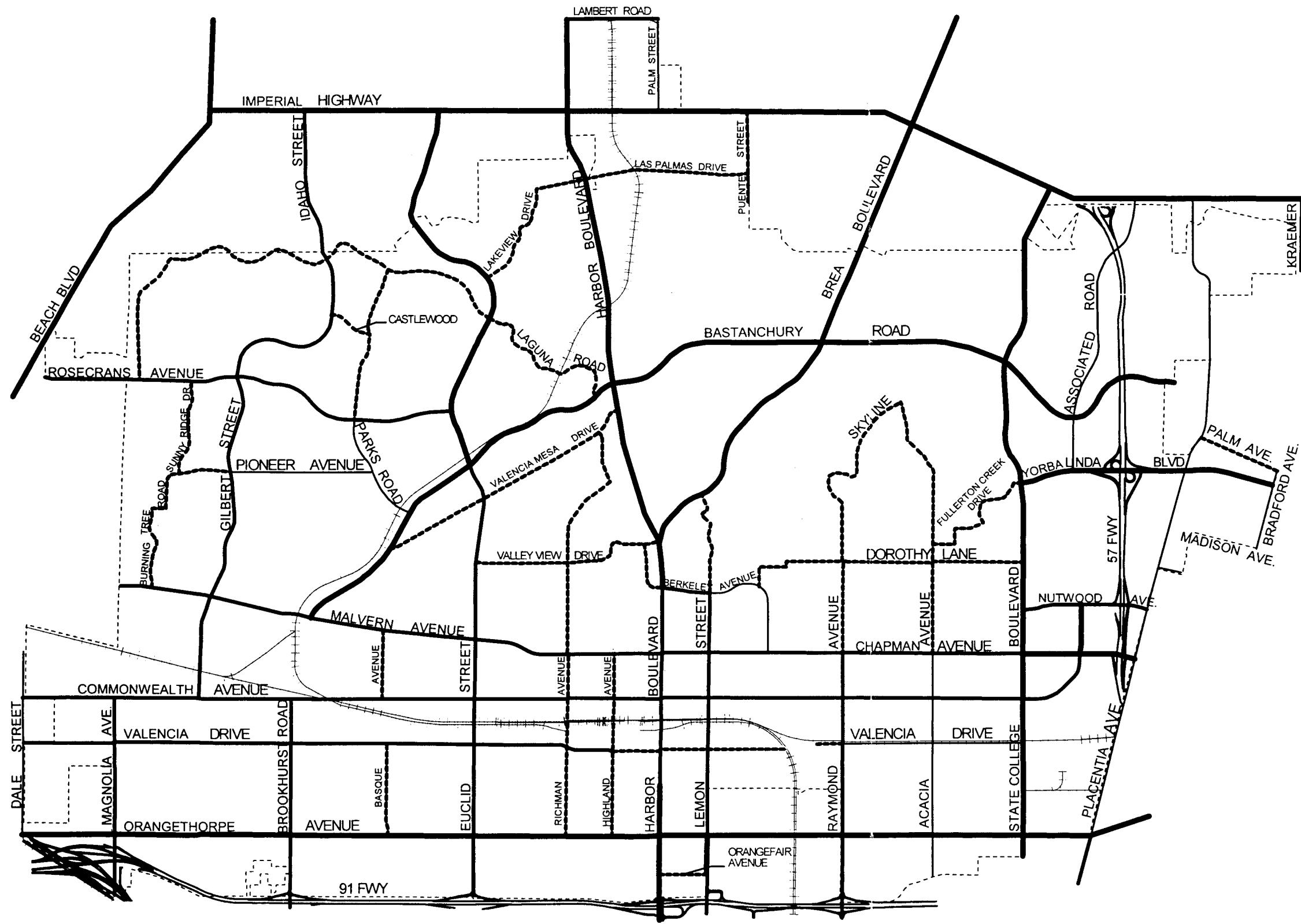
The 1994 Land Use Plan has been analyzed to determine potential future impacts on the transportation system and needed future improvements. Standard trip generation rates were used to forecast the total number of AM Peak hour, PM Peak hour and daily vehicle trips to be generated by the new development. The expected increase in regional "through" trips was also estimated as part of the analysis.





A series of analyses were conducted to test circulation improvements and their ability to reduce intersection deficiencies. The result is the Arterial Highway System Plan which calls for:

- Implementation of full width buildout of roadway configurations as indicated on the Circulation Element Map;
- Completion of all funded and programmed transportation system improvements, including all applicable Capital Improvement Program projects and required improvements per approved development projects;
- Upgrading of portions of selected arterials to higher capacity classifications than was designated in the 1981 Circulation Element; and
- Implementation of the Enhanced Capacity Intersection Concept.

A detailed description of the traffic model and forecast of future traffic conditions is found in the Technical Appendices.

Current General Plan Circulation Element Map



-  Major Arterial
-  Primary Arterial
-  Secondary Highway
-  Local Streets



City of Fullerton
Geographic Information System

3.2 Deficient Intersections and Future Improvements Required

Results of the 1994 General Plan Update circulation analysis indicate that the 1981 General Plan Circulation Element clearly could not accommodate projected trip growth without additional improvements. Table C-3 lists the intersections which exceed acceptable LOS standards of "D" based on the impact of the Preferred Land Use Plan on the fully constructed 1981 Circulation Element Plan.

There are 23 intersections which are forecast to operate at levels of service which exceed the City's LOS standard. During the AM peak hour 9 intersections (15 percent) are forecast at LOS E or F, and 21 intersections (36 percent) are forecast at LOS E or F during the PM peak hour. Exhibit C-3 presents proposed intersection improvement locations.

It is not possible to accurately predict the exact improvements required at each intersection in the long-term due to the variability in factors such as the timing and type of development over time. Instead of proposing specific improvements to each intersection separately, the Intersection Improvement Plan process and the Enhanced Capacity Intersection Concept have been developed to address future projected deficiencies. Programs from the Citywide Transportation Demand Management Ordinance, Transportation Management Organizations, expansion of transit services, upgrading roadway classifications and developer mitigation measures on a case-by-case basis will be used to supplement the Enhanced Capacity Intersection Concept.

Intersection Improvement Plans

*Enhanced Capacity
Intersection Concept*

3.2.1 Intersection Improvement Plan Process

To address the differing needs of each intersection anticipated to exceed the target of LOS D, the City will periodically prepare Intersection Improvement Plans. The Plans will specify what improvements and corresponding rights-of-way dedications and/or acquisitions will be required, based on the Enhanced Capacity Configuration Concept described below and other transportation measures. Before becoming final, the plans will be reviewed by the Transportation and Planning Commissions at noticed public hearings, as well as by the City Council.

See Policy C-5.4

**TABLE C-3
PROJECTED DEFICIENT INTERSECTION LOS UPON
GENERAL PLAN BUILDOUT**

Intersection Number and Name	AM Peak LOS	PM Peak LOS
2. Magnolia Ave./Orangethorpe Ave.	--	E
4. Gilbert St./Malvern Ave.	E	--
5. Gilbert St./Commonwealth Ave.	E	F
7. Brookhurst Rd./Orangethorpe Ave.	--	F
10. Bastanchury Rd./Malvern Ave.	E	E
11. Euclid St./Bastanchury Rd.	--	E
12. Euclid St./Malvern-Chapman Ave.	F	F
13. Euclid St./Commonwealth Ave.	--	F
14. Euclid St./Orangethorpe Ave.	--	F
17. Harbor Blvd./Imperial Highway ³	E	F
20. Harbor Blvd./Chapman Ave. ²	F	F
21. Harbor Blvd./Commonwealth Ave. ²	F	F
22. Harbor Blvd./Orangethorpe Ave. ³	E	F
23. Harbor Blvd./91 Fwy. Westbound On/Off Ramp	--	E
26. Lemon St./Orangethorpe Ave.	--	E
28. Raymond Ave./Chapman Ave.	--	E
30. Raymond Ave./Orangethorpe Ave. ³	--	F
32. State College Blvd./Yorba Linda Blvd.	--	E
34. State College Blvd./Chapman Ave.	--	F
40. 57 Fwy Northbound Off Ramp/Imperial Hwy. ¹	F	--
43. Placentia Ave./Yorba Linda Blvd.	--	E
48. Euclid St./Valencia Ave.	--	F
50. Harbor Blvd./Berkeley Ave.	--	F
— Projected LOS is "D" or better		
1. Not in the City.		
2. "Exception Intersection" due to City character issues. Acceptable LOS is "E."		
3. Congestion Management Program intersections. Acceptable LOS is "E."		

Application of the enhanced capacity intersection concept to deficient intersections with LOS E or F for either the AM or PM peak period identified above should mitigate over-capacity conditions at all intersections except the following 9 locations:

- Gilbert Street/Commonwealth Avenue (PM peak)
- Euclid Street/Malvern Avenue-Chapman Avenue (PM peak)
- Euclid Street/Orangethorpe Avenue (PM peak)
- Harbor Boulevard/Imperial Highway (PM peak)
- Harbor Boulevard/Chapman Avenue (AM and PM peak)
- Harbor Boulevard/Commonwealth Avenue (PM peak)
- Harbor Boulevard/Orangethorpe Avenue (PM peak)
- Harbor Boulevard/91 Fwy WB On/Off Ramp (PM peak)
- 57 Fwy Northbound Off Ramp/Imperial Highway (AM peak)

Additional mitigation measures will be needed for intersections projected to remain at LOS E or worse after implementation of the Enhanced Capacity Intersection concept. These additional measures may include programs from the Citywide Transportation Demand Management Ordinance, Transportation Management Organizations, expansion of transit services, upgrading roadway classifications, and developer mitigation measures on a case-by-case basis.

Further efforts to enhance the City's transportation system level of service include transportation demand management (TDM) and transportation systems management (TSM). The first, established through a TDM Ordinance, establishes strategies for reducing the number and length of trips on the highway system. TSM measures, on the other hand, involve improving the ability of existing roadways to carry traffic more efficiently, i.e. get the most out of existing highway investment. The City actively engages in both types of management programs.

See Policy C-2.4

3.2.2 Enhanced Capacity Intersection Concept

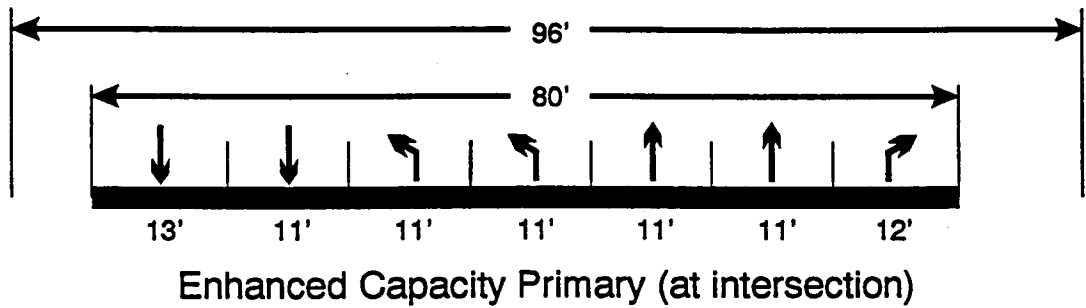
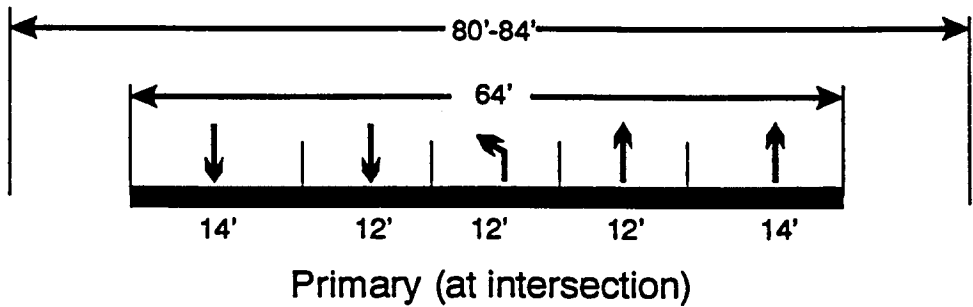
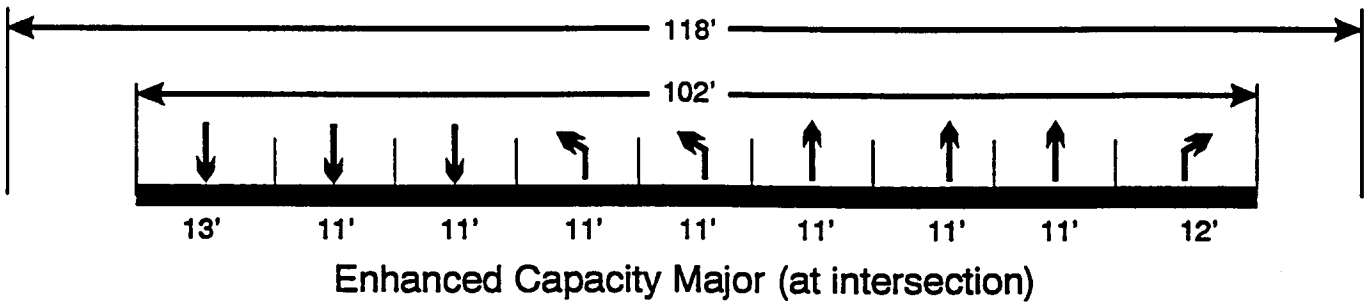
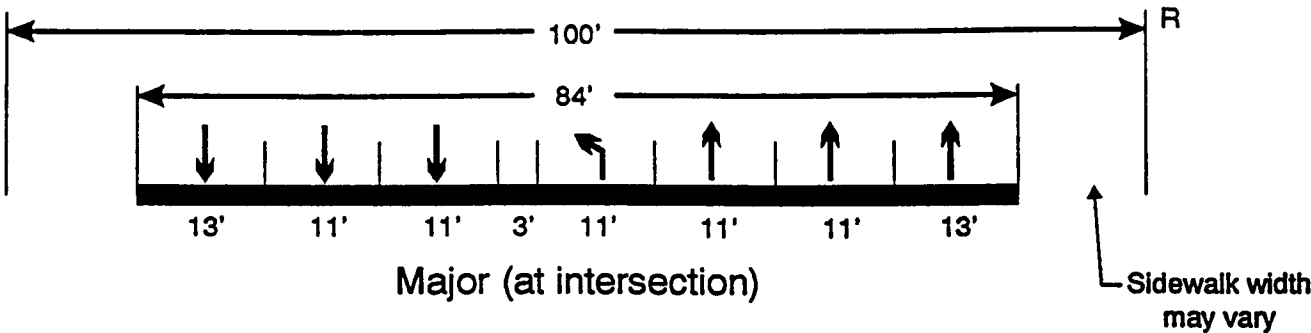
The term "Enhanced Capacity Intersection" defines an intersection design standard which exceeds the 1981 General Plan in terms of both right-of-way and curb-to-curb width. It is essentially the largest non-freeway intersection that can be achieved within the limits of the existing roadway system, city character, and other urban design issues.

See Policies C-1.2 and 5.2

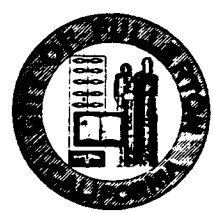
In some cases, improvement to the Enhanced Capacity Intersection standard may require the removal of existing parking and/or buildings adjacent to intersection approaches. Exhibit C-4 compares standard and Enhanced Capacity Intersection right-of-way cross sections for major and primary arterials.

It is important to note that only a few intersections can realistically accommodate the full enhanced capacity configuration on all four approaches, and at some intersections it may not be practical given existing land uses and likely impacts on City character. Also, the full Enhanced Capacity Intersection design may not be necessary at some locations. For example, only one or two approaches of the intersection may actually require the full right-of-way and curb-to-curb widths. Therefore, each intersection will be evaluated on a case-by-case basis as the need arises based on a study of current traffic operating conditions through the Intersection Improvement Plan process.

TYPICAL ROADWAY CONFIGURATIONS



Note: Add 5 feet in each direction where bike lane is designated.



For certain intersections the functional classification is different on one side of the intersection than the other. This is due to a change in classification occurring at the intersection. For example, Raymond Avenue is a Primary Arterial on the south side of Chapman Avenue but a Local Collector on the north side. In these special cases, only the sides of the intersection that are major or primary arterials need be improved.

3.3 Exception Intersections

The citywide definition of acceptable intersection operating conditions is LOS D; however, special conditions warrant exception of this standard in some areas.

3.3.1 Downtown Fullerton

Because of the fully-developed, historical character of the downtown, and the great expense and hardship that would be caused by attempting to secure right-of-way, the intersections at Harbor Boulevard/Chapman Avenue and Harbor Boulevard/Commonwealth Avenue are assigned a standard of LOS E. This is consistent with Measure M, which states:

“The general target standard for each jurisdiction should be LOS D for intersections, but it is recognized that jurisdictions may establish a lower LOS standard for certain intersections in urbanized areas.”

3.3.2 Congestion Management Plan Intersections

In order to provide conformance with the Orange County CMP which calls for an acceptable LOS standard of E, LOS E shall be designated for the following intersections:

- Orangethorpe Avenue/Harbor Boulevard
- Imperial Highway/Harbor Boulevard
- Orangethorpe Avenue/State College Boulevard

3.4 Congestion Management Plan/Measure M Implementation

Two relatively recent programs of considerable significance are reflected in the General Plan: the state-legislated Congestion Management Program (CMP) and the Countywide Growth Management Program (Measure M). Both programs operate countywide under the administration of the Orange County Transportation Authority (OCTA). Their requirements have been coordinated to a large degree and enable cities that qualify to receive state and Measure M funds for selected transportation system improvements. The City of Fullerton was among the first Orange County cities to qualify under these programs.

See Goal C-5

CMP activities include such things as establishment of a Transportation Demand Ordinance, transportation impact fees, and planning for transit services. Specific implementation actions for CMP and Measure M are contained in Circulation Element Goal C-5.

3.4.1 Congestion Management Program

State law (Sections 65088.1, 65089, 65089.3, 65089.4, 14525.6, 65089.5 and 65089.6) requires each metropolitan county in California, to designate a Congestion Management Agency (CMA) and to prepare a Congestion Management Program (CMP). The CMP legislation links land use, transportation and air quality decisions and has established a number of new requirements for regional and local agencies. The designated CMP agency for Orange County is the Orange County Transportation Authority (OCTA).

See Goals LU-4, C-5 and RC-1

The Orange County CMP includes measures such as traffic signal coordination, roadway widening, intersection improvements, on-street parking modifications, restriping and bus turnouts to provide additional capacity and improve traffic flow, and upgrading roadway safety and efficiency. The focus of the CMP is the 220-mile SmartStreet network. Within Fullerton, the following streets are part of the SmartStreet system and therefore are potential routes for future SmartStreet implementation:

- State College Boulevard
- Harbor Boulevard
- Orangethorpe Avenue
- Imperial Highway

The following arterial intersections within the City are part of the CMP network:

- Harbor Boulevard/Orangethorpe Avenue
- Orangethorpe Avenue/State College Boulevard
- SR 91 Westbound On/Off Ramps at Harbor Boulevard (multi-agency, Anaheim is the designated responsible agency for deficiency plan process)
- Imperial Highway/Harbor Boulevard (multi-agency, La Habra is the responsible agency for deficiency plan process)

The Orange County CMP states that a CMP intersection cannot be allowed to deteriorate to a condition which is worse than LOS E (i.e. LOS F) without mitigation being described in an acceptable deficiency plan. The exception is for locations which are already at LOS F, for which the LOS can remain F but cannot move further into F than 0.10 over the base Volume/Capacity ratio. Also, deficiency plans are not required if a deficient intersection will be brought into compliance within eighteen (18) months of its initial detection through improvements which have been previously programmed in the CMP Capital Improvement Program.

Forecasted traffic growth based on the 1994 Land Use Plan will cause all five CMP locations to be deficient, falling to LOS F in either the AM or PM peak period.

Although no deficiency plan is required until a deficiency is measured, the City should be prepared to address the deficiencies once they arise. Identifying future problem intersections is an important part of the General Plan process and provides the City with information to plan for CMP-related implications in the future.

3.4.2 Measure M

Measure M is the Countywide Growth Management Ordinance initiative which raised sales tax in Orange County to fund specific transportation improvements. It also established growth management procedures to insure new development pays for a pro-rated share of traffic improvements needed to maintain acceptable traffic levels of service. An important requirement of Measure M is that the City's Circulation Element be consistent with the County's Master Plan of Arterial Highways (MPAH). This means that all facilities on the Arterial Highway System have the same planned capacity as the

See Goals LU-4, C-5 and RC-1

MPAH. The City must also show that it is taking action to support its own adopted LOS thresholds. Unlike the CMP, this is a self-monitoring program which does not require regular reporting of intersection operating conditions.

The City of Fullerton complies with Measure M through the following actions:

- Implementation of General Plan Growth Management policies including traffic level of service (LOS) standards, a development mitigation program, and a development phasing and monitoring program;
- Participation in inter-jurisdictional planning forums;
- Development of a seven-year capital improvement program;
- Addressing housing options and job opportunities;
- Implementing a Transportation Demand Management Ordinance.

4 ALTERNATIVE TRANSPORTATION PLAN

4.1 Introduction

Alternative transportation is increasingly important in Southern California transportation planning. Air quality regulations and related regional mandates for reducing trips affect every city. Regional regulations such as the South Coast Air Quality Management District's Regulation XV program are encouraging and requiring shifts from single passenger automobiles to alternative modes of travel. It is therefore important for Fullerton, in its long range planning efforts, to recognize the importance of alternative modes and to develop plans which provide for their implementation.

4.2 Public Transit

Public transit services are provided within the City of Fullerton by the Orange County Transportation Authority (OCTA) and AMTRAK. Commuter rail service (AMTRAK and MetroLink) is provided from the Fullerton AMTRAK Station to downtown Los Angeles at Union Station. The AT&SF Mainline between Los Angeles and Chicago and the Union Pacific Anaheim branch line also run through the City. The AT&SF line carries freight and passenger trains and supports the freight transportation needs of local industry.

See Goal C-3

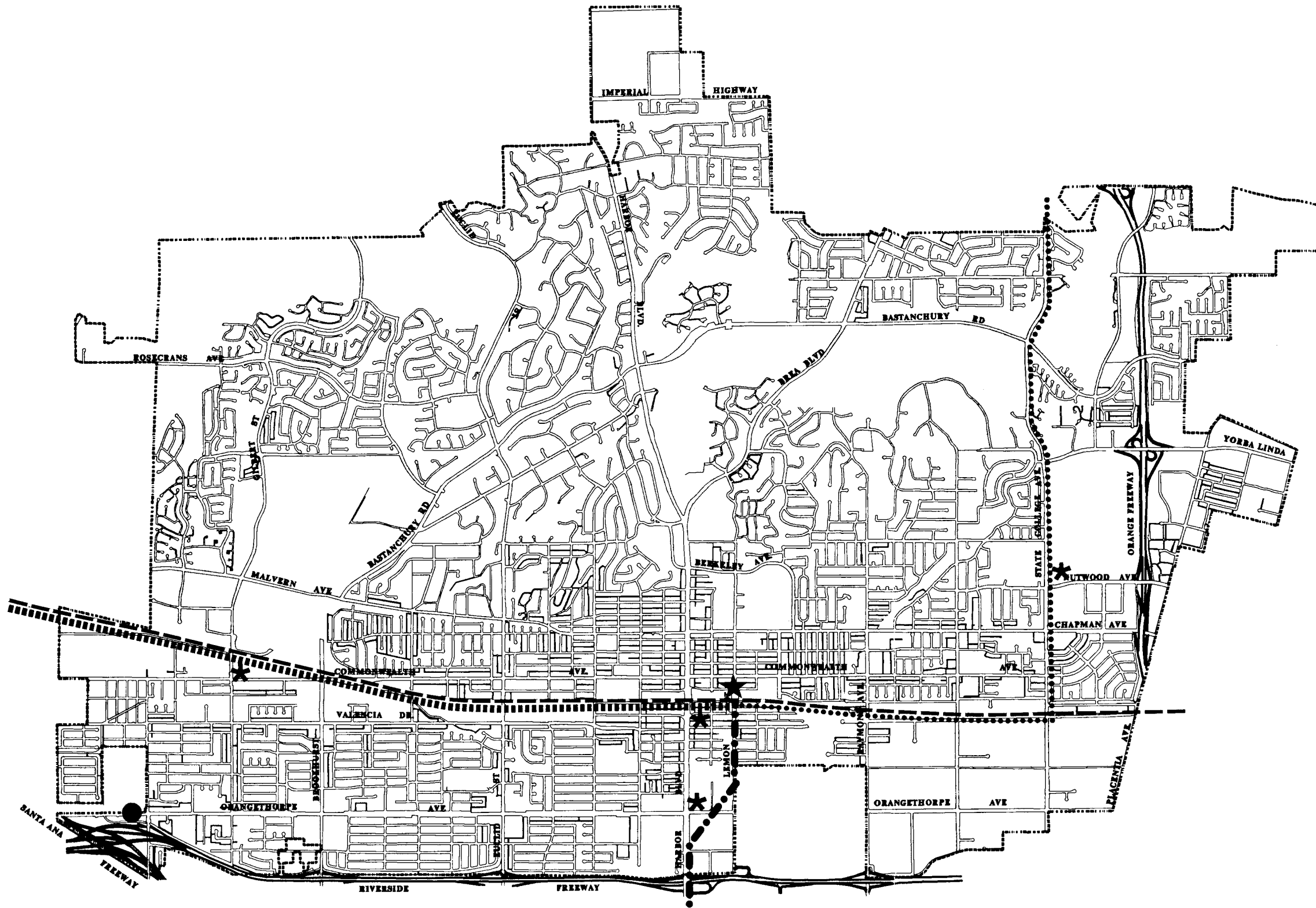
The Orange County Transportation Authority (OCTA) operates public buses within the City of Fullerton. A total of 22 bus lines operate within the City, as described in detail in the EIR.








Exhibit C-5 illustrates the existing and proposed long range rail system in the City of Fullerton. Currently, there are two types of passenger service to Fullerton: 1) Los Angeles to San Diego Amtrack service, and 2) MetroLink Commuter service to Los Angeles from Orange County. Long range future rail service expansions are not known at this time; however, the most current proposal is indicated on the map. The Urban Rail System Fixed Guideway Project proposals, which call for an initial phase in Fullerton to the Transportation Center, and two future phases are also indicated in the Figure.

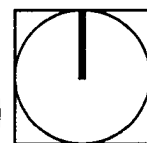
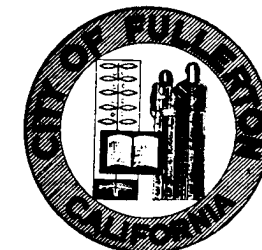
A balanced, diverse circulation system will be important to supplement the roadway network capacity and operation. Transit service frequency and types of opportunities available should be enhanced to increase the viability of public transit as well as improve traffic and air quality conditions. The City will participate in the OCTA transit system commuter rail program and other rail programs as available. Bicycle and

pedestrian facilities will provide additional transportation opportunities to help relieve traffic congestion by linking major activity centers. The maintenance, expansion and improvement of the Fullerton Multi-modal Transportation Center will be a key factor in this regard.

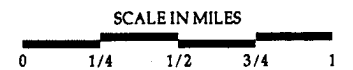
URBAN RAIL SYSTEM



-  Existing Rail Service
-  Proposed Urban Rail System (Fixed Guideway Initial Phase)
-  Proposed Urban Rail System Buena Park Extension
-  Proposed Urban Rail System Brea Extension
-  Transit Center
-  Park & Ride
-  Proposed Urban Rail Station Sites



THE PLANNING CENTER



CITY OF FULLERTON

4.3 Fullerton Municipal Airport

The Fullerton Municipal Airport, established in 1927, occupies approximately 86 acres of land between West Commonwealth Avenue and Artesia Avenue at the western boundary of the City. The field has been active since 1944, subsequent to reacquisition from the U.S. military following WWII. The Airport fulfills a needed public function, as it is the only general aviation airport in Orange County besides John Wayne Airport and is subject to long-term agreements with the federal government to ensure that it continues to operate as a public airport facility.

See Goal C-4

Three-hundred and forty-eight aircraft were based at the airport in 2002. While overall growth, following FAA trends is projected to 2023, the total number of aircraft based at the airport remains lower than historical totals. Over 85 percent are single engine aircraft; the remainder are twin engine airplanes or helicopters. City ordinance restricts aircraft exceeding 12,500 pounds maximum and gross weight. Pattern work is limited to 8:00 a.m. to 10:00 p.m. on weekends and holidays and 7 a.m. to 10 p.m. on weekdays. Touch-and-go operations are prohibited between the hours of 6 p.m. and 7 a.m. on weekends and holidays.

The air traffic control tower recorded 103,481 take-offs and landings in 2002 and 89,453 take-offs and landings during 2003. Approximately 60 percent were related to business and personal transportation, with 40 percent attributed to recreational and training. While overall growth from 2003 is projected to 2023, the total number of take-offs and landings remains lower than historical totals.

The existing airport facility cannot physically expand, except at high costs, as it is surrounded on all sides by development. Compatibility of adjacent land use with airport operations in terms of noise and safety has been an ongoing issue.

Noise complaints from residents in nearby residential neighborhoods peaked in 1989. Current public relations activity has stressed the role of the airport as providing access to business commuters and pilot trainees, increased noise abatement practices, adherence to established hours of operation, and safety program awareness. The airport is not designated as a noise sensitive airport under state law.

The Circulation Element policies provide direction for the planning and management of airport operations to provide personal and business transportation and other aviation services to Fullerton and the surrounding communities. The 2004 Fullerton Municipal Airport Master Plan will remain a primary implementation tool for operations and improvements. Airport planning projects will be integrated with land use planning and opportunities for citizen input and education.

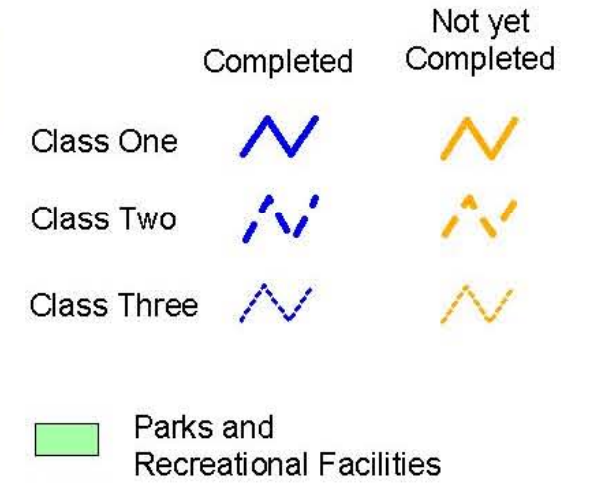
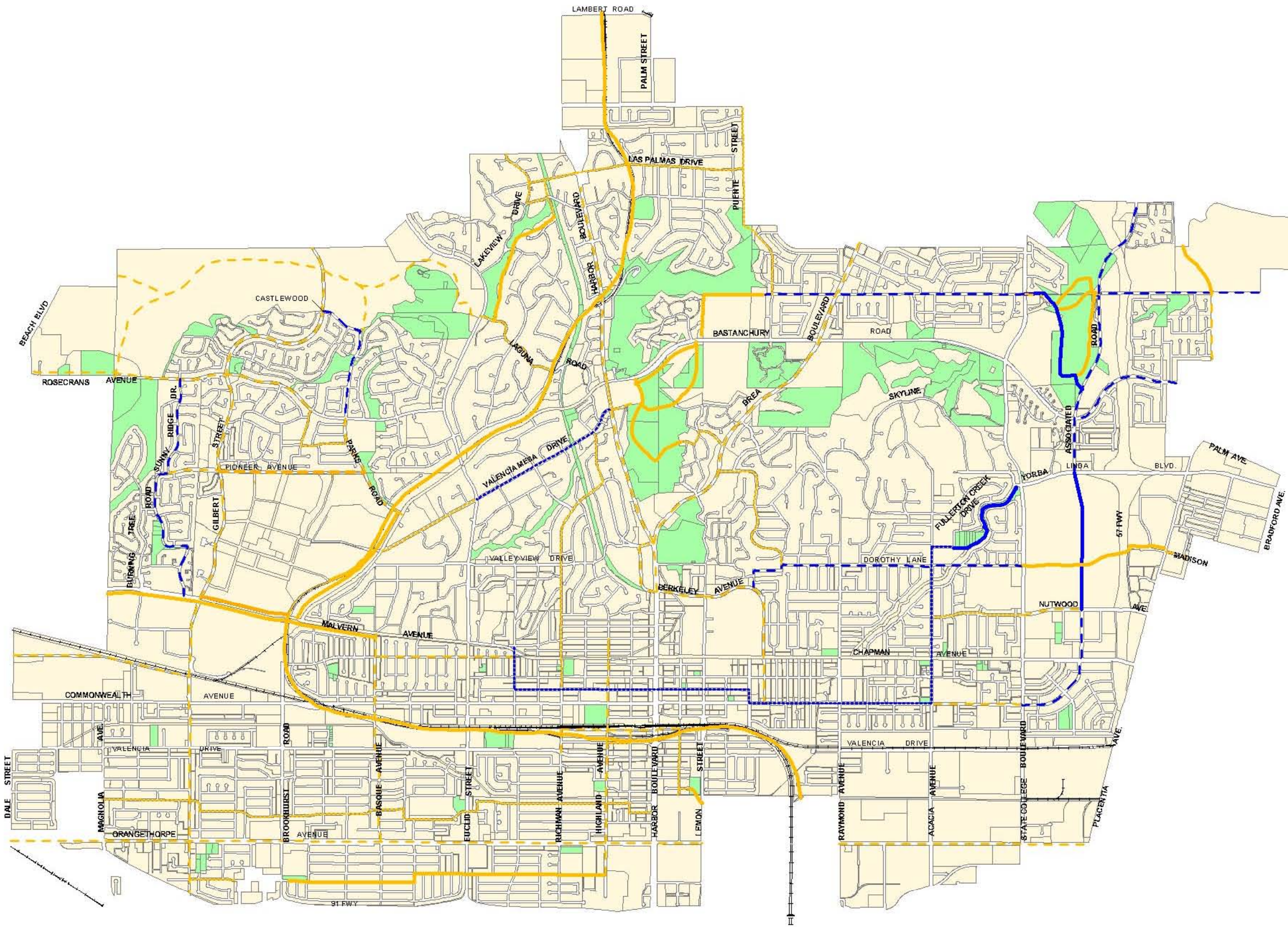
4.4 Bicycle Master Plan

The bicycle is gaining significance both locally and nationally as an alternative mode of commute transportation as well as for recreational purposes. Locally, the regional Air Quality Management District has placed various mandates on commuter traffic in an effort to improve air quality. An increased use of the bicycle has been one of the results as business and government attempt to comply with clean air mandates.

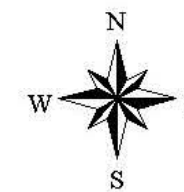
See Policy C-2.1

In response to the projected increased use of this transportation alternative, a comprehensive network of bicycle commuter routes and recreational trails has been proposed and adopted in concept by the City Council, as shown in Exhibit C-6.

Master Plan of Bikeways



Note: Bikeway alignments are conceptual. Refer to the General Plan text for additional detail.



It includes 18.5 miles of Class I routes, 42.2 miles of Class II routes, and 16.9 miles of Class III routes. It is intended that the proposed concept master plan will lead to the development of an integrated network of bicycle routes allowing the bicycle to be used as a viable alternative transportation mode for commuting.

4.4.1 Existing Bikeway Facilities

The existing bikeway system in the City of Fullerton was originally adopted in 1971 and revised in 1983. During this period of time, master-planned routes have been implemented sporadically and in some cases at a reduced designation (Class II to a Class III) resulting in a fractional network of routes. Funding restrictions, local opposition to implementation, inconsistent dedication requirements and conflicting needs of bicyclists versus motorized vehicles are the most often stated reasons for the current implementation status of the bicycle route master plan. The City Council created the Bicycle Task Force in 1990 and the Bicycle Users Subcommittee in 1992 to address the concerns of local bicyclists in terms of long range planning, route implementation, safety, development upgrades and funding.

4.4.2 Bicycle Safety

Although a comprehensive network of bicycle routes is desirable, a large proportion of bicycle trips will actually be made on streets without bicycle routes, particularly arterial streets, since they often provide the most direct route between destinations. Whenever practical it is desirable to have roadways that provide basic enhancements for bicycle usage. These may include extra curb lane widths, bicycle lanes, signage and/or traffic signal actuation modifications.

4.4.3 Bikeway Classifications

The three basic types of bikeways defined in Chapter 80 of the State of California (Caltrans) Highway Design Manual are as follows:

- **Class I Bikeway - (Bicycle Path or Bicycle Trail):** Provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross flows by motorists minimized.
- **Class II Bikeway - (Bicycle Lane):** Provides a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.
- **Class III Bikeway - (Bicycle Route):** Provides a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

4.4.4 Bikeway Design Standards

Widths, Signalization and Signage

The bicycle network should be viewed from the perspective that bicycles are permitted on all streets, and therefore, all streets should be made safe for bicycling. On-street striped bicycle lanes provide for basic channelization of traffic with an attempt to separate motorized vehicles from bicyclists. Class I, II and III routes should be constructed in accordance with Chapter 1000 of the California Department of Transportation Highway Design Manual.

Other Design Considerations

The need for bicycle facilities may vary depending on the type of development and the area. The general criteria used to determine bicycle routes include:

- Compatibility and/or connection to regional trails
- Continuity of the route (east to west and north to south)
- Connection to destinations (commercial or industrial areas, schools, and transportation centers)
- Compatibility with other uses
- Disruption of existing conditions
- Cost of implementation.

Class III routes should be considered only after careful consideration of the traffic count, traffic speed and local conditions and widths. If traffic count and speed become excessive, the route should be upgraded to a Class II route if feasible or deleted with a parallel facility created to replace the existing one.

The need for coordination between adjacent cities, the County of Orange, State agencies, bicycle riders, and property owners is inherent in the provision of a comprehensive, continuous bikeway network as a functional alternative mode of transportation.

4.4.5 Bicycle Facilities in Private and Public Development

The provision of adequate storage facilities in both public and private areas normally results in an increase in commuter cycling. In accordance with TDM requirements, new developments are required to evaluate the need for additional storage facilities and the type and amount of bicycle parking/storage to be provided.

See Policy C-2.2

4.4.6 Bikeway Implementation and Construction

The requirement for eliminating of street parking has varying degrees of impacts, depending on the street in question and whether parking will be removed from one or both sides of the roadway. The elimination of parking from non-front loaded streets does not appear to be a significant barrier. However, the implementation of proposed routes which require the removal of parking in front of residences and/or businesses will require community input due to potential impacts.

See Policy C-2.1

Some city streets have been widened to ultimate width, but have not been striped for the maximum number of lanes (usually six lanes). Harbor Boulevard is a good example of this condition. Bicycle lanes which are added to these streets are temporary, since future traffic volume increases may necessitate their removal to accommodate additional traffic lanes.

While portions of the concept plan can be implemented at minimal costs, other portions will require significant expenditures. Many of the backbone commuter routes of the proposed plan are on arterials, which will necessitate street widenings to implement both the bicycle routes and the improvements called for in the arterial highway plan. Due to the speed and/or volume of vehicular traffic, these same arterials are not normally viable candidates for implementation as a Class III route. It is possible that some routes may be implemented at least on an interim basis, at a lower classification than ultimately planned for.

Implementation of the Conceptual Bikeway Master Plan requires coordination between the City and other outside agencies to extend routes from Craig Regional Park through CSUF south to the Santa Ana River Trail. Implementation of Fullerton's network entails connection with routes in the cities of Anaheim, Placentia, La Habra, Brea and Buena Park.

Specific linkages which require inter-city coordination include:

- Anaheim-Union Pacific right-of-way, Orangethorpe, Acacia and Lemon
- Placentia-Bastanchury, Madison and Orangethorpe
- Brea-Union Pacific right-of-way, Brea Boulevard, Puente Street and Associated Road.

Specific linkages which require coordination with other agencies include:

- Craig Park through CSUF to Santa Ana River Trail (County, State)
- Coyote Creek at Beach Boulevard (County EMA)
- Tri-City Park connection to Rolling Hills Drive (County/Brea/Placentia)
- Bastanchury Road Bypass (OCTA, U.S. Army Corp of Engineers)
- Puente Street Interconnect (U.S. Army Corp of Engineers)
- Orange Freeway overcrossing (Caltrans)

5 CIRCULATION ELEMENT GOALS, POLICIES AND PROGRAMS

The goals, policies and programs of the Circulation Chapter are designed to ensure the transportation network has adequate capacity to accommodate future traffic growth. Residential through-traffic, roadway maintenance and aesthetics, bicycle and pedestrian facilities, transportation demand management, public transit and airport operations are addressed.

Editor's Note: The goals, policies and programs are annotated to show the reader where changes have been made as a result of the Update. Regular text is from the 1981 plan. Italicized policies and programs text represents changes made during initial phases of the Update when 1981 goals and policies were being reviewed. Bold text comes from Council-approved Issue Paper recommendations, and contains new goals, policies and programs which respond directly to concerns identified during the Update.

Overall Approach

Goal C-1: *A comprehensive street and parking automobile transportation network which supports the movement of people and goods in a safe and efficient manner using a variety of modes.*

Policy C-1.1 Provide and maintain a network of arterial highways and streets to direct and channel non-local and large vehicle traffic as well as to accommodate the internal circulation needs of Fullerton's businesses and residents.

Traffic Capacity

Purpose:

1. Reduce vehicular travel times between selected origin/destination points.
2. Reduce heavy vehicles and through-traffic on residential streets.

Programs:

- a. Annual review of circulation network of streets and highways, and periodically amend the Circulation Element as needed.
- b. Monitor Citywide traffic levels and, subject to the analysis of this monitoring, prepare "Intersection Improvement Plans" to specify what improvements and corresponding dedications are required to maintain the City's acceptable LOS standard.
- c. Acquisition of rights-of-way and construction as needed.
- d. Traffic signal coordination, evaluation and expansion as needed.
- e. Traffic signal coordination with neighboring cities and Caltrans as needed.
- f. Development of grade separations between railroads and highways at appropriate crossings.

- g. Investigation of the feasibility of prohibiting parking on selected arterial highways.

Policy C-1.2 Influence the design of streets to discourage through-traffic in residential areas.

Purpose:

- 1. Minimize heavy through-traffic on residential streets without inhibiting internal circulation between neighborhoods.

Programs:

- a. Review street design of new residential and commercial development plans.
- b. Use of cul-de-sacs in residential developments.
- c. *Review internal circulation of new commercial development plans to minimize conflicts with residential neighborhoods.*
- d. *Develop mechanisms to periodically monitor local traffic at the neighborhood level.*
- e. **Encourage continued citizen identification of areas with through-traffic problems.**
- f. **Test and evaluate alternative solutions such as traffic diverters, street closures and speed "humps" on an ongoing basis for identified problem areas.**
- g. **Continue to implement arterial improvements to draw traffic off of local streets.**
- h. **Consider implementing a formalized local street protection program with specific petition, review, ranking and test installation procedures.**

Policy C-1.3 Improve, maintain and regulate the network of highways, streets and alleys to ensure their safe and efficient use.

Purpose:

- 1. Decrease, within the City's ability, the number of pedestrian, bicycle and vehicular accidents.
- 2. Continuously maintain streets, alleys and public lighting systems.
- 3. **Reduce congestion and improve or maintain current LOS.**

Residential Through Traffic

See also the following chapter:
• *Land Use*

Maintenance and Safety

See also the following Chapter:
• *Community Health and Safety*

Programs:

- a. Appropriate engineering studies and actions to address areas of congestion and conflict and in need of maintenance.
- b. Street and alley reconstruction and resurfacing as needed.
- c. Installation of directional and regulatory signs and signals as warranted.
- d. Continuation of lighted street names at signalized intersections.
- e. Regular street sweeping operations.
- f. Installation of safety lighting at signalized intersections and street lighting in deficient areas.
- g. Regulation of on-street parking as needed.
- h. Continued upgrading of railroad crossings in coordination with the railroad companies.
- i. Continuation of the adopted rural street designations with their special design features.
- j. Identify and, where feasible, remove unnecessary four-way stop signs, signals, distracting signage, and sight-distance barriers.*
- k. Work cooperatively with the Elementary School District with regard to the location and procedures of crossing guards.*
- l. Identify and address where feasible, bicycle and pedestrian safety hazards.**

Policy C-1.4 Plan and manage public rights-of-way and median islands to provide attractive streetscapes.

Purpose:

- 1. Provide attractive streetscapes in a cost-effective, low-maintenance manner.
- 2. Continuously maintain and replace street trees as needed to achieve their aesthetic purpose and avoid damage to streets and sidewalks.
- 3. Provide street lights compatible with the character of existing neighborhoods.

Programs:

- a. Design and maintenance of landscaped parkways and decorative median islands.
- b. Street tree replanting and maintenance.

Roadway Aesthetics

See also the following chapter:
• *Community Health and Safety*

- c. Maintenance of existing "entrance planters" on arterial highways leading into City.
- d. Street light design, placement and maintenance appropriate to the neighborhood.
- e. Provision of street improvements, street trees, and street lights by the developer of new projects.
- f. Utilization, where feasible, of drought-tolerant plants and water-efficient irrigation systems in landscaping.
- g. **For targeted major arterials, and entryways to the City from the freeway system, develop a comprehensive landscape, signage and entryway plan.**
- h. **Develop and maintain signage design guidelines to ensure attractive City streetscapes and freeway frontages, compatible with adjacent land uses.**

0

Non-Automobile Transportation

Goal C-2: *A comprehensive network of bicycle, hiking, and bridle trails, which safely and conveniently serve the recreation and commuter transportation needs of the community.*

Policy C-2.1 Promote safe, convenient, and pleasant bicycle travel and a system of routes throughout Fullerton which connect with a designated regional network and to major activity centers.

Purpose:

- 1. Work toward the complete implementation of the Conceptual Bicycle Master Plan.
- 2. Enhance bicycle safety.
- 3. Promote use of bicycles for commuting, student and convenience trips which would otherwise be made by autos.

Programs:

- a. **Utilization of the Bicycle User's Subcommittee for recommendations on Plan implementation priorities.**
- b. Use the State of California design criteria and standards for design construction and maintenance of the bikeway network.
- c. Maintenance of the bikeway network in a reasonably safe condition.
- d. **Continue to research and apply for funding sources for development of the Conceptual Bicycle Master Plan.**

Bicycle Network

See also the following Chapter:
 • *Resource Management*

- e. **Develop and implement a five-year Capital Improvement Program of bicycle facilities.**
- f. Continuation of educational programs on bicycle safety and awareness.
- g. Publication and distribution of map showing bicycle network.
- h. Encouragement of businesses to accommodate the bicycle as a mode for employee and customer transportation, consistent with City Zoning requirements.

Policy C-2.2 Encourage the establishment and use of bicycle-related facilities and services in public and private developments.

Bicycle Facilities In Private Development

Purpose:

- 1. Encourage bicycle usage as a form of transportation to work, school, and for shopping.
- 2. Encourage bicycle usage as a form of recreation.

Programs:

- a. Installation of secure bicycle storage facilities where needed at transportation nodes and public facilities.
- b. **Require bicycle storage facilities as a percentage of auto parking spaces in new non-residential development consistent with the City Zoning Ordinance.**
- c. **Require new development to provide right-of-way dedications consistent with the Conceptual Bicycle Master Plan.**
- d. **Consider bicycle ingress and egress in new non-residential development.**
- e. **Require shower facilities in new non-residential development, where feasible, for persons bicycling to work consistent with the City Zoning Ordinance.**
- h. **Dedication of off-highway (Class I) routes as a condition for new development consistent with the Conceptual Bicycle Master Plan.**
- i. **Review new development and redevelopment proposals for proper ingress and egress to Conceptual Master Plan bicycle routes and bicycle support facilities.**

Policy C-2.3 Insure the provision and maintenance of public sidewalks and walkways where desired in order to facilitate pedestrian mobility and safety.

Pedestrian Facilities

See also the following Chapter:
 • *Community Health and Safety*

Purpose:

1. Continuously maintain and replace public sidewalks.
2. Increase mobility of the disabled as well as other pedestrians.
3. *Create a pedestrian friendly downtown.*

Programs:

- a. Staff review for functional placement of sidewalks and other pedestrian areas and routes in new projects.
- b. Continued replacement and repair of damaged or deficient sidewalks.
- c. Continued reconstruction of existing sidewalks for curb cuts to promote mobility of the disabled.
- d. Provision of safe and convenient sidewalk access points to public transit where feasible.
- e. **Require on-site pedestrian walkways and bicycle paths in new non-residential development to connect with the local system of pedestrian and/or bicycle paths.**
- f. **Require shower facilities in new non-residential development, where feasible, for persons walking to work, consistent with the City Zoning Ordinance.**

Policy C-2.4 Maximize the efficiency of the City's circulation system through the use of transportation system management and demand management strategies.

Transportation Demand Management Measures

Purpose:

1. **Encourage efficiency of alternative modes of travel through bicycle and pedestrian system improvements, ridesharing programs, rideshare support services, shuttle services, and information dissemination.**
2. **Implement land use and employment strategies to reduce the need for travel.**
3. **Reduce vehicular travel through disincentives to auto use.**

Programs:

- a. **Require that new developments provide Transportation Demand Management plans which contribute to the reduction of vehicular trips by employees.**
- b. **Participate in the State and Regional Transportation Systems Management Programs.**

- c. **Enforce the City's existing Transportation Demand Ordinance.**
 - d. **Promote ridesharing through publicity and provision of information to the public.**
-

Public Transit

Goal C-3: *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.*

Policy C-3.1 Encourage and facilitate the use of public transportation and ridesharing for all its residents.

Overall Approach

Purpose:

1. Promote an increase in the number of individuals using public transit.
2. Promote an increase in OCTA bus service levels and a reduction in wait times within City limits.
3. Promote an increase in para-transit services such as Dial-a-Ride.
4. Reduce travel time on streets and highways utilized by fixed route transit.
5. *Achieve improved commuter rail and transit service for residents and workers in cooperation with the OCTA rail plan.*

Programs:

- a. Review of major developments to include accommodations for transportation demand management programs, including public transportation and parking management.
- b. Integration of transit routes and stops into highway, pedestrian, and bicycle circulation network.
- c. Maintain, expand and enhance the multi-modal Fullerton Transportation Center.
- d. Participation in OCTA transit, commuter rail, and transportation demand management planning and implementation activities.
- e. Encourage the construction of bus shelters and bus turnouts/bays at key stops as appropriate.
- f. *Investigation and, where appropriate, encouragement of innovative transportation solutions to serve the community.*
- g. *Promotion of the Commuter Rail Program and other urban rail programs.*

Airport Operations

Goal C-4: *Airport operations which are sensitive to environmental concerns, provide personal and business transportation, support the economic development of the City, minimize adverse impacts on the community, and retain the existing runway size.*

Policy C-4.1 Plan and manage airport operations to provide personal and business transportation services, public safety aviation operations, and other aviation services to Fullerton and the surrounding communities.

Overall Approach

Purpose:

1. Conduct the operation of the Airport Enterprise Fund using efficient business practices.
2. Provide an airport and related services to Fullerton and the surrounding communities.
3. Insure facilities are safe, efficient, attractive, and provide first quality service to users.

Programs:

- a. Continue to implement the 2004 Fullerton Municipal Airport Master Plan including the review of leases and other revenue sources.
- b. Improve overall airport appearance and maintenance of airport facilities.
- c. *Improve the community knowledge of aviation and public aviation activities and continue citizen participation in airport planning and operations.*
- d. *Installation and maintenance of hangars, and permanent tie-down spaces for aircraft as appropriate.*
- e. *Encourage industrial development, as well as supporting complementary uses, in the industrial area surrounding the airport.*
- f. *Support vocational aviation related training.*
- g. *Encourage and support volunteer efforts in airport planning projects.*
- h. *Consult with surrounding municipalities as appropriate.*

Growth and Traffic Management

Goal C-5: A roadway network which supports existing and future land uses with minimal levels of traffic congestion.

Policy C-5.1 Land use and traffic capacity shall be balanced, so that existing and future development can be supported by the roadway network at no worse than LOS D (with reasonable exceptions in order to preserve City character).

Traffic LOS and Related Programs

Purpose:

1. Ensure needed traffic improvements are planned, funded, phased, and constructed as development proceeds.
2. Comply with Measure M and Congestion Management mandates.
3. Ensure careful consideration of City character consistent with the Vision Statement and Land Use Elements.
4. Provide a cooperative process with neighboring communities to implement regionally needed traffic improvements.

Programs:

- a. Ongoing planning for future land use growth and corresponding traffic improvements, with careful consideration of City character consistent with the Vision Statement and Land Use Element.
- b. Establish a comprehensive traffic impact fee program and other programs/actions to provide funding for needed traffic improvements.
- c. Establish comprehensive traffic phasing and implementation/construction programs to ensure traffic improvement implementation.
- d. Establish an annual monitoring program to provide information necessary for planning, phasing and construction programs.
- e. Participation in inter-jurisdictional groups to plan traffic improvements of regional significance.

Policy C-5.2 The City shall maintain updated future land use growth projections and update the Circulation Element as necessary to ensure that the planned circulation network will accommodate growth at no worse than LOS D.

Development Mitigation Program

Purpose:

1. Ensure that needed traffic improvements are comprehensively planned.

2. Ensure careful consideration of maintaining City character consistent with the Vision Statement and Land Use Elements.
3. Provide reasonable lead time to design and construct necessary improvements.

Programs:

- a. Maintain, within the Land Use and Circulation Elements of the General Plan, an updated overall development plan, including land use projections, a critical intersection network, traffic projections, and necessary traffic improvements.
- b. Consideration of City character issues consistent with the Vision Statement when developing plans for future traffic improvements.
- c. Maintain a "Potentially Deficient Intersection List" identifying intersections operating below LOS D after all feasible improvements are constructed.
- d. Analysis of traffic impacts and corresponding need for traffic improvements when land use designation changes are requested.
- e. Implementation of a Transportation Demand Management Ordinance requiring new development to provide amenities which encourage and facilitate alternative transportation modes.
- f. Use of Development Agreements to negotiate traffic improvements and public facilities consistent with the Development Mitigation and Phasing/Construction Programs.

Policy C-5.3 The City shall establish and maintain programs requiring new development to pay its fair share of costs associated with the traffic improvements necessary to support that development.

Funding Mechanisms

Purpose:

1. Ensure that needed traffic improvements are adequately funded.

Programs:

- a. Implement a traffic impact fee program requiring new development to pay a pro-rated share of costs associated with the traffic improvements necessary to support that development.
- b. Require, through locally negotiated mechanisms, that development which contributes more than 10% of the projected traffic at a network intersection provide additional funding to construct the necessary improvements.
- c. Ongoing compliance with Measure M requirements to ensure qualification for Measure M turnback funds.
- d. Participation in requests for regional funding in coordination with inter-jurisdictional planning agencies.

- e. Incorporation of needed traffic improvements into the City's seven year Capital Improvement Program.
- f. Use of Development Agreements where advantageous to negotiate traffic improvements and public facilities consistent with the Development Mitigation and Phasing/Construction Programs.

Policy C-5.4 Land use growth and traffic improvements identified in the General Plan shall be phased so that needed traffic improvements will be provided commensurate with land use demand.

Comprehensive Phasing and Construction Program

Purpose:

- 1. Ensure needed traffic improvements are constructed when they are needed as development proceeds commensurate with demand as set forth.
- 2. Provide reasonable lead time to design and construct necessary improvements.

Programs:

- a. Prepare Intersection Improvement Plans, based on annual monitoring of Citywide traffic levels and following noticed public hearings, to specify necessary improvements for network intersections either currently exceeding or anticipated to exceed LOS D within the following year. Consider the following options for intersection improvements:
 - Enhanced Capacity Intersection Configuration
 - Expanded Transportation Demand Management Requirements
 - Expansion/modification of transit services
- b. Construct necessary traffic system improvements, including implementing arterials to full width and intersection improvements, within the timeframes required by the Congestion Management and Growth Management Programs.

Policy C-5.5 The City shall annually evaluate the past year's land use growth and corresponding implementation of needed traffic improvements consistent with the Development Mitigation and Phasing/Construction Programs and adjust those programs accordingly.

Performance Monitoring Program

Purpose:

- 1. Provide current LOS data necessary to evaluate Development Mitigation and Phasing/Construction Program implementation.

Programs:

- a. Prepare annual progress reports which detail the past year's land use growth and traffic improvements and which include traffic counts and LOS calculations for the Measure M network that are no more than three months old (traffic counts shall not be taken during the periods from June through August nor November 15 through January 5).