Hughson General Plan







City of Hughson December 12, 2005



Hughson General Plan

City of Hughson December 12, 2005

TEL: 510 848 3815

FAX: 510 848 4315



DESIGN, COMMUNITY & ENVIRONMENT

1600 SHATTUCK AVENUE, SUITE 222 BERKELEY, CALIFORNIA 94709

in association with kdANDERSON Transportation Engineers Illingworth & Rodkin Environmental Collaborative

TABLE OF CONTENTS

١.	INTRODUCTION	.1-1
2.	Land Use Element	.LU-I
3.	CIRCULATION ELEMENT	.C-I
4.	Conservation and Open Space Element	.COS-I
5.	Public Services and Facilities Element	.PSF-I
6.	SAFETY ELEMENT	.S-I
7.	Noise Element	.N-I
8.	General Plan Preparers	.P-1
9.	GLOSSARY	.G-I
Lis	st of Figures	T 2
	Figure I-1 Regional Location	I-3
	Figure I-2 City Limits, Sphere of Influence and Planning Area	I-6
	Figure I-3 Sphere of Influence Boundary Changes	I-7
	Figure I-4 General Plan Components	I-11
	Figure LU-1 Existing Neighborhoods	LU-6
	Figure LU-2 Gateways	LU-7
	Figure LU-3 Hughson Redevelopment Project Area	LU-16
	Figure LU-4 Land Use Designations	LU-19
	Figure LU-5 Residential Infill Area	LU-23
	Figure LU-6 Primary and Ultimate Sphere of Influence	LU-30
	Figure C.1 Circulation System	LU-40 C-14
	Figure COS 1 Important Formland	C-14 COS-6
	Figure COS-1 Important Farmland	COS-6 COS-8
	Figure COS-3 Vegetation	COS-14
	1 iguie CO3-3 v egetation.	CC3-14

CITY OF HUGHSON GENERAL PLAN TABLE OF CONTENTS

Figure PSF-1 Public/Semi-Public Uses	PSF-4
Figure S-1 Regional Earthquake Faults	S-3
Figure S-2 Soil Types	S-7
Figure S-3 100-Year Flood Zone	S-9
Figure S-4 Don Pedro Reservoir Dam Inundation Area	S-10
Figure N-1 Land Use and Noise Compatibility	N-5
Figure N-2 Future Noise Exposure	N-12
List of Tables	
Table LU-1 Existing Land Use Acreages	LU-10
Table LU-2 Land Use Designation Acreages	LU-20
Table LU-3 General Plan and Zoning Code Consistency Matrix	LU-21
Table C-1 General Level of Service Thresholds Based on Daily	
Traffic Volumes	C-4
Table C-2 Signalized Intersection LOS Criteria	C-6
Table COS-1 Government Code Open Space Classifications	COS-2
Table COS-2 Definitions of Farmland Quality Terms	COS-4
Table COS-3 Farmland in the Planning Area	COS-7
Table COS-4 Williamson Act Lands	COS-7
Table COS-5 Existing Recreational Facilities in Hughson	COS-10
Table COS-6 Special-Status Species Known or Suspected in the	
Hughson Vicinity	COS-15
Table COS-7 Ambient Air Quality Standards for Criteria Pollutants.	COS-22
Table COS-8 Attainment of Ambient Air Quality Standards in	
Stanislaus County	COS-27
Table COS-9 Measured Air Pollutant Concentrations in Stanislaus	
County	COS-28
Table PSF-1 HUSD Capacity and Enrollment for 2004-2005	PSF-7
Table S-1 Soil Types and Characteristics	S-6
Table N-1 Existing Vehicular Traffic Noise on Major Roadways	N-6
Table N-2 Future Vehicular Traffic Noise on Major Roadways	N-10

I Introduction

The City of Hughson is in a period of unprecedented change. Growth pressures within the Central Valley have resulted in rapid change in Hughson and the region as a whole, with new homes being built at rates never experienced in the past and home prices increasing at similarly fast rates. While recognizing that some change is inevitable and desirable, the City has adopted this General Plan to provide the control and regulation necessary to ensure that in the face of these outside pressures, its high quality of life, small-town atmosphere and agricultural traditions continue into the future.

A. Purpose of this General Plan

The General Plan provides the fundamental basis for the City's land use and development policy, and represents the basic community values, ideals and aspirations to govern a shared environment through 2025. The General Plan addresses all aspects of development including land use, community character, transportation, housing, public facilities, infrastructure and open space, among other topics.

California Government Code Section 65300 requires that the General Plan be comprehensive, internally consistent and long-term. Although required to address the issues specified by State law, the General Plan may be ultimately organized in a way that best suits Hughson. The Plan should be clearly written, available to all those concerned with the community's development and easy to administer.

The overall role of the Hughson General Plan is to:

- Define a realistic vision of what the City desires to be in 20 years.
- Express the policy direction of the City of Hughson in regard to the physical, social, economic, cultural and environmental character of the city.

- Serve as a comprehensive guide for making decisions about land use, community character, circulation, open space, the environment, and public health and safety.
- ◆ Serve as the City's "constitution" for land use and community development. That is, it is to provide the legal foundation for all zoning, subdivision and public facilities ordinances, decisions and projects, all of which must be consistent with the General Plan.
- Be in a clear and easy to understand form that encourages public debate and understanding.

This General Plan document supersedes the previous General Plan, adopted in 1984, and coordinates with the Housing Element update adopted in 2004. The General Plan's implementation will include actions to update other planning documents to ensure consistency with the vision outlined in the Hughson General Plan.

B. Hughson Today

The City of Hughson is located in Stanislaus County, approximately 10 miles southeast of Modesto, 90 miles south of Sacramento and 100 miles southeast of San Francisco. There are no major highways through or adjacent to Hughson. State Highway 99 (SR-99) is the closest freeway, running north to south through Modesto with a linkage via Interstate-205 (I-205) to I-5, the State's major north-south interstate corridor, and I-580. Figure I-1 depicts the City's regional location. The existing incorporated area of the City of Hughson is approximately 1.5 square miles.

The Township of Hughson was founded in 1907 as a result of the growing importance of the surrounding agricultural lands and the arrival of the railroad to the community, with incorporation as a city occurring in 1972. Agriculture and the railroad still continue to play an important role in the



FIGURE I-1

REGIONAL LOCATION

CITY OF HUGHSON GENERAL PLAN INTRODUCTION

community, providing jobs and influencing the physical design of Hughson; however, new development, employment opportunities and regional growth pressures are affecting the character of Hughson.

According to the US Census, there were 3,980 people living in Hughson in 2000, which represented a 22 percent increase from 1990, or about 2.2 percent per year. Since 2000, the State estimates that Hughson is experiencing a much faster rate of growth, with 5,942 residents estimated for January 1, 2005, which reflects an annual growth rate of 10 percent. This rapid increase in development is primarily a reflection of the regional growth pressures that are affecting the Central Valley as people living in more expensive regions look for affordable housing in the Valley.

While there has been a significant increase in the construction of new housing, the cost of housing has also increased, with a significant spike beginning in 2000. As discussed in the Housing Element, median housing prices have increased from \$89,000 in 1990 to \$168,750 in 2002. However, what is important to note is that since 2000, housing prices increased each year during 2001 and 2002 by the same amount that house prices had increase during the entire previous 10-year period, i.e. increasing over \$20,000 per year in 2001 and 2002 versus about \$20,000 total between 1990 and 2000. As wages have not been able to increase at the same rate, the ability of Hughson residents to afford housing is a growing concern, with almost 40 percent of Hughson households overpaying for housing in 2000.

Another concern that is tied to the ability of residents to continue to afford living in Hughson is the lack of higher paying employment opportunities for local residents. The great majority of Hughson residents, over 85 percent, work outside of the city. Many of these residents work within Stanislaus County, traveling to major employment centers such as Modesto. However, according to the 2000 Census, about 13 percent of Hughson residents traveled outside the County for employment. Available data indicates that commuters go to employment centers such as Tracy and Stockton, and to a lesser extent to Sacramento and the Bay Area.

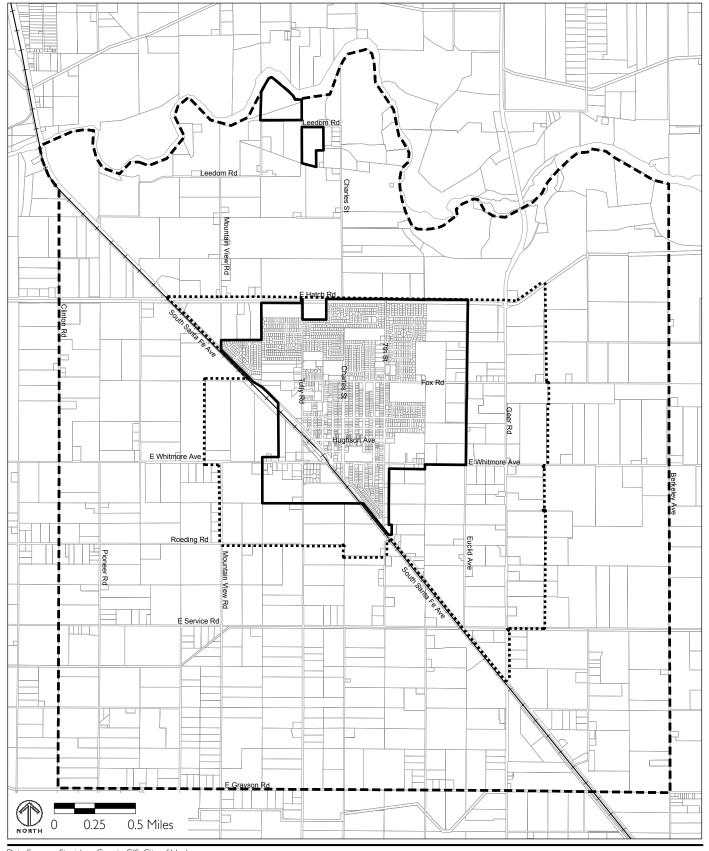
This General Plan is designed to address the issues that face Hughson as pressures to grow and change occur. New employment opportunities are encouraged to allow residents to work, shop and live within the community. A range of housing types are allowed to provide housing to meet everyone's needs, while limiting growth to areas adjacent to the existing city limits and protecting the agricultural lands that contribute to Hughson's character, history and economic success.

C. The City and its Planning Area

The State of California encourages cities to look beyond their borders when preparing a General Plan. For this reason, this General Plan assesses two delineated areas known as the Sphere of Influence (SOI) and the Planning Area, both of which are larger than the city limits.

The SOI includes land over which the City currently does not have complete jurisdiction, but which it may annex and urbanize in the future. The total SOI outside the city limits is approximately 1.9 square miles. Figure I-2 depicts the city limits, SOI and Planning Area for Hughson.

While updating the General Plan, the City decided to propose revisions to the Stanislaus Local Agency Formation Commission (LAFCO)-approved SOI recognizing that much of the existing SOI has already been developed, or is already proposed for development, and the General Plan is meant to plan for potential development for the next 20 years. Figure I-3 depicts the proposed changes to the SOI. The SOI proposed in this General Plan is subject to approval by the LAFCO.



Data Source: Stanislaus County GIS, City of Hughson

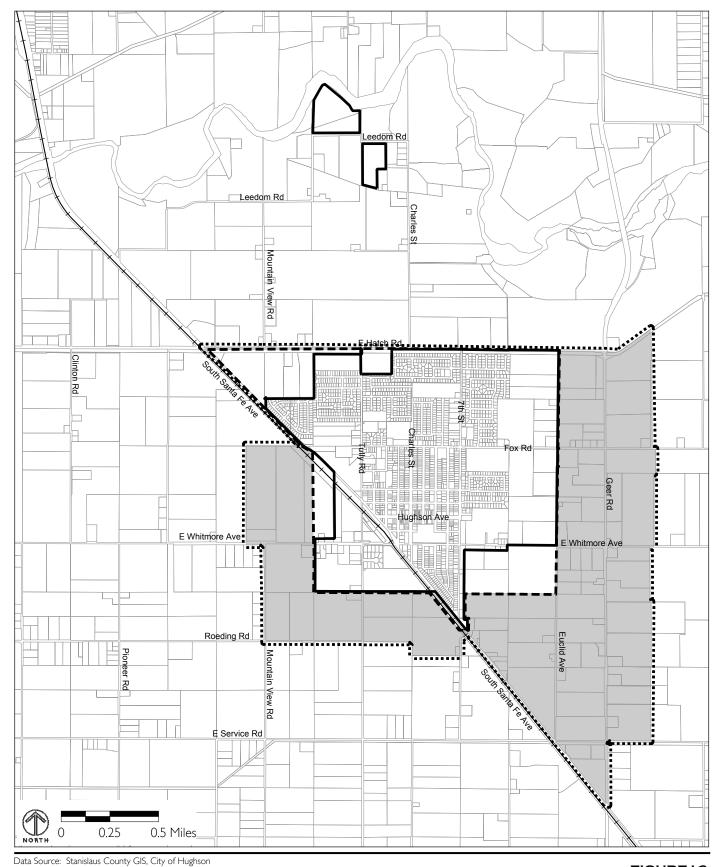
FIGURE I-2

Planning Area

Sphere of Influence

City Limits

CITY LIMIT, SPHERE OF INFLUENCE AND PLANNING AREA



General Plan Sphere of Influence

LAFCO-adopted Sphere of Influence

City Limits

New Area Added to Sphere of Influence

FIGURE I-3

SPHERE OF INFLUENCE BOUNDARY CHANGES

CITY OF HUGHSON GENERAL PLAN CITY OF HUGHSON GENERAL PLAN INTRODUCTION

To comply with LAFCO regulations, Hughson's SOI has been divided into a Primary and Secondary SOI. As discussed in more detail in the Land Use Element, the Primary SOI depicts areas that may develop within the first 10 years of this General Plan, through 2015, while the Secondary SOI includes the remainder of the SOI. Figure LU-7 in the Land Use Element depicts the Primary and Secondary SOI.

State law also allows cities to identify a Planning Area. This is an area outside of a jurisdiction's boundaries that bears a relation to the City's planning. While Hughson does not have any regulatory authority within the Planning Area, outside the SOI, the Planning Area is included in the General Plan as a signal to the County and to other nearby local and regional authorities that Hughson recognizes that development within this area has an impact on the future of the city. The Planning Area includes all unincorporated land north to the Tuolumne River, west to Clinton Road, south to Grayson Road and east to Berkeley Avenue.

D. General Plan Contents

This General Plan includes this introduction and a brief overview of Hughson, as well as six separate "elements" that set goals, policies and actions for each given subject. These six elements cover the seven topics required by California State Government Code Section 65302. Some State-required topics have been combined or included into other elements, as allowed by State law. As previously mentioned, the Housing Element, one of the required elements, was adopted under a separate process and is available as a separate document. A brief explanation of the topics included in the Hughson General Plan is provided here.

Land Use Element. The State-required Land Use Element designates all lands within the City for specific uses such as housing, commercial, industrial, open space and recreational, public facilities and agriculture uses. The Land

Use Element also provides development regulations for each land use category, and overall land use policies for the City.

Circulation Element. State law requires that a Circulation Element specify the general location and extent of existing and proposed major streets and other transportation facilities. As required by law, all facilities in the Circulation Element are correlated with the land uses foreseen in the Land Use Element.

Conservation and Open Space Element. This Element combines two elements required under State-law; the Conservation Element and the Open Space Element. It addresses the preservation of open space and the conservation, development and utilization of natural resources. Also included in the Element are goals and policies for the protection and preservation of agricultural, biological and cultural resources. Finally, this Element covers the issues of air quality, energy conservation, and water quality and conservation.

Public Services and Facilities. This optional Element assesses the current state of public services and facilities within the City, including law enforcement, fire service (including wildland and urban fires typically discussed in the Safety Element), schools, libraries, government facilities, water, wastewater, stormwater drainage, solid waste and utilities. Goals and policies focus on ensuring minimum service levels within Hughson, with and without additional development.

Safety Element. State law requires the development of a Safety Element to protect the community from risks associated with the effects of seismic and other geologic hazards, flooding and dam inundation, hazardous materials, as well as ensuring adequate emergency preparedness. As previously mentioned, threats from wildland and urban fires are covered in the Public Services and Facilities Element.

CITY OF HUGHSON GENERAL PLAN INTRODUCTION

Noise Element. The State also requires a Noise Element as part of the General Plan to addresses noise problems in the community, and analyze and quantify current and projected noise levels from a variety of sources.

Housing Element. As previously stated, the City's Housing Element was adopted in 2004 pursuant to State law. Government Code Section 65588 requires that Housing Elements be updated every five years and include specific components such as analysis of existing housing stock, analysis of existing and projected housing needs, and quantification of the number of housing units that will be developed, preserved and improved through its policies and actions. The Housing Element is available as a separate document.

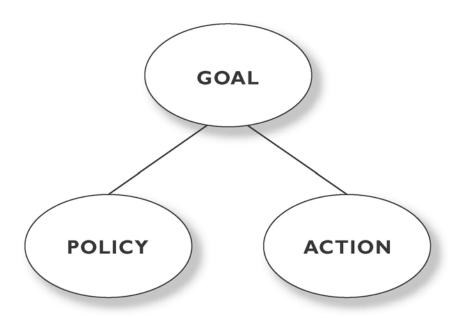
E. Organization of the General Plan Elements

Each element of this General Plan contains background information and a series of goals, policies and actions. Some elements also have additional sections that are specific to them. For example, the Land Use Element contains descriptions of a series of land use designations that guide overall development in the City and the Circulation Element contains information on the network and hierarchy of streets.

The background information section of each element describes current conditions in Hughson relative to the subject of the element. The goals, polices and actions provide guidance to the City on how to direct change and manage its resources over the next 20 years. Figure I-4 illustrates that policies and actions are at the same level of importance, and are both intended to implement goals. In most cases, goals have both implementing policies and actions. However, it is also possible for a goal to be implemented exclusively through either policies or actions. The following provides a description of each and explains the relationship between each:

◆ A **goal** is a description of the general desired result that the City seeks to create through the implementation of its General Plan.

FIGURE 1-4 GENERAL PLAN COMPONENTS



- ◆ A policy is a specific statement that guides decision-making in working to achieve a goal. Such policies, once adopted, represent statements of City regulation and require no further implementation. The General Plan's policies set out the standards that will be used by City staff, the Planning Commission and City Council in their review of land development projects and in decision-making about City actions.
- ◆ An action is a program, implementation measure, procedure or technique intended to help to achieve a specified goal.

F. General Plan Update Process

The General Plan update process began in 1998 and ended in 2005. During the update process, a range of public input opportunities occurred to ensure that an updated General Plan would reflect the community's vision for Hughson. In addition, several drafts of the General Plan were produced in response to changes in public opinion of the direction that the General Plan should take. The following describes the various public outreach efforts that were undertaken.

1. Early Public Outreach and Involvement

Early in the planning process, the public provided initial input on the issues and concerns that they felt would be important to consider during the General Plan update process. Part of this outreach included a survey in 1998. There were also a couple citizen steering committees that participated during various stages of the General Plan process, providing comments and suggestions for various drafts of the General Plan. Both the public survey and steering committee input were reviewed during the final General Plan update process.

2. Planning Commission/City Council Study Session

A public workshop was held on July 11, 2005 to allow the Planning Commission, City Council and members of the public to review the Draft General Plan and provide comments during the official, State-mandated review period.

3. Public Review Period and Adoption

As required by State-law, the General Plan was circulated for a 45-day period along with the associated environmental review during the months of July and August 2005. During this time, the public was allowed to submit additional comments and all of the comments received were taken into consideration at the public hearings held in front of the Planning Commission on July 19, August 16 and October 18, 2005 and City Council on August 22, September 12 and October 24, 2005. The City Council adopted the General Plan on December 12, 2005.

2 LAND USE ELEMENT

The purpose of the Land Use Element is to shape the potential physical development of the City of Hughson and to preserve, protect and enhance the community's current quality of life. The Land Use Element is not designed to discourage or promote development as allowed in this General Plan, but rather describes the manner in which development should be managed in the event that it does occur. The Land Use Element is the central chapter of the General Plan.

As required by California Government Code Section 65302(a) and Public Resources Code Section 2762(a), this Land Use Element portrays the distribution, location and extent of existing lands used for housing, business, industry, parks and recreation, education and other public facilities. The Element also contains text, including specific goals, policies and actions, and maps that guide the future use and reuse of land within the city limits, and set standards of density and building intensity within the community. The General Plan Land Use Map graphically represents the City's vision for the development of the city through 2025.

The Land Use Element focuses on development that could potentially occur in both the existing city limits and the City's Sphere of Influence (SOI). As discussed in more detail in the General Plan Introduction, the SOI is the area outside the city limits that the City may consider as reasonable for annexation during the next 20 years.

The Element is divided into four sections:

- Background Information. Provides details on basic urban design principles, existing land uses in Hughson and its surrounding area, growth management, the redevelopment project area and the City's Design Expectations.
- ♦ General Plan Land Use Designations. Describes the characteristics and intensity of each land use designation and contains a map of the application of these designations in the Hughson area.

- Sphere of Influence. Describes the City's primary and secondary Spheres of Influence and explains how any allowed development in these areas would be phased over time.
- ◆ Goals, Policies and Actions. Provides guidance to the City related to land use decisions.

A. Background Information

This section provides background on basic urban design principles that underlie this Element, the existing land use pattern within Hughson and existing City and County regulations that contribute to the overall character of Hughson. This Land Use Element builds on the existing City form, providing guidance on how to direct new development in such a way that it enhances, rather than changes, the community of Hughson.

1. Urban Design Principles

This Land Use Element is based on notions of good urban design, which address the image and character of the city's environment. The Element considers the relationship between the location of uses and the visual appearance and character of the built environment, with the ultimate goal of attaining a strong sense of place and enhancing the quality of life for the community as a whole.

In Hughson, these urban design principles should be followed to maintain a sense of place. They should be applied at all scales within the city, from individual buildings to larger development projects, and should apply to new development as well as the redevelopment of existing areas.

a. Human-Scale Design

People typically feel most comfortable and secure in environments that are designed at the scale of the individual. At a neighborhood level, this translates into short, walkable block lengths that provide ample connections throughout a neighborhood. At a site or building design level, human-scale

design involves the appropriate massing of buildings, articulation of façade design, organization of buildings on a site, landscaping and use of color and materials. Generally this means avoiding or minimizing the use of sound walls and cul-de-sacs in residential development and ensuring that future residential, retail, office and commercial development presents an attractive "face" to the street and fosters active street life.

b. Pedestrian-Orientation

Designing places that are pedestrian-oriented, or "pedestrian friendly" rather than automobile-oriented often contributes to a sense of place because it encourages people to use public spaces. Pedestrian-orientation for transportation involves good physical connections between destinations, providing a mix of uses where possible, as well as a safe walking environment. In terms of building design, pedestrian-friendly design includes orienting buildings to the street, avoiding stretches of blank walls, locating entrances towards the public realm and providing pedestrian amenities such as sidewalks, awnings, benches and attractive street lighting.

Increasing pedestrian-orientation not only enhances the attractiveness and safety of an area, but it also helps provide opportunities to segments of the community that may not have access to automobiles, such as senior citizens, people with disabilities, low income residents and children.

c. Landscaping

One of the features that makes Hughson attractive, and which can be augmented to increase the town's attractiveness, is landscaping. Street trees, established larger trees and surrounding orchards are important features of Hughson's visual character and are enjoyed by the public as a whole. They also provide shade and cooling during Hughson's hot summers.

The City has adopted a Street Tree Ordinance to protect street trees within the public right-of-way. As part of the Street Tree Ordinance, the City is required to adopt a Master Tree Plan that will outline a comprehensive approach to landscaping along the major roadways in Hughson.

d. Visual Landmarks

A visual landmark is an element by which people orient themselves and that can help create a unique identity for an area. Examples of visual landmarks include statutes, major works of public art, historic buildings, prominent landscaping or other easily identifiable features. Currently, there are relatively few such landmarks in Hughson and this Land Use Element seeks to create them.

e. Nodes

A node is a focal point or public meeting place where people might gather. Examples of nodes include a popular shopping area, a plaza, park or community center. Nodes in Hughson include the Downtown and Starn Park. Nodes are important components of a community because they provide a common location for people to congregate, talk, shop and play. As noted below, they also provide a focal point for neighborhoods.

f. Neighborhoods

Neighborhoods are residential development areas that focus around a park or open space resource, school or retail use that serves as a source of identity for local residents.

Neighborhoods should also provide a mixture of housing types and styles in order to avoid the visual "sameness" seen in many new subdivision. Furthermore, including a mixture of housing types allows for all residents of Hughson to find housing affordable to their means.

Neighborhoods are comprised of two components:

- Development Areas. The majority of the physical area of a neighborhood should be devoted to residential development. Residences should have direct pedestrian connections with neighborhood focal points and the major destinations within Hughson.
- Focal Points. The focal point of a neighborhood should be a park, school, plaza, open space or retail development. Focal points should contain public spaces to serve as a nucleus for neighborhood life and provide

a space where community members can meet their neighbors. For example, the mini-park in the Rhapsody development serves as the focal point for the small neighborhood created by the subdivision, while the Downtown serves as the focal point for the larger neighborhood created by the surrounding residential areas.

Neighborhoods should be of a size where the majority of residents are within a reasonable walking or bicycling distance of a focal point, which generally means that neighborhoods should be no more than about ½-mile across in any direction. An illustrative map of Hughson's existing neighborhoods is shown in Figure LU-1. Some of the existing neighborhoods are larger than is recommended for newer development.

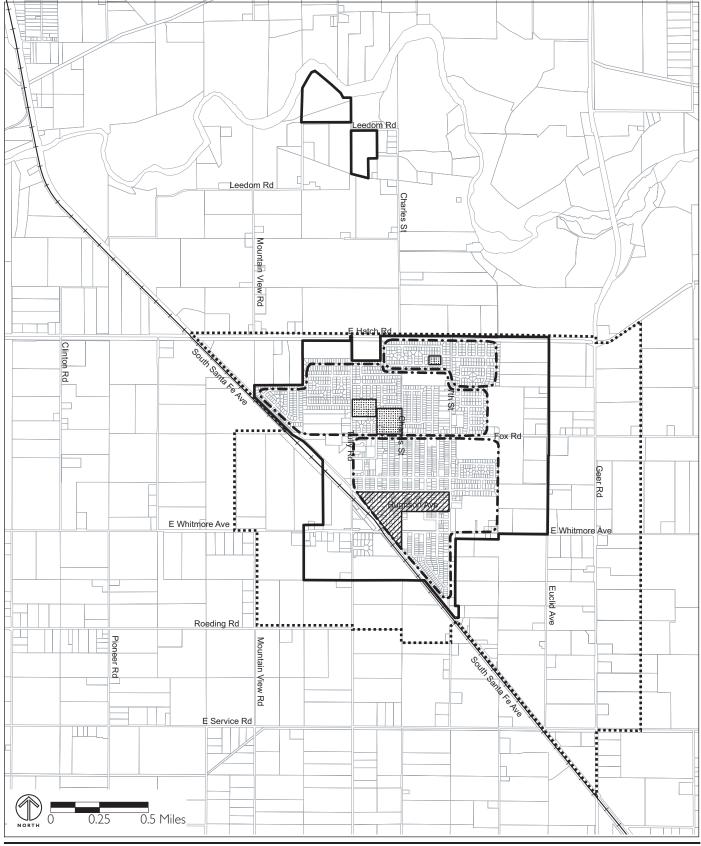
g. Gateways

Gateways are entries to the city along major roadways. Creating aesthetically pleasing gateways is an important component of land use planning and community design that contributes to a city's character and sense of place. Gateway design treatments can include fountains, attractive signage or natural features such as rows of trees.

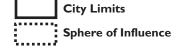
Gateway locations in Hughson are shown in Figure LU-2. The Hughson Botanical Gardens has indicated to the City that as part of the Gardens' improvement plan, it would like to partner with the City to create a gateway along Whitmore Avenue from Geer Road.

h. Community Separators

Community separators are undeveloped, open space areas between urban communities that are established to ensure that the communities do not eventually merge into each other, forming a continuous urban sprawl, as this could result in the loss of community identity and reduction in quality of life. The concept of community separators is especially important in the Hughson

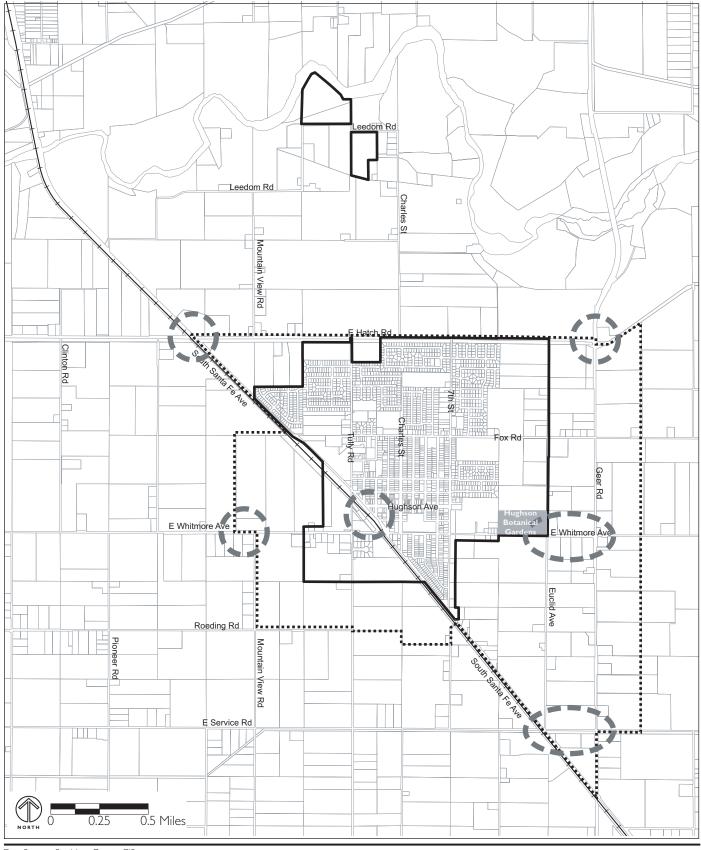


Data Source: Stanislaus County GIS FIGURE LU-1



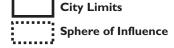


EXISTING NEIGHBORHOODS



Data Source: Stanislaus County GIS

FIGURE LU-2





GATEWAYS

CITY OF HUGHSON GENERAL PLAN LAND USE ELEMENT

area since the majority of Central Valley communities are experiencing great pressure to accommodate additional growth and have grown at unprecedented rates over the last couple decades.

In the past, Hughson has not designated any specific community separators or greenbelts around the city. However, this Land Use Element includes a goal to avoid merging with the City of Ceres with the creation of community separators through the preservation of agricultural lands.

Ceres presents the most immediate concern to Hughson in regards to community separators since it has shown a history of rapid growth towards the east. The establishment of a community separator program between Hughson and Ceres would require coordination and agreement between Ceres and the County.

Ceres has identified in its General Plan the desire to work with Hughson and the County to establish a permanent urban growth boundary along Ceres' eastern boundary. Ceres also has designated a Residential Agriculture buffer between higher density uses to the west and agricultural lands to the east. Other local jurisdictions that are experiencing growth and have the potential to direct growth towards Hughson include Turlock and Denair to the south and Modesto and Empire to the north.

In addition to teaming with other jurisdictions, Hughson could work with non-profits and private property owners to encourage the preservation of agriculture outside the City's SOI and maintain buffers between communities. For example, the Stanislaus Farmland Trust recently merged with three other farmland trusts from Merced, Sacramento and San Joaquin counties to form the Central Valley Farmland Trust. By combining efforts, the newly formed organization will be better able to work towards a regional agricultural preservation process.

2. Existing Land Uses in Hughson

The City of Hughson is largely a residential community characterized by a traditional downtown area surrounded by mainly single-family residential neighborhoods. There are few major employment centers, but available employment is found in the Downtown and in the industrial area located along Whitmore Avenue to the southwest of the railroad.

Hughson currently has a shortage of employment opportunities for its residents, resulting in an outflow of residents during the day as they travel to jobs in neighboring communities such as Modesto and Tracy. The limited amount of retail within Hughson is also a concern since Hughson residents have to shop in other towns and since the City depends on retail uses to augment its tax base and pay for needed community services such as police, fire and road maintenance.

As part of the preparatory work to update the General Plan, a land use inventory of the City and SOI was conducted in 2004. Table LU-1 details the amount of land acreage within each major category of land use, as described below. The following land use categories were created to describe the existing pattern of development in Hughson and are not the official General Plan land use designations, which are identified later in this Element.

a. Residential Neighborhoods

Hughson's residential neighborhoods can be divided into two fundamental types:

◆ Traditional residential neighborhoods surround the Downtown and are built on a grid pattern. These neighborhoods have a mixture of housing types and densities and include the majority of the City's older housing units. Smaller residential homes and lot sizes are concentrated around the Downtown. Most of the community's multi-family housing is also in this area.

TABLE LU-I **Existing Land Use Acreages**

Land Use Category	City Limits	% of Total in City Limits	SOI	% of Total in SOI	Total Acres
Single Family or Duplex Residential	319	32.3%	48	3.9%	367
Multi-Family Residential	22	2.2%	4	0.3%	26
Mobile Home Park	5	0.5%	2	0.2%	7
Downtown Commercial	11	1.1%	0	0%	11
Other Commercial	2	0.2%	5	0.4%	7
Industrial	74	7.5%	29	2.3%	103
Park and Open Space	39	3.9%	0	0%	39
Public Facility	100	10.1%	6	0.5%	106
Religious Facility	24	2.4%	7	0.6%	31
Agriculture	161	16.3%	1,088	87.3%	1,249
Vacant/ Underdeveloped	40	4.0%	27	2.2%	67
Right-of-Way	191	19.3%	30	2.4%	221
Total	988	100%	1,246	100%	2,234

◆ Contemporary residential neighborhoods generally consist of larger homes built on a discontinuous street system with cul-de-sacs. These areas are located to the north of the Downtown and to the east of Seventh Street.

Hughson's neighborhoods can also be viewed from the perspective of the type and density of residence that they accommodate, as described below:

- Single Family and Duplex Residential. This classification typically describes parcels that contain one residential unit. Some parcels contain related structures such as secondary residential units, a garage or shed, or duplex housing units. Ninety-three percent of developed residential land within Hughson's city limits has been developed with single-family or duplex dwellings. According to the 2000 Census, only about three percent of one and two units structures in Hughson were duplexes, with an additional six percent consisting of single family attached units. There are a total of approximately 367 acres in this category, including 319 acres within the City limit and 48 acres outside the city limit in the SOI.
- ♦ Multi-Family Residential. Parcels included in this category contain residences with more than two dwelling units, such as apartment buildings. In Hughson, about seven percent of land developed for residential uses contains multi-family units. There are a total of approximately 23 acres of multi-family residential uses, with 22 acres in the city limit and four acres outside of the city limits in the SOI.

The community has expressed concern about the design and maintenance of the older multi-family units near the Downtown. As a result, new multi-family units will be required to be of high quality and well maintained.

◆ Mobile Home Parks. Land included in this category contains multiple mobile homes or recreational vehicles used for long-term residences. There are a total of approximately seven acres of mobile home parks, with five acres within the city limits and two acres outside the city limits in the SOI.

b. Downtown Commercial Area

Hughson's center is its historic Downtown. As the heart of the community, the Downtown merits special recognition in the General Plan. The Downtown

town has a compact street pattern, with the commercial area along Hughson Avenue as its main axis. It is the commercial and social center of Hughson.

The Downtown includes a mixture of land uses, with commercial uses focused along Hughson Avenue and in the triangular area south of Hughson Avenue and west of Charles Street. There are approximately 11 acres of downtown commercial, all of which are located in the city limits.

Surrounding the Downtown are some of the oldest residential neighborhoods in the city, with single-family homes as the majority and duplexes and multifamily units interspersed. The majority of Hughson's multi-family units are located to the north of Downtown, along Locust Street. Hughson Elementary School is located north of East Whitmore Avenue.

While there are many attractive, older buildings in the Downtown area, many of the surrounding residential units and some of the commercial buildings could benefit from improved maintenance.

The City, through its Redevelopment Agency, is undertaking a façade and downtown improvement project for the Downtown. The project is comprised of several separate efforts, including a façade improvement program that provides design guidance and outlines a potential funding program; an evaluation of targeted buildings to assess the feasibility of including them in the facade improvement program; and a future development concept plan that outlines a comprehensive strategy for the Downtown including potential infill sites, pedestrian and bicycle facilities and locations for shared parking.

c. Other Commercial Areas

Scattered commercial uses are located along Santa Fe Avenue in the city limits and on Geer Road outside the city limits in the SOI. Most of these are one or more retail, service or office buildings. Typical uses include road-side service establishments, automobile services, convenience stores and small restaurants. There are approximately seven acres of this commercial land, with two acres in the city limits and five acres outside the city limits in the SOI.

Commercial uses outside the Downtown are extremely limited. Hughson does not currently have its own modern supermarket and residents are forced to travel to neighboring towns for purchases.

d. Industrial Areas

Although Hughson has relatively limited employment opportunities, there are several areas dedicated to industrial uses. Most industrial lands are located southwest of the railroad and Santa Fe Avenue. Other industrial-type uses are scattered within the city limits and the SOI, including a triangular parcel between Santa Fe Avenue and Tully Road, and agricultural industrial uses along Geer Road.

Industrial uses in Hughson include cold storage, food processing and other agricultural-supporting facilities, as well as light manufacturing. There are approximately 103 total acres of industrial uses, 74 acres in the city limit and 29 acres outside the city limit in the SOI. These uses are mostly located in the southwest area of the City, along Santa Fe Avenue.

e. Public and Quasi-Public Uses

Hughson has a variety of public and quasi-public uses, including parks, public facilities and religious facilities.

- ◆ Parks and Open Space. This category refers to established public and private open spaces and recreational facilities, such as playing fields, miniparks, neighborhood and community parks, and the Hughson Botanical Gardens. Currently there are approximately 39 acres of park and open space land, all of which is within the city limits. Parks are distributed throughout the city, often in close proximity to the public schools.
- ◆ Public Facilities. Public facilities are government-owned parcels, and include civic uses such as libraries, police and fire station, City Hall, the wastewater treatment plant and public schools. There are a total of approximately 106 acres in this category, 100 acres located within the city limits, and an additional six acres located outside the city in the SOI. Large concentrations of this land use include the various public schools

and civic center complex near Downtown, and the wastewater treatment facility on the north side of town close to the Tuolumne River.

• Religious Facilities. This use includes all places of worship, such as churches or temples, as well as the private Hughson Christian school. It does not include private homes used for individual or small-group religious study. There are currently 24 acres of land containing religious facilities within the city limits and seven acres outside the city limits in the SOI.

f. Agriculture

Hughson is proud of its agricultural heritage and continues to be surrounded by agricultural lands. Working and non-working agricultural lands, for row crops, orchards, grazing, dairy farms, single-family homes on large agricultural parcels, and agriculturally-related commercial and industrial uses are included in this category. A total of approximately 1,249 acres of agricultural lands exist in the Hughson area, 161 acres within the city limits and 1,088 acres outside the city limits in the SOI.

Agricultural lands surround the City and provide a source of identity and employment for residents. Agricultural lands in the Hughson area are characterized by orchards, which give the community a "forested" feel, and to a lesser extent row crops and vineyards. Agricultural lands within the city limits and some in the SOI are targeted for future residential, commercial and industrial development; however, the community recognizes the need to preserve agricultural lands not targeted for urban uses.

g. Vacant and Underdeveloped Land

Parcels that contain abandoned structures, were previously urbanized and are no longer utilized, or are void of any structures and are not used for agriculture are all classified as vacant or underdeveloped. There are approximately 67 total acres of vacant land, with 40 acres in the city limits and 27 acres outside the city limits in the SOI. The majority of the larger vacant parcels are located on the north side of town in and around newer subdivisions. Several large vacant parcels also exist on the southwest side of town, adjacent to in-

dustrial uses, and there is a large underdeveloped parcel on the southernmost portion of the SOI where there is scattered vacant commercial buildings.

3. County General Plan Land Use Designations

Since Hughson is surrounded by unincorporated Stanislaus County, it is important to understand the County's land use designations as background for the Hughson General Plan. Stanislaus County has designated unincorporated land outside of the existing Hughson city limits as Urban Transition and Agriculture. Generally, the land that is within the existing LAFCO-recognized SOI is designated as Urban Transition, while the remaining land surrounding Hughson is designated as Agriculture, with a triangle of land south of Service Road designated for Planned Development.

The purpose of the County's Urban Transition designation is to ensure that land remains in agricultural usage until urban development consistent with Hughson's General Plan is approved. Generally, development of this area pursuant to the City's General Plan will only occur as land is annexed into the city. The Agriculture designation's primary goal is to allow for the continued use of land for agricultural uses, by avoiding incompatible urban land uses. Limited development, such as dwelling units, commercial services and light industrial uses may be allowed if compatible and related to agricultural activities. The allowable land uses designated as Planned Development is determined as part of the planned development approval process.

4. Redevelopment Project Area

In 2002, Hughson created a Redevelopment Agency and adopted a Redevelopment Plan for a designated project area, which is shown in Figure LU-3. The Redevelopment Project Area includes the City's downtown commercial area, its primary industrial area and some of the older residential neighborhoods, for a total area of approximately 313 acres.

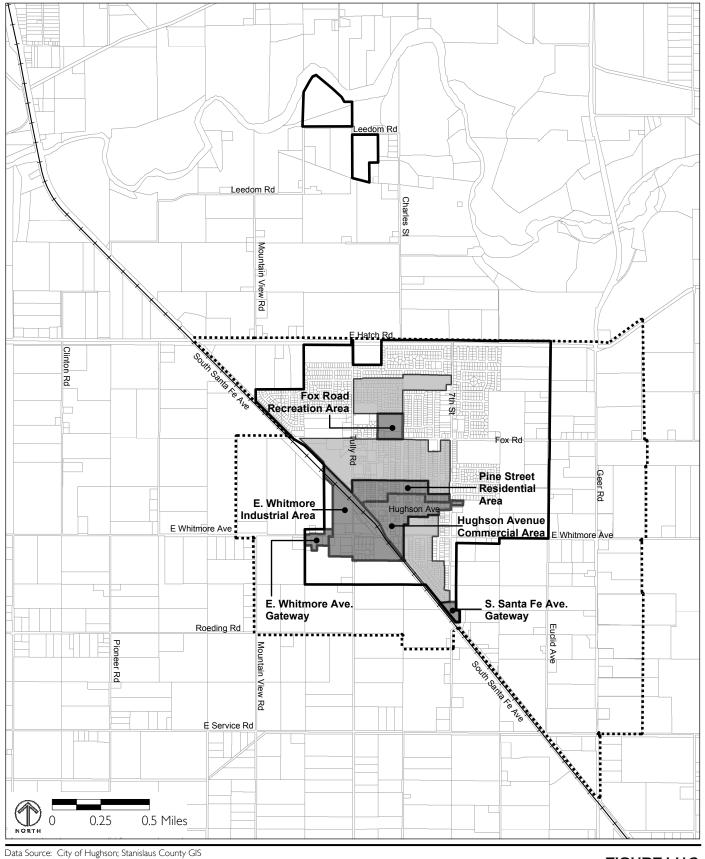


FIGURE LU-3

Redevelopment Project Area **Principal Improvement Zones City Limits Sphere of Influence**

HUGHSON REDEVELOPMENT PROJECT AREA

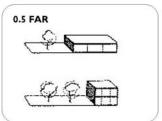
> CITY OF HUGHSON GENERAL PLAN

Within the Redevelopment Project Area, the Redevelopment Agency has identified several Principal Improvement Zones as part of its 2003 Redevelopment Implementation Strategy. The Principal Improvement Zones are areas where the Redevelopment Agency can most effectively promote and facilitate immediate marketing and redevelopment activities. These areas are also shown in Figure LU-3.

The Redevelopment Implementation Strategy contains a range of short-, midand long-term programs that the City will undertake to achieve the Redevelopment Plan's goals to reduce blight, provide affordable housing and generally improve the quality of life for City residents. The Redevelopment Agency does not have eminent domain authority where people reside, so all of the programs affecting areas with residential units are based on voluntary participation of property owners. Where there are no residents, eminent domain is only allowed within the first 12 years from Redevelopment Project Area adoption.

5. Design Expectations and Principles

In 2004, Hughson adopted Design Expectations that inform developers of the City's expectations for new residential development. The Design Expectations build on the more generalized principles described in this General Plan, and provide more specific examples of how to achieve a pedestrian-friendly community that builds on Hughson's traditional character. Prior to submitting a project application, developers are required to complete the Self Certification Checklist contained in the Design Expectations to ensure that each development incorporates the spirit of the desired design principles.





B. General Plan Land Use Designations

This section outlines Land Use Designations for land within the city limits and the SOI. All new development in the City and the SOI, as it annexes into Hughson, must conform to these designations. Figure LU-4 maps the General Plan Land Use Designations and Table LU-2 summarizes the acreage for each land use designation in the city limits and within the current SOI.

The 12 different land use designations establish a range of densities and intensities of use in order to provide flexibility for development while still maintaining Hughson's existing character. The development levels listed here do not create entitlements to a specific number of dwelling units or amount of floor area ratio. Densities on individual parcels may be lower due to site constraints or other City regulations.

Development intensity for housing is expressed in terms of dwelling units per gross acre. Development intensity for commercial and other non-residential uses is expressed as floor area ratios (FARs), which is the gross floor area of all construction divided by the net property areas.

The Land Use Designation Map is implemented through the Zoning Code, which provides more specific classifications than this General Plan. In some cases more than one zoning district is consistent with the General Plan Land Use designations. Table LU-3 shows which zoning districts are consistent with each General Plan land use designation. Other parts of the Municipal Code, especially the Subdivision Ordinance, enforce additional development standards. Under State law, the Zoning Ordinance and other City regulations must be consistent with the General Plan.

The goals, policies and actions contained in this Element provide additional direction on how the various land use designations should be developed to contribute to the overall character of Hughson.

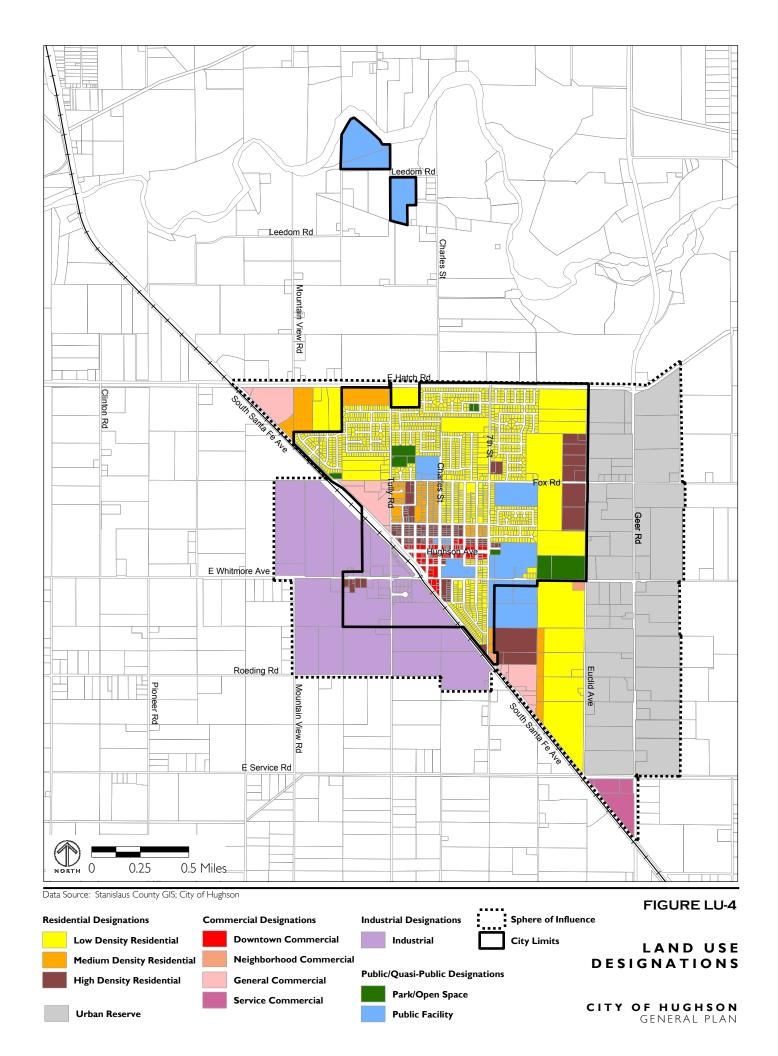


TABLE LU-2 LAND USE DESIGNATION ACREAGES

Land Use Category	City Limits	% of Total in City Limits	SOI	% of Total in SOI	Total Acres
Low Density Residential	395	40.0%	149	12.0%	544
Medium Density Residential	42	4.3%	37	3.0%	79
High Density Residential	70	7.1%	25	2.0%	95
Downtown Commercial	17	1.7%	0	0%	17
Neighborhood Commercial	1	0.1%	2	0.2%	3
General Commercial	23	2.3%	38	3.0%	61
Service Commercial	0	0%	23	1.8%	23
Industrial	101	10.2%	320	25.7%	421
Park/Open Space	31	3.1%	0	0%	31
Public Facility	117	11.8%	31	2.5%	148
Urban Reserve	0	0%	591	47.4%	591
Roads/Right-of-Way	191	19.3%	30	2.4%	221
Total	988	100%	1,246	100%	2,234

TABLE LU-3 GENERAL PLAN AND ZONING CODE CONSISTENCY MATRIX

General	Zoning Districts									
Plan Desig- nation	RA	R-1	R-2	R-3	C-1	C-2	C-3	I	PD	OS
Low Density Residential	X	X							X	
Medium Den- sity Residen- tial			X						X	
High Density Residential				X					X	
Downtown Commercial						X			X	
Neighborhood Commercial					X				X	
General Commercial						X	X		X	
Service Com- mercial							X		X	
Industrial								X	X	
Park/Open Space	X	X	X	X	X	X	X	X	X	X
Public Facility	X	X	X	X	X	X	X	X	X	X
Urban Reserve		A	new zoning dis	strict will be nee	eded to correspo	ond to the Urba	n Reserve Gene	ral Plan designa	ntion.	
Agriculture	A new zoning district will be needed to correspond to the Agriculture General Plan designation.									

Note: X=Consistent General Plan Designation and Zoning District

1. Residential Designations

The three different residential land use designations allow for residential uses ranging from low-density single-family homes, to duplexes, to multi-family structures.

The residential land use designations also allow for other certain types of land uses that serve the community. Examples of allowable uses include home businesses, churches, schools, parks and recreational facilities, fire stations, libraries, day care facilities, community centers and other public uses. The precise location of such facilities will be determined upon the submittal of detailed plans for individual properties.

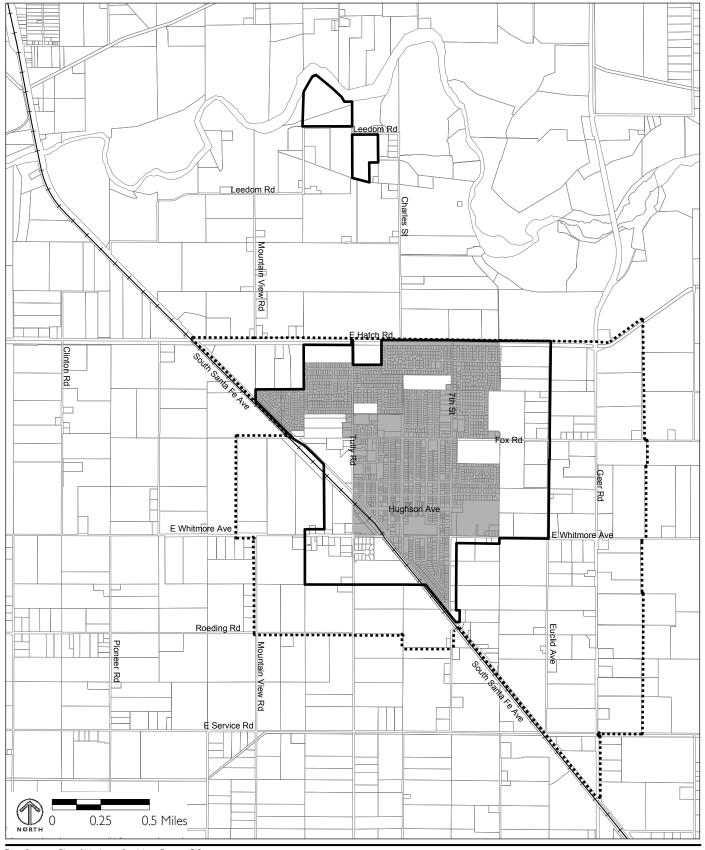
In all residential designations, conventional and manufactured homes on permanent foundations are permitted. Mobile home parks may also be permitted by conditional use permit as long as they do not exceed the allowable maximum density. Second dwelling units are permitted by the provisions of State AB1866.

a. Low Density Residential

The Low Density Residential designation is mainly a single-family residential designation. The maximum allowable density for Low Density Residential is 7.0 dwellings per gross acre. The maximum allowable density will only occur in the portion of the city designated within the Infill Boundary, as shown in Figure LU-5. Newly subdivided areas will need to provide an average lot size of at least 8,500 square feet, which would result in a maximum density of 5.0 dwelling units per gross acre. The maximum density may be increased by up to 25 percent under the Planned Development process, as part of legally-required affordable density bonuses.

b. Medium Density Residential

The Medium Density Residential designation promotes a mixture of single-family houses, duplexes, triplexes, fourplexes and townhouses within the same neighborhood. This category is designed to provide a transition



Data Source: City of Hughson; Stanislaus County GIS

FIGURE LU-5

Residential Infill Area

City Limits

Sphere of Influence

RESIDENTIAL INFILL AREA

between higher density multi-family and commercial development and low density, single family neighborhoods. The designation also ensures that there will be a variety of housing types in Hughson, which is consistent with the traditional character of the community. Allowable densities range from 5.1 to 14.0 dwelling units per gross acre. The maximum density may be increased by up to 25 percent under the Planned Development process, as part of legally-required affordable density bonuses.

c. High Density Residential

The High Density Residential designation allows for residential uses, including apartments and multi-family buildings, with allowable densities ranging from 10.1 to 27.0 dwelling units per gross acre. The maximum density may be increased by up to 25 percent under the Planned Development process, as part of legally-required affordable density bonuses.

Lower density residential uses are also allowed in the High Density Residential designation, but to provide a range of housing types to Hughson residents, the City encourages land designated High Density Residential to be developed with multi-family units.

In addition to exclusively residential uses, mixed-use development with residential and commercial uses in the same building are allowed. Limited office and medical clinic uses are also allowed within the High Density Residential designation. The maximum FAR for non-residential uses is 0.6.

2. Commercial Designations

Four commercial land use designations allow for a wide range of uses with a focus on retail and service establishments. Public uses that serve the larger community are also allowed for each designation.

a. Downtown Commercial

The Downtown Commercial designation allows for general commercial and services uses that serve the entire community. The role of this designation is to preserve the City's traditional commercial core as the primary pedestrian-

focused commercial area for Hughson. The Downtown Commercial designation allows a range of community-serving retail, office, financial and public uses. Limited residential uses, when combined with commercial uses in the same building, are also allowed. The maximum allowed intensity of use for Downtown Commercial is a FAR of 1.8. The maximum allowable residential density is 30 units per gross acre.

b. Neighborhood Commercial

The Neighborhood Commercial designation allows for local shopping areas where the retail or service businesses meet the daily needs of residents in surrounding neighborhoods. Examples of appropriate uses include hair salons, drycleaners, coffee shops and bakeries. The maximum allowed intensity of use for Neighborhood Commercial is a FAR of 0.6.

c. General Commercial

The General Commercial land use designation allows for larger-format commercial uses that serve the community as a whole and which would not be appropriate for Neighborhood or Downtown Commercial areas. The General Commercial designation identifies locations along major streets with good access to regional roadways where any one or combination of significant community serving retail, office and service activity is appropriate. General Commercial areas will be compatible with surrounding land uses, including surrounding commercial activities and will complement commercial uses within the Downtown. Examples of appropriate uses are supermarkets, destination retail tenants, business and commercial services and professional and commercial offices. The maximum allowed intensity of use for General Commercial is a FAR of 0.5.

Light industrial uses are permitted as interim uses within the General Commercial designation where existing facilities are already in operation. However, these uses will not be allowed to expand from the current development intensity and will be encouraged to eventually relocate to land designated for Industrial uses.

d. Service Commercial

The Service Commercial land use designation allows for commercial uses not appropriate for the Downtown, such as auto sales and services, nurseries, larger scale home maintenance centers and wholesale establishments, as well as some limited light industrial uses. This designation is applied to areas outside of the Downtown along major streets. The maximum allowed intensity of use for Service Commercial is a FAR of 0.5.

3. Industrial Designation

The Industrial designation is designed to encourage a wide range of industrial development by providing areas dedicated to heavier industrial land uses and industrial parks, as well as lighter industrial uses such as automobile dealerships and repair shops, building materials sales, light manufacturing, distribution, warehousing and wholesaling. The Industrial land use designation accommodates uses that often create nuisances that cannot readily be mitigated and which require physical separation from conflicting uses, which is provided by Santa Fe Avenue and the railroad. While the emphasis in Hughson is on agricultural related industrial uses, other types of industry compatible with the policies in the General Plan are encouraged. Other uses, including offices, retail and community facilities are allowed in small amounts as long as their primary function is to meet the daily needs of the industrial area workforce. Industrial parcels are allowed a maximum FAR of 0.6.

4. Public/Quasi-Public Designations

Public/Quasi-Public lands contain uses that are generally available for public recreational enjoyment. Some privately owned properties may not be open to the general public's use without prior authorization or permission.

a. Park/Open Space

The Park/Open Space designation provides for current and future locations for publicly-owned parks of all sizes in the City. In addition, privately-owned land that provides recreational opportunities is also included in the Park/Open Space designation. These uses include privately-owned and maintained parks and drainage basins. In addition, the Hughson Botanical Gar-

dens, which will provide limited public access once it is developed, is designated as Park/Open Space since it has the potential to serve as an important regional open space resource once its master plan is implemented.

The Conservation and Open Space Element provides a detailed description of the various types of parks existing and planned for Hughson, as well as privately owned parks, drainage basins and the Hughson Botanical Gardens.

Parks and open space uses are also allowed in the other residential, commercial and industrial land use designations, when included as part of a larger development and approved by the City.

The maximum intensity allowed under the Park/Open Space designation is a FAR of 0.1 to allow for needed improvements that provide for public use of the property, such as bathrooms and visitor facilities, while maintaining the maximum amount of recreational space possible.

b. Public Facility

The Public Facility designation allows for the development and operation of services and facilities that are necessary to meet the community's needs. Allowable uses include public schools and public school property, government offices, fire and police facilities, wastewater treatment plant and other governmental facilities.

5. Urban Reserve

Recognizing that there may be a need for additional housing and employment opportunities in the City, areas designated for Urban Reserve are identified as reasonable locations for future urban expansion. Before the City will allow development to occur in areas designated Urban Reserve, a Specific Plan will need to be prepared, with associated environmental review. The Specific Plan will need to comply with State law, and its preparation must include a public outreach process to ensure that appropriate land uses are identified for the area. These land uses must support the goals, policies and actions included in this General Plan, and be coordinated with a well designed circulation system.

A plan for annexation for the Specific Plan area will also be included as part of the Specific Plan process. Once the Specific Plan is prepared, the City will consider a General Plan amendment and Specific Plan adoption to allow for new growth in this area. Until a Specific Plan is prepared, uses al-lowed under the Agriculture designation will apply.

6. Agriculture

The Agriculture designation may be used by the City to maintain an agricultural buffer area between urban uses in Hughson and adjacent communities in an effort to preserve the agricultural character of the area. The Agriculture designation also serves to provide protection for agricultural operations in the region, which are important to the local economy and identity of Hughson, and serves as a temporary land use designation for areas designated Urban Reserve until a Specific Plan is adopted.

The primary use allowed in the Agriculture designation is agriculture. Additional uses that are allowed to a restricted extent include dwelling units, limited agricultural-related commercial services, agricultural-related light industrial uses and community facilities. The maximum density allowable for dwelling units is between 0 to 2.0 dwelling units per 40 gross acres, while maximum allowable intensity for commercial and light industrial uses is a FAR of 0.3. Commercial and industrial uses require a conditional use permit. Existing multi-family development is allowed to remain as a non-conforming use.

C. Sphere of Influence

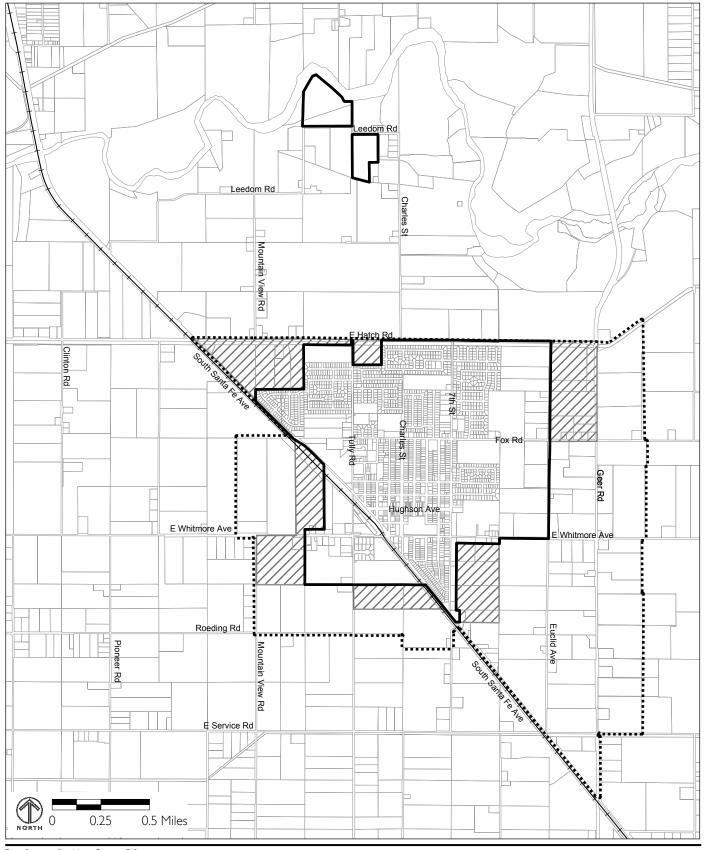
As discussed in the Introduction to this General Plan, the City and LAFCO have established a Sphere of Influence for Hughson. The SOI represents the area that the City may consider for annexation during the next 20 years.

The City has divided its SOI into a Primary SOI and a Secondary SOI, as shown in Figure LU-6. The Primary SOI is the area where the City generally anticipates growth to occur through 2015, while the Secondary SOI is the area anticipated to develop between 2015 and 2025.

a. Primary Sphere of Influence

The Primary SOI consists of areas closest to the existing city limits and targeted for development before other parts of the SOI. To the northeast of the railroad, the Primary SOI is located north of Whitmore Avenue, south of Hatch Road and west of Euclid Avenue, except north of Fox Road, where it extends to Geer Road, as well as a limited amount of residential land to the south of Whitmore Avenue. These areas were included in the Primary SOI for the following reasons:

- ◆ They are contiguous with existing urban uses where urban services are already available, which will allow for the well-planned expansion of services, consistent with good growth management practices. .
 - They allow for a range of housing and employment opportunities to help provide a balance of housing and jobs within Hughson. This is important since so many residents currently have to travel out of the community to find employment and shop, so there is a need for new employment and retail opportunities. The new homes will also help to support the new commercial uses, which along with additional local jobs, will provide needed sales tax revenue for the City.
- ◆ As shown in Figure COS-2, the areas are generally less restricted by Williamson Act contracts.
- The northern portion is located close to the City's wastewater treatment plant to the north, and Hatch Road, which is the major east-west thoroughfare.



Data Source: Stanislaus County GIS

FIGURE LU-6

Primary Sphere of Influence
Secondary Sphere of Influence
City Limits

PRIMARY AND SECONDARY SPHERE OF INFLUENCE

CITY OF HUGHSON GENERAL PLAN To the southwest of the railroad tracks, within the industrial area, the Primary SOI was designed to avoid leapfrog development by including parcels adjacent to existing industrial uses.

b. Secondary Sphere of Influence

The City's Secondary SOI is the remainder of the total SOI and contains the remainder of land south of Whitmore Avenue, the outer ring of industrial land to the southwest of the railroad, and the area between Euclid Avenue and ¼ mile to the east of Geer Road.

D. Goals, Policies and Actions

Goal LU-1 Control and direct future growth so as to preserve Hughson's existing small town character of the community and its agricultural heritage.

- Policy LU-1.1 The City will phase development by focusing growth from 2005 through 2015 into the Primary SOI, as shown in Figure LU-6, to ensure an appropriate rate of growth. A priority will be given to infilling of older sections of the city, as shown in Figure LU-5, for residential uses by allowing modifications in setbacks and lots sizes.
- Policy LU-1.2 Future residential growth shall be limited to the area south of Hatch Road, northeast of Santa Fe Avenue and west of Euclid Avenue.
- Policy LU-1.3 The City will work with the County, surrounding jurisdictions and farmland preservation organizations to ensure that urban development occurs only in areas adjacent to existing urbanized areas and to develop a countywide program to

permanently preserve agricultural community separators between urban areas.

- Action LU-1.1 Request the Stanislaus County LAFCO to update the City's SOI to include the entire SOI identified in this General Plan.
- Action LU-1.2 Request the County to update its General Plan to designate the portions of the Hughson SOI designated for urban uses as Urban Transition, consistent with the County's General Plan policy.
- Action LU-1.3 Work with Ceres, the County and Stanislaus LAFCO to create a community separator program that includes or identifies the following:
 - Agreements between Hughson, Ceres and Stanislaus County to maintain permanent agricultural community separators between Hughson and Ceres.
 - ◆ Appropriate locations for urban separators between Hughson and Ceres.
 - Agreements between Hughson and the County to preserve agriculture to the north, east and south of Hughson.
 - Appropriate locations for expansion of the Hughson SOI to designate areas as Agriculture, thereby providing more control to the City to avoid urbanization in areas targeted for agricultural preservation.
 - ◆ Areas within separator areas to be targeted for property or conservation easement purchase to create barriers to development.
 - Community partners, such as Central Valley Farmland Trust, and funding sources useful for program implementation.

The agreement between Ceres, the County and Hughson shall be completed prior to submitting a SOI update request to LAFCO that includes expanding the SOI to include land designated for Agriculture.

Action LU-1.4 Explore the creation of an agricultural mitigation fee program to generate fees to use for the purchase of farmland and farmland conservation easements. Community partners, such as Central Valley Farmland Trust, will be included in the formation of the program to assist in determining the best use of collected fees and to ensure the program's on-going success.

Goal LU-2 Develop a balanced land use pattern to provide for residents' varied needs and ensure that revenue generation matches the City's responsibility for provision and maintenance of public services and facilities.

- Policy LU-2.1 The City will encourage a land use mixture that provides a balance or surplus between the generation of public revenues and the cost of providing public services and facilities.
- Policy LU-2.2 Recognizing that the market will be one force directing growth within the community, the City will give priority to high quality, environmentally-sound projects that will add additional employment and revenue-generating uses.
- Policy LU-2.3 New residential neighborhoods will incorporate a mixture of residential types to meet the housing needs of the entire community.
- Policy LU-2.4 The City will only approve development proposals adequately funded through the developer, City or other fund-

ing mechanism that ensures an on-going level of public service and facilities that meets the City's established service levels. The initial cost of improving facilities and services, as well as the on-going operation and maintenance of these facilities and services, will be taken into consideration.

- Policy LU-2.5 The City will work closely with the County, surrounding jurisdictions and other transportation agencies to obtain needed transportation funding and facilities to support future growth.
- Policy LU-2.6 The area south of Whitmore Avenue between 7th Street and Euclid Avenue may be developed under a Specific Plan in order to allow adjustments to the land use pattern shown in Figure LU-4, provided that the total acreage dedicated to each use is the same.
- Action LU-2.1 Create an industrial recruitment plan. As part of the plan development, target and survey industries to determine inducements required. The Redevelopment Agency and local business groups should be involved in development and implementation of the plan.

Goal LU-3 Ensure that new development preserves and enhances Hughson's unique small town character.

- Policy LU-3.1 New development should be compatible with physical site characteristics, surrounding land uses and available public infrastructure.
- Policy LU-3.2 New development should provide a visually interesting appearance through variations of site and building design and building placement and orientation.

- Policy LU-3.3 Residential development within the Medium Density Residential designation should provide a mixture of housing types within the same development. Purely single-family neighborhoods are strongly discouraged.
- Policy LU-3.4 New multi-family housing design should be in scale with adjoining and adjacent single-family areas through the use of similar setbacks, complimentary building arrangements, buffer yards and the avoidance of overwhelming building scale and visual obstructions. Larger multi-family developments shall include a mixture of housing types, including both apartments and for-sale units.
- Policy LU-3.5 New development should be designed to connect to the existing community, through the orientation and design of buildings and vehicular, pedestrian and bicycle connections.
- Policy LU-3.6 New development should preserve views of the surrounding agricultural lands through building orientation and design.
- Policy LU-3.7 The edges of new developments should not be visually or physically separated from the rest of the community. For example, sound walls should be avoided whenever possible.
- Policy LU-3.8 Public art and other design features such as fountains, monuments and other landmarks should be used to enliven the public realm.
- Policy LU-3.9 Where sound walls are allowed, they should be built of high quality materials and provide visual relief through the use of a mixture of materials, landscaping and walkways and greenbelts.
- Policy LU-3.10 While the City recognizes that there will be a loss of orchard trees as development occurs, new development will be

encouraged to design landscaping with mature trees to create a feeling similar to that of an active orchard.

- Policy LU-3.11 Until the City adopts a Master Tree Plan, new residential and commercial developments should:
 - Use landscaping to differentiate between gateways, major intersections, and primary and secondary arterials, where appropriate.
 - ◆ Develop a palette of appropriate trees for the project, taking into account, soils, rooting characteristics and ongoing maintenance of trees.
 - Provide adequate shading along roadways, sidewalks and in parking lots.
- Policy LU-3.12 Lighting on private and public property should be designed to provide safe and adequate lighting while minimizing light spillage to adjacent properties.
- Action LU-3.1 Update the City's Municipal Code, Subdivision Ordinance and other ordinances to ensure consistency with the General Plan and assist with the implementation of the General Plan goals and policies. As part of the update, the Zoning Code will be revised to address the following issues:
 - ◆ Standards for the R-1 district will be revised to ensure consistency with Figure LU-5, Residential Infill Area.
 - ◆ The R-2 district will be revised to control the development of purely single family neighborhoods within the Medium Density Residential designation.
 - Other Zoning districts will also be updated, as necessary, to ensure consistency with Table LU-3 and the General Plan land use designations.

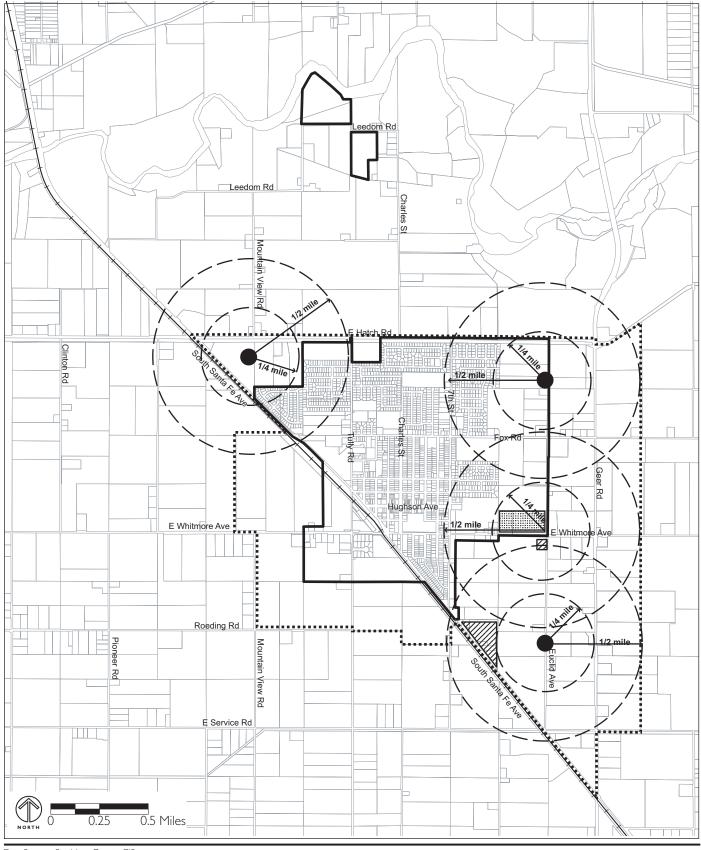
- New zoning districts consistent with the Urban Reserve and Agriculture designations will be created.
- Action LU-3.2 Require new development to comply with the City's Design Expectations.
- Action LU-3.3 Develop a plan to improve the major gateways to Hughson that are depicted in Figure LU-2, as a means to provide a clearly defined sense of place as people enter the city. As part of this process, the City will coordinate with the Hughson Botanical Gardens to create an entrance along Whitmore Avenue at Euclid Avenue.
- Action LU-3.4 Identify the minimum requirements for tree planting for survival, such as planting hole size, tree grates and irrigation.
- Action LU-3.5 Enforce the City's Street Tree Ordinance to protect and preserve street trees and guide landscaping plans.
- Action LU-3.6 Develop a Master Tree Plan that addresses the overall character of the City, and accents and acknowledges the city's gateways, major intersections, and primary and secondary roadways. The Master Tree Plan should initiate a program to plant street trees in City parks and along public rights-of-way and identify funding sources to fund new street trees in existing neighborhoods.
- Action LU-3.7 Create street design plans for major arterial and collector streets. These plans should identify a themed street tree pattern consistent with the Street Master Plan, as well as appropriate lighting, signage and street fixture design.
- Goal LU-4 Enhance the viability of the Downtown and preserve its role as the heart of the community.

- Policy LU-4.1 The City will encourage the location and retention of businesses within the Downtown.
- Policy LU-4.2 The City will focus commercial-related economic development efforts outside the Downtown on commercial uses that do not detract from downtown shopping.
- Policy LU-4.3 The City will encourage the eventual phasing out of existing industrial uses, single-family homes and other uses surrounding the Downtown that generally are not compatible with a downtown commercial core area and their replacement with appropriate commercial, mixed use and high quality higher density residential uses.
- Policy LU-4.4 The City will encourage the development of mixed use developments along Hughson Avenue, with residential and commercial uses in the same building.
- Policy LU-4.5 Infilling, parcel assemblage and physical enhancements will be encouraged in the Downtown to improve the area's economic success and provide appropriate locations for commercial development.
- Policy LU-4.6 The City will give priority to the location of a supermarket in the Downtown or the General Commercial parcel located between Santa Fe Avenue and Tully Road before considering alternative locations.
- Action LU-4.1 Implement the façade and downtown improvement project to improve the visual appearance and pedestrian friendliness of the commercial core.
- Action LU-4.2 Develop a plaza or other public open space area in the Downtown as a place for residents to gather.

- Action LU-4.3 Coordinate with the Hughson Chamber of Commerce and other business organizations to enhance the Downtown as the community's primary commercial area.
- Action LU-4.4 Implement the Redevelopment Plan to enhance and improve the Downtown.
- Action LU-4.5 Require a brief economic impact assessment be prepared for all proposed outlying commercial developments in order to determine the potential impacts of the development on the Downtown and the community as a whole.

Goal LU-5 Create new residential neighborhoods that have the desirable characteristics of traditional small town neighborhoods.

- Policy LU-5.1 New residential developments should be organized in neighborhoods with focal points, following the principles of neighborhood design beginning on page LU-2 and in the locations shown on Figure LU-7. As part of the Specific Plan process, areas designated as Urban Reserve shall also be designed to incorporate the neighborhood concept, including focal points and neighborhood design principles.
- Policy LU-5.2 Neighborhoods should be designed, with emphasis placed on high-quality construction and innovative architecture, to provide a "sense of place" and preserve the City's small-town character while offering a choice of residential densities and costs that meets the varying needs of residents.
- Policy LU-5.3 New single-family houses, duplexes and townhouses will be encouraged to include front porches in their design.



Data Source: Stanislaus County GIS

City Limits
Sphere of Influence



New Commercial Core



NEW NEIGHBORHOODS



New Park or Community Feature FIGURE LU-7

- Policy LU-5.4 Garages for new single-family houses, duplexes and town-houses should be subordinate in visual importance to the house itself, especially the entry. This should be achieved by encouraging the location of garages toward the back of properties, encouraging garages as separate structures from the house, requiring garages to be set back from the front edge of the house and encouraging the orientation of garage doors 90 degrees from the street.
- Policy LU-5.5 Instead of an integral curb, gutter and sidewalk configuration, planting strips will be encouraged on all residential streets with sidewalks with a sufficient width to allow for street trees between the curb and the sidewalk.
- Policy LU-5.6 Commercial uses may be located either in the center or at the periphery of neighborhoods, and should be integrated with residential uses and designed to be as accessible and appealing to the pedestrian as possible, in order to encourage walking and biking.
- Policy LU-5.7 Neighborhoods should be physically connected to one another via a series of roadways and pedestrian paths, and all residents should be within a short walk or drive of retail and other services.
- Action LU-5.1 Conduct a study to narrow the City's residential street standards from the current width requirements to reduce vehicle speeds, improve visual character and increase pedestrian safety while also maintaining traffic flow.

CITY OF HUGHSON GENERAL PLAN LAND USE ELEMENT

3 CIRCULATION ELEMENT

The purpose of the Circulation Element is to provide the policy framework for regulation and development of the circulation system in Hughson. This Element balances the need to provide safe ways to move people from one place to another with the goal of preserving the character of the community. The transportation system should accommodate the needs of Hughson, minimize environmental degradation, and complement regional transportation and land use plans.

The Circulation Element must be correlated with the Land Use Element. This correlation between land use and circulation is especially important in Hughson since such a large portion of the working population, approximately 85 percent, commutes out of the city on a regular basis as there are few local jobs in comparison to the number of housing units.

As required by Government Code Section 65302(b), the Circulation Element contains information on the general location and extent of existing and proposed major thoroughfares, transportation routes and terminals.

State law also requires that a Circulation Element include data and policies related to the provision of public infrastructure. For the purposes of this General Plan, these components are presented in the Public Services and Facilities Element.

The Circulation Element is divided into four sections:

- Background Information. Provides background information on the existing circulation system.
- Roadway Classifications and Standards. Provides a description of the various roadway types in Hughson, along with a map depicting the location of existing and planned roadways.
- Programmed and Planned Improvements. Outlines improvements to the local circulation system planned by the City to support the future needs of the community.
- ◆ Goals, Policies and Actions. Provides policy guidance for maintaining and improving all aspects of the circulation system.

A. Background Information

The transportation system in and around the City of Hughson is comprised of roadways, parking systems, limited bicycle and pedestrian facilities, public transit, and regional facilities. Each is discussed in greater detail in the following sections.

1. Roadway System

The network of roadways in and around Hughson consists of arterials, collectors and local streets. The closest major highway, Highway-99 (SR-99), is located in Ceres approximately 4.5 miles west of Hughson.

The following provides an overview of the existing roadway system, along with an analysis of how well it is able to carry current traffic loads. In addition, major intersections are identified with an analysis of their capability to operate at acceptable levels with existing traffic conditions.

a. Existing Roads

Many of Hughson's streets have existed since the original development of the city. The roadway system is comprised of arterials, collectors and local streets; all of which are two-lane with one lane in each direction.

◆ Arterials. Santa Fe Avenue is an arterial and runs northwest to southeast connecting Denair to Empire. Geer Road is also a north-south arterial serving Hughson, and runs along Hughson's eastern Sphere of Influence boundary connecting Turlock to Oakdale. Hatch Road, Whitmore Avenue and Service Road are the east-west arterials connecting residents to SR-99 and the commercial establishments of Ceres.

While the majority of the City's arterials are laid out on a grid-pattern, Santa Fe Avenue runs along the railroad at an angle to the grid system. This alignment complicates circulation patterns since all Santa Fe Avenue intersections have a skewed configuration, and intersection improvements are limited due to the presence of the adjoining railroad crossing and canals.

- ◆ Collectors. The backbone of the City's roadway system consists of the collector streets, which are also developed on a grid system. These streets include the north-south collectors of Tully Road, Charles Street, 7th Street and Euclid Avenue. East-west collectors include Fox Road and Hughson Avenue.
- ◆ Local Streets. The remainder of Hughson's streets are considered local and serve to connect vehicles from individual neighborhoods to the collector system. However, in some of the City's southern portions, older streets were developed based on previous County standards and contain potentially dangerous connections with arterials.

Recent residential development in Hughson has built around systems of discontinuous streets and exterior sound walls abutting collector and arterial streets. Although this is one method for buffering residents from traffic corridors, it also creates severe barriers from the rest of the community and negative visual impacts.

b. Roadway Level of Service

As part of the General Plan background analysis, the operation of major road-ways was analyzed. To describe traffic conditions and put traffic volumes in perspective, Level of Service (LOS) standards are utilized. LOS is a qualitative measure of traffic operating conditions whereby a letter grade, "A" through "F", corresponds to progressively worsening traffic service along a roadway or intersection. LOS A, B and C indicate that traffic can move relatively freely. LOS D indicates that delays are more noticeable and average traffic speeds are sometimes 40 percent of free flow speed. LOS E describes operating conditions at or close to capacity with significant delays and average travel speeds as low as 30 percent of free flow speed.

Table C-1 shows the general LOS thresholds used for assessing traffic conditions for Hughson roadways. These thresholds were developed based on review of several sources, including the Stanislaus County Congestion Management Plan (CMP) and its background references. The general thresholds

TABLE C-1 GENERAL LEVEL OF SERVICE THRESHOLDS BASED ON DAILY TRAFFIC VOLUMES

Street		<u>-</u>	Daily Traffic Volume at LOS			
Classification	Lanes	Control	С	D	E	
Collector	2	undivided	7,700	11,600	12,900	
Arterial	2	undivided	9,200	13,700	15,450	
	4	divided (105' ROW*)	20,100	30,200	33,200	

^{*} Right-of-Way (ROW)

originally developed by the Florida Department of Transportation were also used in this analysis. All of the existing arterials and collectors operate at LOS C or better, with the only exception being Hatch Road between Tully Road and Santa Fe Avenue, which operates at LOS D due to the congestion that builds at the Santa Fe Avenue/Hatch Road intersection.

c. Major Intersections

As part of the General Plan background study, several important intersections also were analyzed along the City's arterials and collectors. These included the following intersection:

- ♦ Santa Fe Avenue/Hatch Road
- ♦ Santa Fe Avenue/Tully Road
- ♦ Santa Fe Avenue/Whitmore Avenue
- ♦ Santa Fe Avenue/7th Street
- ♦ Santa Fe Avenue/Geer Road
- ♦ Hatch Road/7th Street
- ♦ 7th Street/Whitmore Avenue
- ♦ Geer Road/Hatch Road
- ♦ Geer Road/Whitmore Avenue

Of these intersections, most have all-way stop sign controls (all approaches must stop), with two being side-street stop sign controlled (major street operates freely). None are signalized.

Table C-2 depicts the LOS levels that were used to determine the December 2004 operating levels for each intersection. The majority of the unsignalized intersections in the city operate at LOS B or better during both AM (7:00 to 9:00) and PM (4:00 to 6:00) peak hours. One exception is the intersection of Santa Fe Avenue and Hatch Road, which currently operates at LOS F during the morning peak hours and LOS E during the evening peak hours. The Geer Road and Santa Fe Avenue intersection operates at LOS D during the PM Peak hours. Based on the existing LOS, the Santa Fe Avenue/Hatch Road intersection requires signalization to improve its operation.

d. Seasonal Traffic Variations

The volume of traffic on the major roads around Hughson can fluctuate throughout the year, primarily as a result of agricultural activity. According to data obtained from the Stanislaus County Department of Public Works, volumes observed during the late summer months (July, August and September) are typically much higher than data collected in the winter. To provide a rough indication of the variation, County staff has compared traffic volumes recorded throughout the year on major roads and developed rough "equivalency" factors.

Based on these equivalency factors, the County data suggests that the volume observed in July could be as much as 68 percent higher than volumes counted in December. The effects of this traffic variation can be substantial. If the volumes observed in December were uniformly increased by 68 percent to approximate July condition, the resulting LOS at most major intersections would reach E and F, therefore prompting consideration for signalization at all intersections, other than the Whitmore Avenue/7th Street intersection.

TABLE C-2 SIGNALIZED INTERSECTION LOS CRITERIA

LOS	Description	Average Control Delay (in Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	<u><</u> 10.0
В	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 to 20.0
С	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 to 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 to 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	> 55.0 to 80.0
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	> 80.0

Source: Highway Capacity Manual, Transportation Research Board, 2000.

2. County Identified Improvements

The County has already begun to plan for improvements to intersections and roadways operating at poor conditions and to provide capacity for potential regional growth. Based on conversations with Stanislaus County Department of Public Works staff, the following projects are understood to have been funded:

- Geer Road/Hatch Road. Signalize intersection and widen approaches to accommodate two through lanes and a left turn lane in each direction.
- ◆ Geer Road/Whitmore Avenue. Signalize intersection and widen approaches to accommodate two through lanes and a left turn lane in each direction.

- ♦ Fox Road/Geer Road. Add left-turn lanes.
- Santa Fe Avenue/Hatch Road. Signalize intersection and widen approaches to accommodate two through lanes and a left turn lane in each direction.
- ◆ Santa Fe Avenue/Geer Road. Signalize intersection and widen approaches to accommodate two through lanes and a left turn lane in each direction.

3. Parking Requirements

Generally, the availability of adequate parking is not an issue in Hughson. All new residential development is required to meet City parking standards. However, there are no park and ride facilities within Hughson or the immediate vicinity to facilitate ride sharing.

However, many of Hughson's newer neighborhoods are designed with street-facing garage doors, with the garages often protruding in front of the house and occupying over 50 percent of the street wall or more. The City encourages alternative design approaches that minimize the street presence of the garage. Currently, alley systems are not used in residential areas within Hughson; however, their use can allow for garages to be disguised behind the primary residences, reducing the visual impact of front-facing garages.

In the Downtown, individual businesses have historically used the shared parking spaces along Hughson Avenue, versus providing specific on-site parking spaces. Shared parking opportunities allow the City to maintain the pedestrian-focus of the Downtown by minimizing the number of individual parking lots visible along the commercial corridor.

4. Bicycle System

Bicycle facilities are classified according to a typology established by Caltrans as documented in its Highway Design Manual. The Caltrans standards provide for three distinct types of bikeway facilities, as described below:

- Class 1 Bikeway (Bike Path). Provides a completely separate right-ofway and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized.
- Class II Bikeway (Bike Lane). Provides a restricted right-of-way and is designated for the use of bicycles with a striped land on a street or highway. Vehicle parking and vehicle/pedestrian cross-flow are permitted.
- ◆ Class III (Bike Route). Provides for a right-of-way designated by signs or pavement markings for shared use with pedestrians or motor vehicles.

Although the City does not have a comprehensive bicycle plan, there is currently a Class II bikeway along Hughson Avenue and Sixth Avenue, and one planned for Charles Street. In general, separate bicycle lanes have not been pursued in Hughson because local bicycle travel is considered safe due to the relatively low volumes of automobile and truck traffic on the neighborhood streets and the Downtown. Nevertheless, there is a need in the City for additional bicycle facilities and planning.

5. Pedestrian System

Hughson's existing pedestrian system is comprised of sidewalks along roadways; however, while sidewalks exist throughout much of Hughson, there are gaps in the system. In addition, there are not currently any dedicated pedestrian paths meant specifically for recreation, such as along the Hatch Street Canal.

Many of the major destination points in Hughson are accessible by pedestrians. Most routes around schools and the Downtown maintain sidewalks in good condition. Some pedestrian connections exist to the various community parks, and are required in the Park Master Plan as a component of future development. New subdivisions are also required to incorporate and provide sidewalks as part of the neighborhood's site design.

There is a lack of safe pedestrian connections between the existing residential areas to the southwest side of the railroad and the rest of the community to the northeast. As a result, the City is concerned with safety issues associated with pedestrians crossing the railroad at Whitmore Road, especially because children living on the southwest side of the railroad tracks have to cross to walk to schools and workers in the industrial area need to cross to access services in the Downtown.

The City is studying improvements within the Downtown to improve the area's walkability and attractiveness to pedestrians in order to encourage residents to shop and visit local businesses.

6. Public Transit

Public transit in the Hughson area is provided by Stanislaus County Transit's Waterford-to-Modesto Runabouts. In Hughson, the runabouts stop at the Community Resource Center on Third Street just north of Whitmore Avenue, Monday through Saturday between 7:30 a.m. and 6:00 p.m. There are three round trips per day between Modesto and Waterford with stops in Hughson and Empire. The trip from Hughson to Modesto typically takes 45 minutes. Once in Modesto, riders can connect with the Modesto Area Transit system.

Runabouts are available to the general public and combine designated fixed stops/routes with curb-to-curb service. For fixed stop/route service, passengers can board a runabout at the Community Resource Center without having to pre-book a ride, but will also be required to disembark at another designated fixed stop. Passengers living within the Hughson city limits can also request curb-to-curb service from a specific location. Residents can call up to a week in advance to request a curbside pick-up before or after one of the scheduled pick-ups at the Community Resource Center. Based on number of

pickups, the curb-to-curb service from Hughson to Modesto can take between one to two hours.

7. Freight Movement

Freight, mainly consisting of retail and agricultural goods, travels to and from Hughson ultimately by truck, but often connects during transport with the regional rail corridor.

a. Truck Routes

Hughson has adopted a truck route ordinance that allows the City to designate appropriate truck routes for vehicles weighing over eight tons. Currently, truck traffic travels along the major roadways surrounding Hughson, including Hatch Road, Geer Road, Santa Fe Avenue, Whitmore Avenue and Service Road.

Major truck traffic is associated with traveling to and from the industrial area to the southwest of the railroad, as well as other industrial operations scattered along Santa Fe Avenue and Geer Road. Agricultural production also generate high amounts of truck traffic, especially during the summer months when there is a peak in agricultural activities. Slower moving trucks, or trucks entering and exiting industrial and agricultural facilities along major roadways, can result in congestion and traffic hazards for smaller vehicles.

To a lesser extent, truck traffic associated with delivery of goods to the Downtown is another issue facing Hughson. Since goods are currently delivered to the front of businesses, trucks often park along Hughson Avenue and create traffic hazards if not appropriately located. As a result, modifying Hughson Avenue to make it more pedestrian friendly is to some extent limited by the need to ensure that it is maintained at its current width to allow for truck access.

b. Rail System

The Burlington Northern/Santa Fe Railroad and Amtrak run in a northwest to southwest diagonal along the rail tracks on Hughson's west side, along Santa Fe Avenue. However, there are no rail stations or other stops within Hughson, so the major benefit of the railroad is that it allows for the transport of manufactured and produced goods in and out of the larger region. Currently, there are railroad crossings in the city at Hatch Road, Tully Road, Whitmore Avenue and Seventh Avenue.

Although the rail system does not maintain any stops in Hughson, its presence still impacts the community. Physically, the raised railway tracks act as a separation between residential uses to the northeast and industrial and higher-density residential uses to the southwest. Since all railroad crossings are currently at grade, the railroad contributes to safety concerns and traffic delays, especially where pedestrians are concerned. The City is reviewing existing circulation conflicts along Santa Fe Avenue, including automobile and pedestrian safety hazards at the Whitmore/Santa Fe Avenue intersection.

Passenger rail service is not available from Hughson directly. Presently, the closest depot is located in Denair at the Amtrak Station, five miles south of Hughson. There are ongoing discussions at the State High Speed Rail Authority of creating a regional rail network to link Sacramento to the Bay Area and Sacramento to Southern California. Stanislaus County would fall on the route linking Sacramento to Los Angeles, with a stop in Modesto estimated to be about a 15-minute drive from Hughson. However, there is not any funding secured for the project at this time.

8. Airports

The closest airport to Hughson is the Modesto City-County Airport, located approximately six miles west of Hughson. Limited regional airline service is provided from this airport. General aviation facilities are also located about 15 miles south in Turlock, and about 15 miles north in Oakdale, although neither airport services scheduled flights.

B. Roadway Classifications and Standards

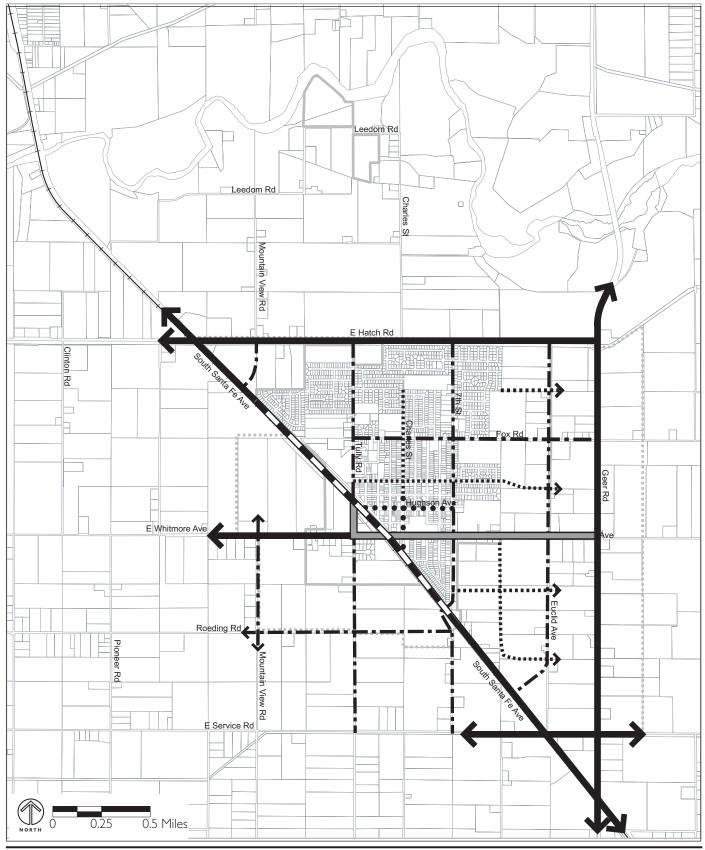
Each of the roadways in Hughson's comprehensive street system can be categorized according to a typology known as functional classification. Functional classification is a method to classify a roadway based on its function. Since the two major functions of a roadway are to serve through traffic and provide access to adjacent property, different roadways prioritize these two functions differently. For instance, freeways prioritize the movement of traffic at the expense of access to adjacent properties. The City's ultimate roadway plan, with general functional classifications, is shown in Figure C-1.

The current functional classifications for roadways in Hughson are detailed below, and planned improvements are then discussed in Section C.

1. Arterials

In general, these roadways are intended to serve as the major routes of travel within the city. Arterials are typically larger roadways designed to gather traffic from the collector system, described below, and provide major connections between regional destinations and highway and freeway systems. As Hughson does not have local access to a freeway or highway, the arterials serve to link the City to neighboring cities and SR-99.

Arterials should be located along the outer edges of the community and can usually carry up to 9,000 vehicles per day for a two-lane arterial and 20,000 vehicles per day for a four-lane arterial while maintaining LOS C. Arterials are designed with two to four traffic lanes with 80- to 110-foot right-of-ways, with the potential for additional right-of-way at intersections where left-and/or right-turns are required.



Data Source: Stanislaus County GIS, Kd ANDERSON Transportation Engineers

Two-Lane Arterial

FIGURE C-1

City Limits

Santa Fe Avenue Corridor Study Area

Sphere of Influence

Four-Lane Arterial

Santa Fe Avenue Corridor Study Area

CIRCULATION PLAN

Major Collector

Minor Collector

CITY OF HUGHSON GENERAL PLAN Residential driveways and local streets should not connect directly with the arterials except where absolutely necessary; however, residential areas should still face onto arterials, while limiting access points. This can be accomplished through the use of frontage roads that provide limited access to the arterial, while also providing a setback area between the arterial and the residential units for safety.

As previously mentioned, Hughson's arterials include Santa Fe Avenue, Whitmore Avenue, Geer Road, Hatch Road and Service Road, as well as the portion of Tully Road between Santa Fe Avenue and Whitmore Avenue. They all currently contain two lanes and 100-feet right-of-ways except Hatch Road, which has an 80-foot right-of-way.

Geer Road, Hatch Road, Service Road and Whitmore Avenue west of Tully Road should eventually be expanded to four lanes, as discussed under Section C. Tully Road between Santa Fe Avenue and Whitmore Avenue and Whitmore Avenue east of Tully Road would retain their two-lane alignment, but minimize access points to the extent feasible. As the County and StanCOG have planned or are planning on designating Hatch, Geer, and Service Roads as four-lane Class C Expressways, all these roadways should also limit driveway access points to no closer than 300 feet and limit full intersections to no less than ½ to ½ mile apart. They should also preserve a 110-foot right-ofway to allow for the expansion to four lanes.

Santa Fe Avenue should also be expanded to four lanes, with a right-of-way of at least 85 feet when feasible. However, since the portion of Santa Fe Avenue between the Sterling Glen subdivision and 7th Street is already developed with urban uses, it requires special study to determine the best manner to expand capacity, while recognizing the need to balance capacity with existing urban uses and to allow for safe connections between the industrial area to the southwest and the Downtown to the northeast. As with Hatch, Geer and Services Roads, Santa Fe Avenue outside of the current city limits is identified by the County and StanCOG as a future four-lane Class C Expressway.

Therefore, the same access limitations as the other roadways would apply to Santa Fe Avenue outside the existing city limits.

2. Collectors

These roadways serve as intermediaries between arterials and local roads, collecting traffic from local roads and distributing it to the arterial system. Collector roadways also provide direct access to residential subdivisions, shopping centers and industrial complexes, and should be spaced at quarter-mile to half-mile intervals. As with arterial streets, where residential homes face on to collectors with higher levels of traffic, the design of the residential development should incorporate features to ensure the safety of the residents. To allow for residents to travel by foot and bicycle, collectors should provide opportunities for pedestrian and bicycle facilities.

Collectors can carry traffic volumes up to about 7,500 vehicles per day while maintaining a LOS C. Collectors are designed with two lanes of traffic and right-of-ways of approximately 80-feet to allow for parking, sidewalks and bicycle facilities; however, the right-of-way may need to be larger if additional land for landscaping or bicycle facilities is needed, or to create an edge to the community.

Existing collector streets in Hughson include Euclid Avenue, Hughson Avenue, Charles Street, Tully Road, 7th Street and Fox Road. Each utilizes a 60-foot right-of-way except for Hughson Avenue and Charles Street between Whitmore Avenue and Fox Road, which both have 100-foot right-of-ways. Mountain View Road south of Whitmore Avenue and Roeding Road west of 7th Street are also identified as collectors in this General Plan, but do not currently act as collectors since there is limited existing industrial development. The City's collectors can be classified into three categories, as follows:

◆ Downtown Collectors. These are collectors that were developed in the past with large right-of-ways in the Downtown area, but which are not anticipated to carry large levels of traffic. Since they serve the Downtown business area with mixed-use, commercial and residential uses, they should be designed to promote pedestrian and bicycle usage. This may include narrowing the roadway, or incorporating traffic calming design features, such as bulb-outs or bicycle facilities. On-street parking should be maintained. Hughson Avenue and Charles Street south of Pine Street are considered downtown collectors.

◆ Major Collectors. Major collectors are expected to carry higher levels of residential traffic across town or carry large trucks in the industrial area so shall have a 80-foot right-of-way, unless otherwise shown on the Street Master Plan. Fox Road, Euclid Avenue, 7th Street, Roeding Road, Mountain View Road and Tully Road, except for the portion of Tully Road between Santa Fe Avenue and Whitmore Avenue, are considered major collectors.

Until the City completes the Street Master Plan, deviations from the 80-foot right-of-way on these roadways will only be allowed in areas where both sides of the streets have been developed with urban uses and a project proponent can show that: 1) existing development makes the 80-foot requirements difficult and 2) alternative designs within the existing right-of-way will support future traffic demand. In addition, while Roeding Road and Mountain View Road south of Santa Fe Avenue may not be needed to serve as major collectors during the lifetime of this General Plan, if the entire industrial area does not develop, appropriate 80-foot right-of-ways shall be maintained to allow for their eventual development as major collectors.

♦ Minor Collectors. Minor collectors provide the same role as major collectors, but are not expected to carry as much traffic. As a result, these roadways may have right-of-ways that are less than 80 feet. Since these roadways will not carry as much traffic, a higher priority is given to providing adequate pedestrian and bicycle access and safety along these routes. All of the other new collector roadways are considered minor collectors, including the extension of 5th Street and Locust Street.

3. Local Streets

All other streets in Hughson are classified as local roads or residential streets, which provide direct access to properties and connect travelers to collectors

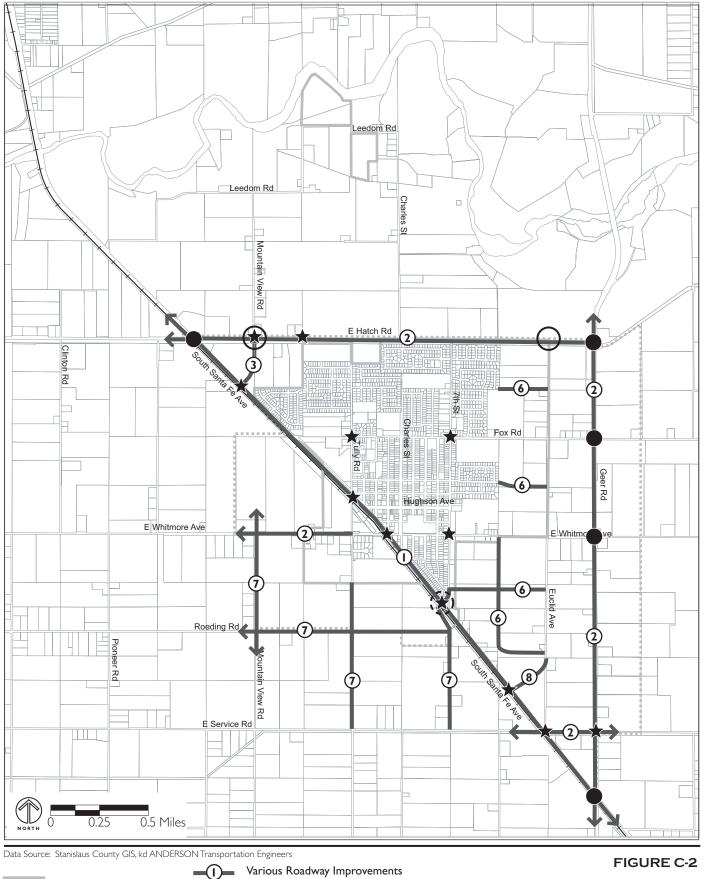
and arterials. Local streets should have right-of-ways of approximately 60 feet, be dedicated as public streets and be maintained by the City.

C. Planned Circulation Improvements

Based on the traffic and circulation studies completed for Hughson and the policies and actions contained in this General Plan, several improvements to the local circulation system have been identified to support the land use plan. These are described below. The following improvements are identified on Figure C-2, and the numbering on the figure corresponds to the numbering below.

However, recognizing that the ultimate alignment of the roadway system will depend on a detailed study of Santa Fe Avenue and the ability to modify railroad crossings, there may be some variation to the southern portion of the circulation system, especially around the 7th Street railroad crossing. Even if the detailed design of the system needs to be modified, the system will still incorporate the following features and improvements:

- 1. Santa Fe Avenue Improvements. Improve the capacity of Santa Fe Avenue by expanding to four lanes where feasible and improving the major Santa Fe Avenue intersections of Hatch Road, Geer Road, Tully Road, Mountain View Road, Whitmore Avenue, 7th Street, Euclid Avenue and Service Road, as described below.
- 2. Hatch Road, Geer Road, Service Road and Whitmore Road Expansion. Expand Hatch, Service and Geer Roads from two to four lanes, as well as the portion of Whitmore Avenue west of Tully Road.
- 3. **Mountain View Road Extension.** Extend Mountain View Road south across the Hatch Road Canal to relieve traffic from the Santa Fe Avenue/Hatch Road intersection.
- 4. Canal Crossings. Provide additional crossings across the Hatch Road canal at Mountain View Road and Euclid Avenue.



Data Source: Stanislaus County GIS, kd ANDERSON Transportation Engineers

Various Roadway Improvements

City Limits

Canal Crossing (4)

7th Street Railroad Crossing Improvements (5)

City Identified Intersection Improvements (9)

County Identified Intersection Improvements (10)

CITY OF HUGHSON GENERAL PLAN

- 5. 7th Street Railroad Crossing Improvements. Realign the 7th Street atgrade crossing to create a continuous collector road across Santa Fe Avenue.
- 6. **New Collectors.** Extend the current ¼-mile grid system to the northeast of the railroad to provide additional east-west collectors from 7th Street to Euclid Road and a new north-south collector from Whitmore Avenue south between 7th Street and Euclid Avenue.
- 7. New and Expanded Industrial Area Collectors. Improve Tully Road and 7th Street south of the current city limits to serve as major collectors. Plan for the eventual expansion of Roeding Road and Mountain View Road to serve as major collectors when the industrial area eventually builds out.
- 8. Euclid Avenue Realignment. Realign Euclid Avenue to reduce the number of major roadways intersecting at the current 5-way Santa Fe Avenue/Euclid Avenue/Service Road intersection.
- 9. **City-Identified Intersection Improvements**. Make the following intersection improvements:
 - Santa Fe Avenue/Tully Road. Signalize the intersection, widen the Burlington Northern/Santa Fe railroad crossing and add auxiliary lanes.
 - Santa Fe Avenue/Mountain View Road. Signalize with left turn lanes.
 - Santa Fe Avenue/Whitmore Avenue. Signalize the intersection, widen the Burlington Northern/Santa Fe railroad crossing and add auxiliary lanes.
 - Santa Fe Avenue/7th Street. Signalize the intersection, re-align the two segments of 7th Street and widen to add auxiliary lanes.
 - Santa Fe Avenue/Euclid Avenue. Relocate Euclid as proposed, signalize the intersection with left turn lanes.
 - Santa Fe Avenue/Service Road. Signalize the road with left turn lanes
 - Hatch Road/Tully Road. Signalize with left turn lanes.

- Whitmore Avenue/7th Street. Signalize with left turn lanes.
- Hatch Road/Mountain View Road. Signalize with left turn lanes.
- Fox Road/Tully Road. Signalize with left turn lanes.
- Fox Road/7th Street. Signalize with left turn lanes.
- Service Road/Geer Road. Signalize with left turn lanes.
- 10. County-Identified Intersection Improvements. Additional improvements planned by the County are described in Section A of this Element.

D. Goals, Policies and Actions

Goal C-1	Provide a safe circulation system consistent with
	the Land Use Element to provide access and mobil-
	ity for all of Hughson's residents and businesses
	while maintaining the quality of life for residents.

- Policy C-1.1 Hughson will develop a connected street pattern with multiple route options for vehicles, bicycles and pedestrians.
- Policy C-1.2 The City shall strive to maintain a LOS of D on major streets and intersections. The City will strive to maintain this LOS during peak traffic hours, but recognizes that this may not always be feasible due to constraints associated with the built environment. Because seasonal traffic volume variation due to agricultural activities will represent a reduced percentage of the overall traffic as the County develops with urban uses, and is limited to a few months a year, the policy is to maintain LOS D under "typical" or "average annual" conditions versus during the peak agricultural harvest season.
- Policy C-1.3 To prevent traffic diversions of local cut-through traffic onto local streets, the City will maximize the carrying ca-

pacity of arterials and collector streets by providing a well-coordinated traffic/signal control system, controlling the number of intersections and driveways, and requiring sufficient off-street parking.

- Policy C-1.4 While the City encourages developers to face houses towards the street, projects proposing to face residential uses towards a collector or arterial street with traffic volumes of over 2,500 vehicles per day will be required to include design features to minimize safety risks to residents from vehicles.
- Policy C-1.5 New development should be designed with a grid or modified grid pattern with a variety of block size and street length to facilitate traffic flows and to provide multiple connections to arterial streets.
- Policy C-1.6 Local street width shall be limited to the minimum necessary to adequately carry the amount of anticipated traffic and allow for adequate bicycle and pedestrian facilities and emergency access.
- Policy C-1.7 Alleyways will be considered for new residential development where their use will allow for creatively designed rear access to parking, reducing the visual impact of garages on the primary street frontage, and where the City will not be responsible for on-going maintenance of the alleyways.
- Policy C-1.8 Allow for a reduction in the covered parking requirements in developments incorporating alleyways to increase the affordability of new development without drawing attention to it from the street.
- Policy C-1.9 The City will consider using traffic calming methods to reduce local cut-through traffic, where appropriate. However,

gating existing public roadways to exclude traffic from specific residential neighborhoods should not be allowed.

- Policy C-1.10 New gated communities will only be considered where they are designed as a stand alone community, with appropriate access for governmental and emergency operations, and where they will not conflict with traffic flows. Streets within a gated community will be privately owned and maintained.
- Policy C-1.11 To create a walkable community that provides pedestrian and bicycle connections, dead-end cul-de-sacs lacking pedestrian and/or bicycle access to adjoining streets or public areas will be discouraged.
- Policy C-1.12 Public roadways should be maintained in good condition to minimize the potential for automobile accidents and reduce wear and tear on vehicles.
- Action C-1.1 Develop and adopt a standard basis of analysis to be used when analyzing traffic impacts, identifying Capital Improvement Plan, as well as other planning activities. This basis will take into consideration seasonal variations in traffic levels due to schools, agricultural operations, and other seasonable activities.
- Action C-1.2 Develop and adopt a Street Master Plan for arterial, collector and local streets. The Plan will include standard cross sections for each category.
- Action C-1.3 Work with the Santa Fe Railroad and the State Public Utilities Commission to explore additional railroad vehicle and pedestrian crossings and improve existing crossings to provide improved and safer access between the southwestern and northeastern sections of the City.

- Action C-1.4 Maintain a program of identification and monitoring of high traffic accident locations, with emphasis on early detection and correction of conditions that could potentially constitute traffic hazards.
- Action C-1.5 As part of the Street Master Plan, undertake a Santa Fe Avenue corridor study. The study will provide detailed analysis how to improve the Santa Fe Avenue corridor, focusing on the following issues:
 - ◆ Long-term Roadway Expansion. Explore the feasibility and cost of expanding Santa Fe Avenue to four-lanes where there is existing development. Attention will be given to identifying where existing right-of-ways allow for expansion of the roadway and estimating the cost that would be required to purchase additional right-of-way.
 - ◆ Mid-term Intersection Expansion. Create detailed design and cost estimates of improving major Santa Fe Avenue intersections of Hatch Road, Geer Road, Tully Road, Mountain View Road, Whitmore Avenue, 7th Street, Euclid Avenue and Service Road.
 - ◆ Coordination with the PUC and Burlington Northern/Santa Fe Railroad. Since final design of some intersection improvements will depend on improvements or relocation of at-grade railroad crossings, involve the PUC and railroad early in the study process to determine appropriate crossing design and necessary right-of-way requirements. Where appropriate, the study will take into consideration the need to reserve adequate right-of-way for future grade separated crossing improvements.

Goal C-2 Minimize the negative effects of new development on the existing and planned circulation system.

- Policy C-2.1 New applicants for development with the potential to generate 100 peak hour trips per day of traffic may be required to have a qualified traffic engineer prepare a traffic study to identify potential traffic impacts and specify improvement measures needed to ensure an acceptable LOS on affected streets. City staff will determine the extent of the traffic study based on existing conditions and key issues associated with site plans.
- Policy C-2.2 New development shall provide all improvements necessary to adequately serve the development's traffic access and circulation needs, such as roadway improvements, dedications of rights-of-way and reciprocal easements.
- Policy C-2.3 Between identification of the need for improvement and the completion of major projects, the City recognizes that the LOS may fall below the City's standard for short time periods while funding is being assembled.
- Policy C-2.4 Until the Street Master Plan is completed, new development proposed on or near to 7th Street that would affect the potential alignment of the 7th Street railroad crossing will require a traffic study completed in conjunction with PUC and Burlington Northern/Santa Fe Railroad consultation to determine the final alignment and crossing design.
- Policy C-2.5 Until the Street Master Plan is completed, all new development adjacent to existing railroad crossings or proposed relocated crossing locations will be reviewed with the cooperation of the PUC and Burlington Northern/Santa Fe Railroad to determine if there is a need to reserve right-of-way for future improvements to the railroad crossing.

Goal C-3 Develop a Downtown circulation system that is pedestrian-oriented and supports the Downtown as a destination. Policy C-3.1 The City will promote pedestrian activity as one of the primary modes of travel in the Downtown. Policy C-3.2 Circulation system improvements in the Downtown should reduce traffic speeds in order to preserve and enhance the pedestrian friendliness of the Downtown, while allowing for adequate vehicular access to local businesses. Action C-3.1 Implement the roadway improvements identified in the façade and downtown improvement project to improve the pedestrian friendly environment of the Downtown. Goal C-4 Ensure that there is adequate on- and off-street parking for residents and visitors to Hughson. Policy C-4.1 New development outside the Downtown shall provide adequate off-street parking, consistent with the City's municipal code. Policy C-4.2 New development in the Downtown may utilize existing on-street parking and shared parking facilities to meet parking requirements. Where parking is provided on individual parcels, the City will encourage the site design to locate the parking behind the building or otherwise reduce the visual impact of the parking so as to complement the pedestrian character of the Downtown. Policy C-4.3 The City will ensure the efficient use of available public

parking facilities, especially in the Downtown, through the

use of parking control measures such as time limits and signage.

Policy C-4.4 Consider establishing a Downtown parking district to assist in the area's economic development and maintain the pedestrian focus of the Downtown.

Goal C-5 Support public transit service and alternative transportation modes that meet the needs of the community.

- Policy C-5.1 The City will continue to support the activities of Stanislaus Regional Transit.
- Policy C-5.2 Stanislaus Regional Transit will be encouraged to explore the possibility of expanding the transit system to provide additional service between Hughson and major regional employment and commercial areas.
- Policy C-5.3 The City will support ride-share lots and car-pooling, as well as other initiatives aimed at reducing the number of single occupancy vehicles commuting out of Hughson.
- Action C-5.1 Work with employers to encourage ridesharing (carpools and vanpools), public transit, bicycling, walking, flexible working hours and preferential parking.

Goal C-6 Provide a bicycle and pedestrian network to encourage bicycling and walking for transportation and recreational purposes.

Policy C-6.1 Safe, attractive and convenient bicycle and pedestrian facilities will be provided to link schools, parks, civic facilities,

employment centers, shopping and Downtown, as well as provide a viable alternative to the automobile.

- Policy C-6.2 The City will explore ways to connect local bicycle and pedestrian routes to larger regional systems, including those established in the Regional Bicycle Action Plan, adopted in 2001 by the StanCOG to implement the Regional Bicycle Transportation Master Plan of 1996.
- Policy C-6.3 The City will work with the Burlington Northern/Santa Fe Railroad to improve railroad crossings to address pedestrian and bicyclist safety. Alternatives such as over and underpasses at major crossings will be explored.
- Policy C-6.4 New development will be required to provide sidewalks and connections to the community-wide bicycle and pedestrian network.
- Policy C-6.5 The City will work to complete gaps in the sidewalk system within developed portions of the community. New funding sources, such as grants, will be identified to help fund the new sidewalk facilities.
- Policy C-6.6 New bicycle and pedestrian facilities will be designed to incorporated visual features that define the routes and encourage their use, such as trees, signage, special paving materials and attractive light fixtures.
- Policy C-6.7 Development shall meet the requirements of the Americans with Disabilities Act to further facilitate the mobility of persons with accessibility needs.
- Action C-6.1 Create a Bicycle Master Plan that identifies appropriate locations for new bicycle facilities. Potential locations for new facilities include:
 - Class II bike lanes along arterials and collectors.

 Off-street pedestrian and bicycle path along the Hatch Road irrigation canal.

Action C-6.2 Create a Sidewalk Maintenance Fund to ensure that the City's sidewalk system is maintained in good shape.

Goal C-7 Ensure a well-coordinated regional transportation system that serves Hughson and the surrounding region.

- Policy C-7.1 The City will work with the County to identify and implement improvements to the Hatch Road/Santa Fe intersection, as well as other impacted intersections that cross jurisdictional boundaries.
- Policy C-7.2 The County and adjacent jurisdictions will be encouraged to identify and create alternative major east-west transportation corridors, such as Service Road, to relieve traffic congestion on Hatch Road.
- Policy C-7.3 The City will work with the County and other jurisdictions to consider appropriate regional funding programs to finance regional transportation improvements.
- Policy C-7.4 Since the City requires good access to Highway 99 to support successful industrial activities, the City will encourage the City of Ceres and the County to preserve and improve Service Road as a major east-west corridor providing alternative access to the Hughson industrial area.
- Action C-7.1 Work with other eastern communities and the County to create a circulation plan that addresses the need to improve the roadway system in eastern Stanislaus County to support eastern businesses and residents by providing access to re-

gional transportation facilities. In the Hughson area, improvements will include expanding Hatch Road, Whitmore Avenue, Service Road and Geer Road from two to four lanes. The overall plan shall include a mechanism for equitably collecting the funds needed to implement the plan, including fees from new development in Hughson.

Action C-7.2 Request the County to update the Regional Traffic Mitigation Fee to reflect needed improvements to regional facilities, especially to provide adequate access from the eastern portions of Stanislaus County to major regional facilities, such as Highway 99.

Goal C-8 Provide adequate railroad and roadway systems to accommodate the safe and efficient movement of goods, while minimizing impacts to residential neighborhoods.

- Policy C-8.1 Recognizing the regional importance of the railroad, the City will support the continued operation of rail transportation facilities, while working with rail operators to minimize railroad-related impacts to the community.
- Policy C-8.2 In the event that improvements are made to the railroad, the City will encourage the operators to mitigate local safety concerns, as well as consider developing a new spur to provide a direct connection to the Hughson industrial area.
- Policy C-8.3 Truck traffic will be directed to create efficient routes between regional roadways and industrial and commercial areas, while avoiding residential areas.
- Policy C-8.4 The loading of trucks along Hughson Avenue will be controlled to facilitate the safe and convenient loading of com-

mercial goods, while minimizing impacts to adjacent businesses, residents and traffic flow.

Action C-8.1 Develop a Downtown Truck Loading Plan. The Plan will explore opportunities to improve truck access to the rear of Hughson Avenue, as well as limiting the hours that businesses can load and unload along Hughson Avenue to nonpeak traffic periods.

4 CONSERVATION AND OPEN SPACE ELEMENT

The purpose of the Conservation and Open Space Element is to ensure the comprehensive and long-range preservation and management of open space and agricultural land in and around Hughson, as well as work to improve air quality within the San Joaquin Valley Air Basin. The Conservation and Open Space Element seeks to maintain the small-town character and farming heritage of the community while providing a high quality of life for residents. This can be achieved by preserving open space and viable agricultural resource lands, protecting natural habitats for endangered and threatened species and providing recreational opportunities for City residents.

To avoid repetition, this element combines two State-mandated elements, the Conservation Element and the Open Space Element, as well as addresses air quality in compliance with California Government Code Section 65302.1. Therefore, this chapter includes discussion of the following topics:

- ◆ Agricultural Resources
- ♦ Parks and Open Space
- ♦ Biological Resources
- ♦ Cultural Resources
- ♦ Energy and Water Conservation
- ♦ Water Quality
- ♦ Air Quality

The Conservation Element is concerned with the protection of natural resources, including agricultural land, plants and animal wildlife, water bodies and watersheds, soils, minerals and energy conservation. Since many of these natural resources are also associated with open space lands, the Hughson General Plan combines these two elements into one.

The Open Space Element is intended to address the management of open space resources, defined as any parcel or area of public or private land or water that is essentially unimproved and undeveloped. As discussed in greater detail to follow and shown in Table COS-1, State law identifies several types and classifications of open space. These include open space that preserves

TABLE COS-I GOVERNMENT CODE OPEN SPACE CLASSIFICATIONS

Category	Examples	
Open Space for the Preserva- tion of Natural Resources	 Plant and animal habitat areas Rivers, streams, lakes and their banks Watershed lands Areas required for ecologic or scientific purposes 	
Open Space Used for the Managed Production of Resources	 Agricultural lands Rangelands Forest and timber lands Mineral resource production areas 	
Open Space for Outdoor Recreation	 Areas of outstanding scenic, historic and cultural value Parks and other areas used for recreation Scenic corridors and trails Links between different open space areas 	
Open Space for Public Health and Safety	 Areas requiring special management or regulation because of risks presented by natural hazards such as earthquakes or flooding 	
Open Space for the Preserva- tion of Places, Features and Objects Important to Native Americans	 Sanctified cemeteries Religious or ceremonial sites Sacred shrines or places of worship	

natural and cultural resources, manages production of resources, provides outdoor recreation, protects public health and safety and protects places, features and objects important to Native Americans.

California Government Code Section 65302.1, was adopted by the California Legislature in response to the concern that the San Joaquin Valley has a serious air pollution problem. As a result, cities and counties located in the San Joaquin Valley Air Pollution Control District must include goals, policies and feasible implementation strategies in their General Plans to improve air quality. This Element addresses State requirements by including updated information on air quality conditions, the regulatory environment, and goals, objectives, policies and actions to improve air quality in and around the City of Hughson. Other Elements, such as Land Use and Circulation, also include

policies and actions that work towards improving the air quality in the region.

The Conservation and Open Space Element is divided into two sections:

- ◆ Background Information. Provides information on the existing conditions of agricultural resources, parks and open space, biological and cultural resources, energy conservation and water and air quality.
- ◆ Goals, Policies and Actions. Provides policy guidance for protecting and preserving the important resources covered in this element, mentioned above.

A. Background Information

The following sections outline the existing conditions in Hughson as they relate to conservation and open space resources. The City is committed to protecting and conserving its existing environment and resources, including its agriculture, biology, history, parks, water and air. This General Plan aims to continually improve the quality of life for Hughson residents now and into the future.

1. Agricultural Resources

Agriculture is a major activity within the undeveloped portions of Hughson's Sphere of Influence (SOI), Planning Area and throughout Stanislaus County and most of California's Central Valley. The industry has been an important component of the local economy throughout the area's history and continues to play an important role today. In 2002, there were 7,998 acres of land identified as Prime Farmland, Unique Farmland and Farmland of Statewide Importance in the Hughson Planning Area, SOI and city limits combined. Definitions of each type of farmland are presented in Table COS-2. Since this survey, some agricultural land may have been converted to urban uses.

TABLE COS-2 **DEFINITIONS OF FARMLAND QUALITY TERMS**

Name	Description
Prime Farmland	Land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops within the last three years
Farmland of Statewide Importance	Land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops within the last three years.
Unique Farmland	Land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance that is currently used for the production of specific high economic value crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes and cut flowers.
Farmland of Local Importance	Land other than Prime Farmland, Farmland of Statewide Importance or Unique Farmland that is either currently producing crops or that has the capability of production. This land may be important to the local economy due to its productivity. The county-specific definition for Stanislaus County is farmlands growing dryland pasture, dryland small grains and irrigated pasture.

But, at the time, there were 250 acres in the city limits, 1,202 in the SOI and 6,546 in the Planning Area, outside of the SOI, as shown in Table COS-3 and depicted in Figure COS-1.

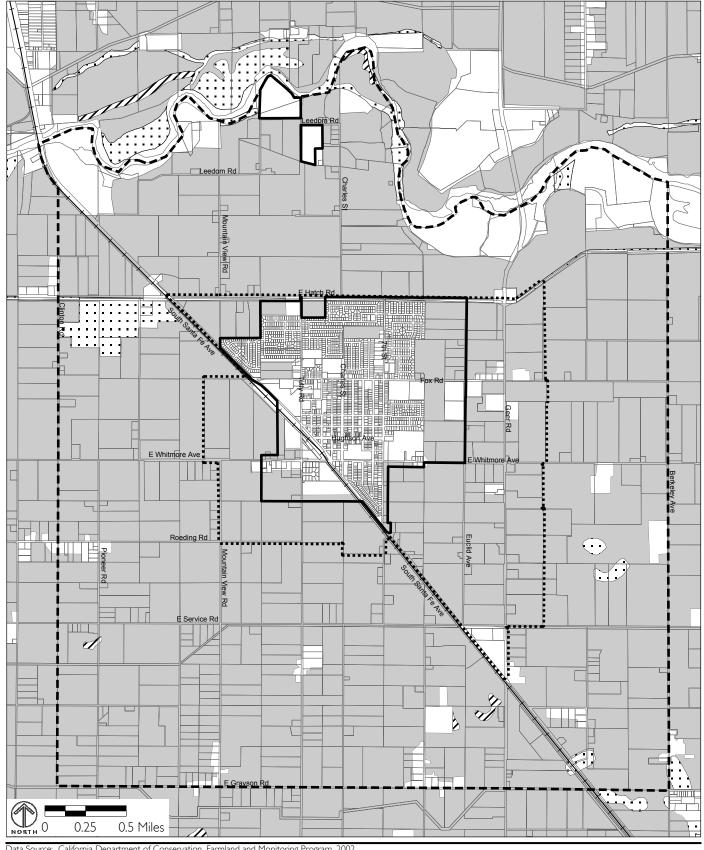
The Hughson SOI and Planning Area also include many agricultural lands under Williamson Act contracts, which place development restrictions on parcels to preserve the land in agricultural use for ten years, in exchange for tax benefits to the land owner. According to Stanislaus County records, as of 2005 there are approximately 600 acres within the city limits and SOI subject to Williamson Act contracts. Table COS-4 details these acreages and Figure COS-2 shows the locations of all Williamson Act lands. Hughson values its agricultural heritage and working industry. Hughson has not adopted a right-to-farm ordinance.

The City is planning to work with the County and nearby cities to limit urban growth and preserve permanent agricultural community separators between each urban center.

2. Parks and Open Space

The City of Hughson currently provides active and passive recreational opportunities to its residents through a variety of mini, neighborhood and community parks. Additional recreational opportunities are also provided through the public schools sites, which have historically been used by the community for a range of recreational activities, such as organized sports leagues. The privately owned Botanical Gardens, located on Whitmore Avenue, is also planning for expansion, which would provide additional recreational opportunities.

Finally, several regional parks and reservoirs are available for use by Hughson residents. The County's park system includes 16 parks, ranging in size from ½ acre to 96 acres. Nearby reservoirs include the Modesto and Woodward Reservoirs in Waterford and Oakdale, respectively.



Data Source: California Department of Conservation, Farmland and Monitoring Program, 2002.

Note that recently-urbanized areas within the city limits have been removed from farmland data layer.

FIGURE COS-1





IMPORTANT FARMLAND

CITY OF HUGHSON GENERAL PLAN

TABLE COS-3 FARMLAND IN THE PLANNING AREA (IN ACRES)

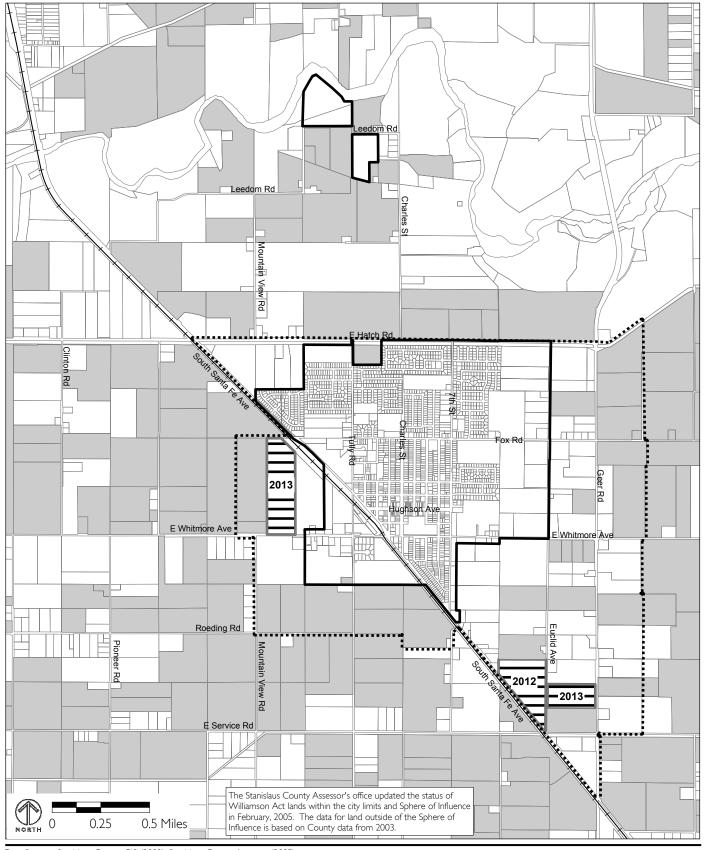
Farmland Type	City Limits	Sphere of Influence	Planning Area	Total
Prime Farmland	244	1,191	6,332	7,767
Farmland of Statewide Importance	0	0	17	17
Unique Farmland	6	11	184	201
Farmland of Local Importance	0	0	13	13
Total	250	1,202	6,546	7,998

Source: State of California, Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, 2002.

TABLE COS-4 WILLIAMSON ACT LANDS (IN ACRES)

Williamson Act Category	City Limits	SOI
Active Contract	2	500
In Non-renewal	0	98
Total	2	598

Source: Stanislaus County Assessor's Office, February 2005.



Data Source: Stanislaus County GIS (2000); Stanislaus County Assessor (2005).

FIGURE COS-2



a. Existing Parks

As of December 2004, there is one mini-park, one neighborhood park and two community parks in Hughson, totaling approximately 17 acres. In addition, there are two drainage retention basins, several public school recreation facilities and a botanical garden. The complete recreational facilities inventory is detailed in Table COS-5 and includes the types of equipment or amenities located at each facility. The locations of each facility is shown in the Public Services and Facilities Element in Figure PSF-1. The City is currently working to develop a recreational corridor in and around Hughson that would include linear parks, and bicycle and pedestrian trails. Bicycle and pedestrian routes are discussed further in the Circulation Element.

Any newly developed parks must comply with the American with Disabilities Act (ADA), Consumer Products Safety Guidelines for Public Playgrounds and City standards for public works construction, and include proper signage and emergency services access. The following provides a description of Hughson's tiered park system, which will be used when planning for future recreational facilities:

- ◆ Mini-Parks. Small parks, typically ½ to five acres that provide recreational activities generally used by the local neighborhood or subdivision. These are often privately owned and maintained by the related Homeowners Association; however, these facilities are also available for use by the general public. In Hughson, the Rhapsody neighborhood includes a mini-park complete with a tot lot.
- ◆ Neighborhood Parks. Generally, consist of three- to seven-acre sites that host basic recreational activities for 1,000 to 3,000 people within a ¼-to ½-mile radius. They have street frontage on at least one public street, are convenient to pedestrians, are linked with bicycle routes and trail corridors when possible, and are located adjacent to schools or other municipal facilities. Carrie Shrader Park is currently the only neighborhood

TABLE COS-5 EXISTING RECREATIONAL FACILITIES IN HUGHSON

Name	Facility Type	Acres	Amenities	Owner
Name	Туре	Acres	Lighted baseball field with dugouts,	Owner
Starn Park	Community Park	8.2	jogging trail, play structures, concession/restroom building, picnic area, BBQ grills, paved off-street parking for 50 cars, ADA accessible	City
Carrie Shrader Park	Neighbor- hood Park	2.0	Swimming pool (open to the public during the summer), restrooms, picnic area, BBQ grills, play equip- ment, passive play areas, parking	HUSD
LeBright School (former school site)	Community Park	6.32	5 baseball diamonds, bleachers, field for football and soccer prac- tice, snack bar, portable rest- rooms, gravel off-street parking for 100 cars	HUSD
Hughson High School	Public School	8.52	2 baseball diamonds, 8 tennis courts, football and track venue, stadium seating, basketball courts, restrooms, concession stand, off- street parking	HUSD
Ross Middle School and Fox Road Elementary	Public School	6.05	2 soccer fields, 2 baseball diamonds, 1 volleyball court, benches, grass areas, vending, restrooms, off-street parking	HUSD
Hughson Elementary School	Public School	3.68	Basketball courts, tetherball, play equipment, small baseball diamond, small grass field, off-street parking	HUSD
Santa Fe Drainage Basin	Open Space	1.15	Open space grassed area that serves as drainage for heavy rains but is designed to also provide park space and dry within 1 day	City
Rhapsody Drainage Basin and Tot Lot	Open Space/ Playground	1.28	Open space as described above, with an additional playground geared towards younger children	Private
Hughson Botanical Garden	Arboretum	13	Undeveloped open space with established tree collection	Private

park in Hughson, although the two drainage basins can be considered in this category. Because Carrie Shrader Park contains the City's main swimming pool, it tends to draw residents from a further radius than typical to a neighborhood park.

◆ Community Parks. Generally, consist of 10- to 25-acre sites that provide a mix of active and passive recreational activities for 10,000 to 50,000 people within up to a 50-mile radius. They have street frontage on at least two public streets, off-street parking and convenient access for pedestrians and bicycle traffic. They should be located within close proximity to neighborhoods and adjacent to schools or other municipal facilities if possible, while consciously preventing negative impacts from higher activity levels on these communities. Starn Park and LeBright School are the two community parks in Hughson.

b. City of Hughson Parks Master Plan

The City is in the process of developing and adopting a Parks Master Plan. To address the growth pressures experienced by Hughson, the Parks Master Plan works to implement the community's established priority regarding the provision of parks and open space and provides direction as to how to meet the need for parkland.

The City currently has at least five acres of parkland for every 1,000 residents. As allowed by the State's Quimby Act, the City has established in this General Plan a goal of providing five acres of parkland for every new 1,000 residents. The Parks Master Plan addresses the type and location of parks and open space allocations the City wishes to secure to meet its parkland goal. For each park category, the Plan provides guidelines for size, service area, location, site characteristics, design elements, lighting, restrooms, recreation facilities, utilities, site furnishings and landscaping. The Plan also identifies a planning and design process to ensure proper site selection and cost-efficient implementation.

The Parks Master Plan also analyses the cost of developing and maintaining the various types of parks and provides direction for utilizing accrued park and open space funds efficiently, without placing an undue tax burden on residents. The Plan will direct the establishment of appropriate development impact fees in order that the City might pass along land acquisition and construction costs to project proponents. However, the Parks Master Plan also recognizes that no matter how park development is initially funded, the City must take into consideration future maintenance costs.

c. Open Space Areas

Open space areas can be strictly visual amenities or provide opportunities for passive and/or active recreation. Agricultural lands surrounding Hughson fall into the first category, while the two neighborhood drainage basins fit the second. Not all drainage basins in Hughson have been designed with visual quality or recreational access in mind. To take advantage of all potential recreational opportunities, drainage basins in Hughson are now encouraged to serve the dual purpose of providing additional park facilities and open space for residents, along with controlling stormwater flows.

d. Hughson Botanical Garden

In 1994, a longtime Hughson resident began to develop a small ornamental tree collection and in 2000, after visualizing the community benefit that could be provided, deeded 13 acres of the land and established the Hughson Arboretum & Gardens non-profit organization and appointed a Board of Directors.

An interpretive planning process for the Hughson Botanical Garden, geared to be a regional horticultural and educational institution, began in earnest in 2003. The Garden's mission was solidified during these activities: to "...foster stewardship and promote an appreciation of native landscapes, the creation of sustainable urban landscapes and the preservation of heritage landscapes," simply put, to incorporate education and awareness with public recreation.

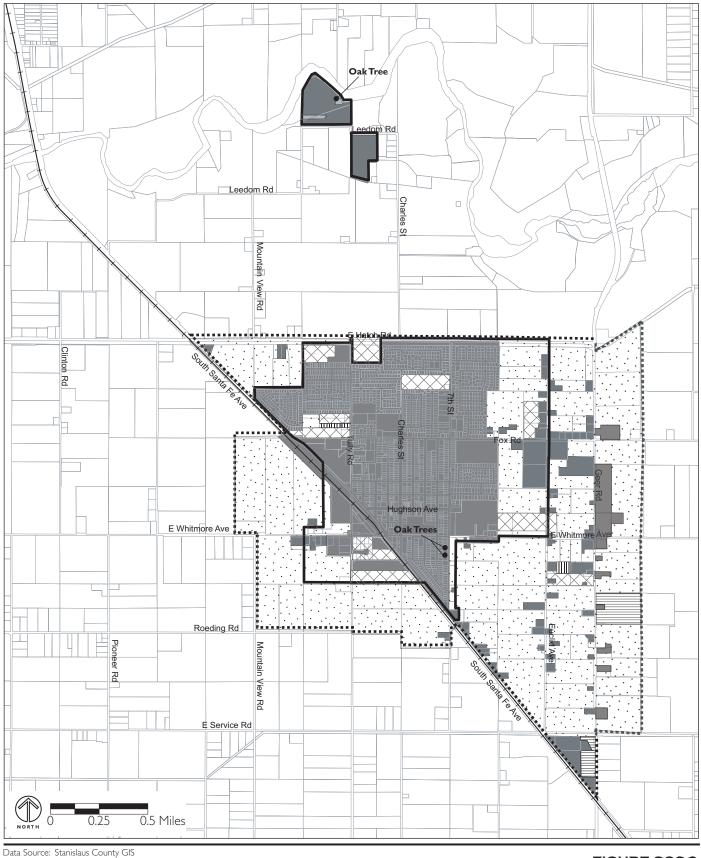
As part of the planning process, a master plan for the botanical garden has been prepared and the non-profit is working to implement the vision of the master plan.

3. Biological Resources

A literature review and field reconnaissance was conducted in 2005 to assess the biological resources in and around Hughson and identify rare and sensitive species and habitats with the potential to occur in the area. Among resources studied was the Conservation/Open Space Element of the Stanislaus County General Plan and the California Natural Diversity Database (CNDDB), maintained by the California Department of Fish and Game. This database tracks the location and condition of California's rare animals, plants and natural habitats. Figure COS-3 depicts the results of the field reconnaissance. Table COS-6 lists the special-status species and communities that may occur within the Hughson vicinity, although the CNDDB has not officially reported any of them within Hughson. Nevertheless, due to the possibility of their occurrence, the City monitors new development to ensure that it does not negatively impact these species.

Special-status species are plants and animals that are legally protected under the State and/or federal Endangered Species Acts or other regulations, as well as other species that are considered rare enough by the scientific community and trustee agencies to warrant special consideration, particularly with regard to protection of isolated populations, nesting or denning locations, communal roosts, and other essential habitat. Species with legal protection under the Endangered Species Acts often represent major constraints to development, particularly when they are wide ranging or highly sensitive to habitat disturbance and where proposed development would result in a "take" of these species.

Most original native perennial grasslands, oak woodlands and riparian woodlands in the Hughson area have been replaced over time with agricultural and urban uses. Today, local vegetative cover in the area consists mainly of row crops, orchards and limited ornamental landscaping in areas of urban uses and scattered rural residences. The lack of protective cover in the agricultural fields generally limits their suitability as habitat for wildlife and explains the relatively low populations of predatory birds and mammals. Remnant



City Limits

Sphere of Influence

Peveloped/Disturbed

Orchard Crop

Riparian

Orchard Crop

Row Crop

Fallow/Ruderal Grassland

FIGURE COS-3

VEGETATION

VEGETATION

CITY OF HUGHSON

GENERAL PLAN

TABLE COS-6 SPECIAL-STATUS SPECIES KNOWN OR SUSPECTED IN THE HUGHSON VICINITY

Species	Category	Status	Habitat Type
Valley elderberry longhorn beetle	Insect	FT	Riparian, fencerows with elderberry
Northwestern pond turtle	Amphibians/ Reptiles	FSC, CSC	Ponds, rivers, streams
Swainson's hawk	Bird	ST	Riparian, grasslands, agricultural
Golden eagle	Bird	CSC, CP	Grasslands, agricultural
Northern harrier	Bird	CSC	Grasslands agricultural, marshland
Prairie falcon	Bird	CSC	Grasslands, agricultural
Cooper's hawk	Bird	CSC	Riparian, woodland, agricultural
White-tailed kite	Bird	СР	Riparian, grasslands, agricultural
Burrowing owl	Bird	FSC, CSC	Grasslands, agricultural
Tricolored black- bird	Bird	FSC, CSC	Marshland, agricultural
Bank swallow	Bird	ST	Riparian, agricultural
Loggerhead shrike	Bird	FSC,CSC	Grasslands, agricultural
California yellow warbler	Bird	CSC	Riparian
Ringtail	Mammal	CP	Riparian

Source: Biological Resources Study for the Hughson General Plan, Environmental Collaborative, 2005.

- FT = Listed as Threatened under the Federal Endangered Species Act.
- FSC = A Federal Special Concern Species. Former Category 2 candidate species but were considered to common or for which sufficient information was not available to warrant continued listing as candidate.
- ST = Listed as Threatened under the California Endangered Species Act.
- CP = California fully protected species; individual may not be possessed or taken at any time.
- CSC = Considered a species of special concern by the California Department of Fish and Game; taxa have no formal legal protection but nest sites and communal roosts are generally recognized as significant biotic features.

riparian woodland and scrub grow along the banks of the Tuolumne River near the former treatment ponds of the City's wastewater treatment plant, and a few native valley oaks are scattered throughout the city limits and SOI.

Although several plant species with special-status are known or suspected to have occurred in the central part of Stanislaus County, the extent of disturbance in the Hughson vicinity has led to conditions under which no special-status plant species are believed to occur within the city limits or SOI. Conspicuous wetlands are also absent from the city and SOI. All development proposals are reviewed to encourage the preservation of existing trees and ensure compliance with all federal, State and regional regulations for habitat and species protection.

4. Cultural Resources

Hughson's history began with Native American settlements in the region and transitioned into a mainly agricultural community with the arrival of European settlers. In 1882, Hiram Hughson purchased 1,000 acres for a grain ranch, which eventually grew to contain 5,000 acres. The San Joaquin Railroad purchased land from Hughson for its tracks and established the Hughson stop and station, which began to draw settlers to the area. This boom elevated the price of Mr. Hughson's land and spurred him to place it, of which a portion eventually became Hughson, in the hands of the Hughson Town Company for development. Eventually another land owner to the south of Hughson, John Tully, opened up his land for settlement and the Township was established in 1907.

Due to evidence of pre-historic human activity in the region and relatively long time that European settlements have occurred in Hughson, there is the possibility of cultural resources to occur in the City and the surrounding area. Hughson has not been comprehensively surveyed for significant historical structures and buildings, but there are some buildings over 50 years old, especially in the downtown. Some of these older buildings may be considered significant historic structures under State or federal definition.

The Hughson Historical Society was established in 1999 to document historical photographs and oral histories of the City, as well as eventually establish a museum. It is working with the City in these efforts and gathered public support during the General Plan update visioning process.

The presence of archaeological and paleontological resources is also possible, although Stanislaus County is one of the least archaeologically researched region in California and no known artifacts have been found in the Hughson area. According to the University of California Berkeley database of paleontological resources, the vertebrate fossils found closest to Hughson were located on the eastern edge of Modesto and in the area between Empire and Waterford, to the northeast side of Hughson. Both artifacts were from the Quaternary period and the Pleistocene epoch. Eight other examples of vertebrate resources have been found throughout the County and two invertebrates fossils. Although the chance of discovery of cultural resources is low, the City has established guidelines in its Standard Conditions of Approval that encourage compliance with State and federal requirements for the protection of cultural resources. According to these regulations, development that encounters or uncovers cultural resources is required to halt construction, assess the situation and mitigate potential impacts to these resources as necessary. The City recognizes that the ultimate responsibility lies with the project applicant.

5. Energy and Water Conservation

The energy shortages and accompanying high utility rates of the 1970s and the year 2000 led to a heightened awareness of the need for energy conservation techniques as a means of saving money and natural resources. However, the benefits of energy conservation go well beyond financial savings for individual consumers. For example, the combustion of fossil fuels to produce heat or electricity, or to power internal combustion engines, has also been linked to poor air quality in the Central Valley, global warming and negative impacts on crops.

In Hughson, energy conservation can be achieved from reducing electricity and private automobile use, encouraging alternative energy sources, efficiently siting buildings for optimal sun exposure, and implementing land use and transportation policies that encourage fewer and shorter vehicle trips. The City's Standard Conditions of Approval encourages the highest levels of energy efficiency in all projects and requires that information be provided to customers concerning options for energy-efficient appliances.

Water use and conservation is also a concern and priority throughout the entire Central Valley, especially as the City is reaching capacity of its existing potable water system. The combination of agricultural production, warm climate and increased urban landscaping threatens supply and sustainability. Hughson has recently enacted a Water Conservation Program aimed at preserving water, reducing the environmental impacts of overuse, and controlling costs for customers. The Program limits times and days for watering landscaping and washing vehicles, as well as outlining appropriate operation and maintenance of watering systems and fountains, or other water displays.

6. Water Quality

The City of Hughson depends on the local groundwater basin for all of its drinking water. Data gathered by the City indicates that the current water supply system and its contents are in compliance with existing State maximum contaminant levels (MCLs). Arsenic levels in Hughson register 11 parts per billion (ppb) on average, which although compliant with current regulations of 50 ppb, are one point higher than new standards established by the United States Environmental Protection Agency (EPA), which will take effect in 2006. The City is working with the Department of Health to determine how to address the issue of arsenic in the groundwater basin, which could include the installation of a mandatory arsenic removal system, which will add to the overall cost for the provision of potable water to Hughson.

The Hughson Standard Conditions of Approval also contains guidelines and regulations aimed at the maintenance of high quality water. New development is required to adopt Best Management Practices to minimize grading

and control run-off which, as mentioned in the Public Services and Facilities Element, pollutes storm drains that eventually can lead to pollution of ground water sources. New development proposals are also reviewed for adequate drainage systems that ensure the project will not, over time, hamper water quality in the City.

The northern edge of the Hughson Planning Area abuts the Tuolumne River, which, although not controlled or monitored by the City, has the potential for affecting ground water quality in Hughson as well as providing a regional recreational areas for the surrounding community. The Tuolumne River Technical Advisory Committee (TAC) was created by the 1996 New Don Pedro Federal Energy Regulatory Commission Settlement Agreement between 10 stakeholders. Among other considerations, the Agreement provided for minimum in-stream flows, a monitoring program and the identification of 10 non-flow restoration projects on the river, all designed to sustain and improve the salmon fishery. A Tuolumne River Corridor Restoration Plan was completed in March 2000 and is being used as a guide in rehabilitating the lower river.

The Tuolumne River Trust works in conjunction with the TAC to monitor these activities and any restoration projects. Vital to this monitoring and restoration work is the involvement of the Turlock and Modesto Irrigation Districts and the City and County of San Francisco. The Irrigation Districts are considered the major stewards of the river due to the federal power bestowed on them to build and operate the Don Pedro Dam and Powerhouse, which was completed in 1971. The Turlock Irrigation District is also currently administering the \$25 million project to improve a 27-mile stretch of the river channel, and riparian and fisheries conditions.

7. Air Quality

Hughson is located in the San Joaquin Valley Air Basin, which is about 35 miles wide and 250 miles long. Surrounded by mountain ranges, the air basin drains to the north, with an opening at the Carquinez Strait leading into San Francisco Bay and then the Pacific.

Relatively wet winters and dry summers characterize the Hughson region's inland Mediterranean-type climate. Climate is temperate, with an average annual high of about 75 degrees and an average low of 45 to 50 degrees. Rainfall totals can vary widely over a short distance with windward mountain areas west of Hughson averaging over 20 inches of rain and shadow areas, such as the city, averaging about 10 to 12 inches annually. During stormy periods, horizontal and vertical air movement ensures rapid pollutant dispersal. Rain also washes out particulate and other pollutants. Conversely, during calm periods, pollutant levels can build up to unhealthy levels.

Winds from March to November typically blow from the northwest near Hughson. During winter months, winds are generally light and variable as colder air from surrounding mountains flows down into the valley floor and then out toward the Delta.

Normally, air temperatures decrease with increasing elevations. Sometimes this normal pattern is inverted, with warm air aloft, and cooler air trapped near the earth's surface. This atmospheric condition occurs in all seasons. In summer, especially when wind speeds are very low, a strong inversion will trap air emissions near the surface allowing high levels of ozone smog to develop. In winter, persistent inversions can trap emissions of particulate (e.g. woodsmoke) and carbon monoxide near the surface, resulting in unhealthful air quality.

The potential for serious summer air pollution in the San Joaquin Valley is strong because of high surface temperatures, plentiful sunshine, relatively stable air, and mountains that trap emissions. In winter, low rainfall, strong inversions and weak winds allow emissions to build up to high levels. In the Hughson area, local pollution sources are augmented by emissions transported from upwind sources. Conversely, air pollutant emissions created in Hughson can be transported toward other communities by the wind, and contribute to unhealthful levels in those areas. Hence controlling air pollution requires both local and regional efforts and unified programs to achieve clean air.

8. Regulatory Framework

Air quality in the Hughson area is subject to federal and State regulations for regulated pollutants. The following provides an overview of the applicable regulations and regulatory bodies for the Hughson area.

a. National and State Ambient Air Quality Standards

Federal and State ambient air quality standards for criteria air pollutants have been established for ozone (O3), carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), inhalable particulate matter (PM10 and PM2.5) and lead (Pb). Ambient air quality standards specify the concentration of pollutants that the public can be exposed to without adverse health effects. Individuals vary widely in their sensitivity to air pollutants, so standards are designed to protect more sensitive populations such as children and the elderly. Federal and State standards are reviewed and updated periodically based on new health effects studies. Except for the eight-hour CO standard, California ambient air quality standards are more stringent that the national standards. Table COS-7 summarizes the air quality standards and provides a brief description of the six criteria air pollutants.

b. San Joaquin Valley Air Pollution Control District

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is responsible for local air quality regulation. The SJVAPCD's primary responsibility is to regulate stationary sources and develop plans to achieve and maintain air quality standards. The California Air Resources Board (ARB) and US Environmental Protection Agency (EPA) have jurisdiction over controlling emissions from mobile sources. To protect public health the SJVAPCD has adopted plans to achieve ambient air quality standards. The SJVAPCD must continuously monitor its progress for plan implementation. SJVAPCD must report this effort regularly to the ARB and the US EPA. It must also periodically revise its attainment plans to reflect new conditions and requirements. The SJVAPCD tries to exercise a uniform emission control effort that will bring the entire region into compliance with State and federal standards as quickly as possible.

TABLE COS-7 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard	Federal Pri- mary Stan- dard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources	
Ozone (O3)	1 hour 8 hours	0.09 ppm	0.08 ppm*	 Irritation and possibly permanent lung damage. 	Motor vehicles, including refining and gasoline delivery.	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	D : 1 1 6 : 1 11 1 0	,	
	8 hours	9 ppm	9.0 ppm	 Deprives body of oxygen in the blood. Causes headaches and worsens respiratory problems. 	Primarily gasoline-powered internal combustion engines.	
Nitrogen Dioxide (NO2)	Annual Average		0.05 ppm	Irritating to eyes and respiratory tract. Colors	Motor vehicles, petroleum-refining, pow	
	1 hour	0.25 ppm		atmosphere reddish-brown.	plants, aircraft, ships and railroads.	
Sulfur Dioxide	Annual Average		0.03 ppm	Irritates and may permanently injure respira- tory tract and lungs. Can damage plants, de-Fuel combustion, chemic		
(SO ₂)	1 hour	0.25 ppm		structive to marble, iron, and steel. Limits	recovery plants and metal processing.	
	24 hours	0.04 ppm	0.14 ppm	visibility and reduces sunlight.		
Suspended Particulate Matter (PM10 PM2.5)	24 hours	50 ug/m³ (PM10)	150 ug/m ³ (PM ₁₀) 65 ug/m ³ (PM _{2.5})			
	Annual Geometric Mean		50 ug/m³ (PM10) 15 ug/m³ (PM2.5)	May irritate eyes and respiratory tract, decrease lung capacity, cause cancer and increased mortality. Produces haze and limits visibility. combustion, wood smoke, photochemical reactions, a tivities (e.g. wind-raised du	Industrial and agricultural operations, combustion, wood smoke, atmospheric photochemical reactions, and natural activities (e.g. wind-raised dust and ocean sprays).	
	Annual Arith- metic Mean	20 ug/m³ (PM10) 12 ug/m³ (PM2.5)		_		
Lead	Monthly	1.5 ug/m ³		Discussion of the state of the	Present sources include: lead smelters,	
	Quarterly		1.5 ug/m ³	 Disturbs gastrointestinal system, and causes anemia, kidney disease and neuromuscular and neurologic dysfunction (in severe cases). 	battery manufacturing & recycling facili- ties. Past sources include: combustion of leaded gasoline.	

¹ The national 1-hour ozone standard was revoked by US EPA on June 15, 2005.

Note: ppm = parts per million; ug/m3 = micrograms per cubic meter.

Source: California Air Resources Board, January 9, 2003

CONSERVATION AND OPEN SPACE ELEMENT

The SJVAPCD has several rules and regulations that pertain either directly or indirectly to land use development projects affected by General Plans. The following discusses these rules and regulations.

i. Ozone (O3)

The San Joaquin Valley suffers from high levels of ground-level ozone, which can lead to serious health effects such as asthma and harm local crops. As a result, the area has been designated by the US EPA as a severe nonattainment area. In response, the SJVAPCD has prepared several plans since 1994 to address attainment of both the federal and State O₃ standards. The Amended 2002-2005 Rate of Progress Plan is the latest plan submitted that addressed the federal one-hour O₃ standard. However, the national 1-hour ozone standard was revoked by US EPA on June 15, 2005. The latest plan addressing the State O₃ standard is the 2000 Triennial Update. All of these plans include strategies for reducing the emissions of O₃ precursor pollutants.

ii. Particulate Matter

Occasionally, monitors in the Hughson area exceed the national PM₁₀ (course particulate matter) standard. As a result, the US EPA has designated the area as a nonattainment area. Human generated PM₁₀ is generally caused by vehicle exhaust, dust from roadways, and dust and smoke from agricultural activities. The 2003 PM₁₀ Plan (PM₁₀ Plan) is the SJVAPCD's strategy for achieving the National Ambient Air Quality Standards for particulate matter measuring less than 10 microns in diameter (PM₁₀). The plan is designed to meet the requirements of the federal Clean Air Act and contains measures needed to attain the federal PM₁₀ standard at the earliest possible date. The PM₁₀ Plan will become part of the State Implementation Plan for the San Joaquin Valley.

The Hughson area experiences concentrations of fine particulate matter (PM2.5) that exceed the National Ambient Air Quality Standards on an estimated 18 to 30 days per year. PM2.5 is mainly caused by fuel combustion from automobiles, agricultural burning, industrial processes, and diesel powered vehicles such as buses and trucks. The US EPA recently designated all of

Stanislaus County as nonattainment for the national PM_{2.5} standard. Plans for PM_{2.5} could be due to EPA in 2006.

The more stringent California Ambient Air Quality Standard for PM₁₀ is exceeded on an estimated 50 to 75 days per year.

iii. General Plan Guidance

The SJVAPCD also works with cities and counties to develop General Plans that will help create better air quality in the future. To this end, the SJVAPCD prepared the *Air Quality Guidelines for General Plans* that sets forth 77 goals, policies and implementation strategies for air quality. The Guidelines emphasize a comprehensive approach to air quality planning that would reach the entire community. According to the SJVAPCD, the Guidelines' suggestions for General Plans can be summarized as follows:

- ◆ Determine and mitigate project level and cumulative air quality impacts under the California Environmental Quality Act (CEQA).
- ♦ Integrate land use plans, transportation plans and air quality plans.
- Plan land uses in ways that support a multi-modal transportation system.
- ◆ Support local and regional programs that reduce congestion and vehicle trips.
- Plan land uses to minimize exposure of citizens and workers to toxic air pollutant emissions from industrial and other sources.
- Support the SJVAPCD and public utility programs that reduce emissions from energy consumption and area sources, including water heaters, woodstoves, fireplaces and barbecues.

9. Existing Air Quality Conditions

Air quality in the San Joaquin Valley Air Basin is consistently monitored to allow for appropriate planning to address basin specific air quality issues. The following provides a summary of existing air quality conditions in the Hughson area.

a. Criteria Pollutants

Ambient air quality is affected by the rate and concentration of pollutant emissions and meteorological conditions. Factors such as wind speed, atmospheric stability and mixing height all affect the atmosphere's ability to mix and disperse pollutants. Long-term variations in air quality typically result from changes in emissions, while short-term variations result from changes in atmospheric conditions. There are several continuous air monitoring stations operated by government agencies in the Hughson area. Measured air pollutant data indicate that ground-level ozone, PM10, and PM2.5, are the air pollutants of greatest concern because they are fatal in high concentrations.

The California Air Resources Board measures ambient air quality concentrations at two locations in Stanislaus County. The monitoring stations in Modesto and Turlock are generally representative of regional air quality conditions (i.e., ozone levels) in this part of the San Joaquin Valley. Because of the rural nature of Hughson, the monitor at Turlock is more representative for localized air pollutants (particulate matter and carbon monoxide). Ambient air pollution data typically receives great scrutiny and quality assurance testing, so recent data is not available. State and federal air quality standards and the highest local air pollutant levels measured over the past five years (2000-2004) are reported in Table COS-8.

During the past five years, the State one-hour ozone standard was exceeded from nine to 31 days per year in Turlock. Modesto, had fewer exceedances, with two to 14 days per year. While Turlock had higher concentrations, both stations exceeded the federal one-hour standard up to one day per year. The federal 8-hour standard was exceeded four to 25 days per year in Turlock and between zero to seven days per year in Modesto. Reasons for higher ozone levels in Turlock are related to the complex conditions that result in ozone formation. Also, emissions from the City of Modesto lead to higher concentrations downwind where Turlock and Hughson are located.

State PM₁₀ standards have been exceeded over 60 times a year. Federal PM_{2.5} daily standards have been exceeded from three to five times a year. Standards for all other criteria pollutants were not exceeded in the five-year period.

The California ARB publishes an almanac each year that evaluates air quality trends statewide. It also makes forecasts about future pollution levels. According to ARB, emission sources for ozone precursors in the San Joaquin Valley are from both motor vehicles and industry, with oil fields at the south end of the valley producing high NOx levels. Agriculture, fugitive dust from paved and unpaved roads, and waste burning all contribute to high background levels of PM10.

b. Attainment Status

As is shown in Table COS-9, the region does not meet federal standards for ground level ozone and fine particulate matter. As noted in the table, the national 1-hour ozone standard was revoked by the US EPA on June 15, 2005. However, the 8-hour standard, which the region is currently considered in Serious Nonattainment, has become the prevailing federal standard for ground level ozone.

B. Goals, Policies and Actions

1. Agricultural Resources

Goal COS-1 Preserve and protect agricultural lands in and around Hughson.

Policy COS-1.1 Property owners within the Sphere of Influence will be encouraged to maintain their land in agricultural production until the land is converted to urban uses.

TABLE COS-8 Attainment of Ambient Air Quality Standards in Stanislaus County

Pollutant	Federal Designation	State Designation
Ozone - one hour	*	Nonattainment/ Severe
Ozone - eight hour	Nonattainment/Serious	No State Standard
PM _{2.5}	Nonattainment**	Nonattainment
PM_{10}	Nonattainment	Nonattainment
CO	Unclassified/Attainment	Attainment
Nitrogen Dioxide	Unclassified/Attainment	Attainment
Sulfur Dioxide	Unclassified/Attainment	Attainment

^{*}US EPA revoked the 1-hour standard in 2005.

Source: California Air Resources Board

- Policy COS-1.2 The City should endeavor to direct new growth away from areas established as Prime Farmland and/or under Williamson Act contracts, and discourage the premature conversion of agricultural land to urban uses.
- Policy COS-1.3 The City will support Stanislaus County in its efforts to maintain agricultural lands in viable farming units for those areas not currently designated for urban uses.
- Policy COS-1.4 Any County proposals within the Hughson Planning Area that involve the development of urban uses on land designated as Agriculture outside of the City's Sphere of Influence will be discouraged by the City.

^{**} US EPA recently designated as Nonattainment

TABLE COS-9 Measured Air Pollutant Concentrations in Stanislaus County

Pollutant	Average Time	National Ambient Air Quality Standard	California Ambient Air Quality Standard	2000	2001	2002	2003	2004
Ozone (O3) Modesto	1-Hour	0.12 ppm	0.09 ppm	0.13 ppm	0.12 ppm	0.12 ppm	0.11 ppm	.10 ppm
	8-Hour	0.08 ppm	-	0.10 ppm	0.09 ppm	0.10 ppm	0.09 ppm	.08 ppm
Ozone (O3) Turlock	1-Hour	0.12 ppm	0.09 ppm	0.13 ppm	0.11 ppm	0.14 ppm	0.12 ppm	.11 ppm
	8-Hour	0.08 ppm	-	0.10 ppm	0.10 ppm	0.11 ppm	0.10 ppm	.09 ppm
Carbon Monox- ide (CO) <i>Turlock</i>	8-Hour	9 ppm	9 ppm	3.5 ppm	3.1 ppm	2.7 ppm	2.3 ppm	1.8 ppm
Fine Particulate Matter (PM _{2.5}) Modesto	1-Hour	65 ug/m ³		77 ug/m³	95 ug/m³	83 ug/m ³	64 ug/m³	
	Annual	15 ug/m³		19 ug/m³	16 ug/m³	19 ug/m³	15 ug/m³	
Respirable** Particulate Matter (PM10) Modesto	24-Hour	150 ug/m³	50 ug/m³	119 ug/m ³	160 ug/m³	86 ug/m³	71 ug/m³	
	Annual	50 ug/m³	20 ug/m³	35 ug/m ³	37 ug/m³	37 ug/m³	30 ug/m³	

Source: California Air Resources Board, http://www.arb.ca.gov/adam.

Note:

ppm = parts per million

 u/gm^3 = micrograms per cubic meter

NA = data not available

Values reported in bold exceed ambient air quality standards

- Policy COS-1.5 The City will support the application and renewal of Williamson Act contracts or other conservation easements for areas outside of the City's Sphere of Influence.
- Policy COS-1.6 The City will work cooperatively with land trusts and other non-profit organizations to preserve agricultural land in the Planning Area.
- Policy COS-1.7 The City will minimize conflicts between agriculture and urban uses.
- Action COS-1.1 Work with the County and surrounding jurisdictions to create a county-wide policy to limit urban growth to areas adjacent to existing development and preserve permanent agricultural separators between urbanized areas.
- Action COS-1.2 Require that development projects include sufficient buffer zones within site designs, such as roads, setbacks and other physical boundaries, between agricultural uses and urban development.
- Action COS-1.3 Consider adopting a Right-to-Farm Ordinance to require new development adjacent to agricultural land to include deed restrictions recognizing the right to farm on neighboring parcels currently under agricultural production.

2. Parks and Open Space

Goal COS-2 Provide parks, open space and recreation facilities to maintain and improve the quality of life for Hughson residents.

- Policy COS-2.1 New development will be required to provide adequate parkland at a ratio of five acres per 1,000 residents in accordance with the Quimby Act (California Code 66477). Golf course development shall not be counted towards park acreage requirements.
- Policy COS-2.2 The City will guide park development to include a diversity of passive and active recreational amenities that are geographically distributed throughout the City and easily accessible by pedestrians and bicyclists.
- Policy COS-2.3 Where feasible, drainage basins should be built with a contoured or tiered design to optimize the potential for the dual purpose of providing additional recreational opportunities.
- Policy COS-2.4 The City will support the development of the Hughson Botanical Garden as a natural resource/habitat improvement opportunity, and as a City and regional asset.
- Policy COS-2.5 The City will support County, State and other efforts to develop and expand park and open space opportunities along the Tuolumne River, including the potential re-use of the City's waste water plant's northern ponding areas, for recreational and habitat uses.
- Policy COS-2.6 All park and recreation developments shall be designed and maintained to minimize water, energy and chemical (e.g. pesticides and fertilizer) use, preserve wildlife habitat where appropriate, and incorporate native plants and drought-resistant turf.
- Action COS-2.1 Implement the City's Parks Master Plan and update it on a regular basis.

Action COS-2.2 Establish a joint use agreement with the Hughson Unified School District to allow for the shared design and operation of recreation facilities to maximize use and reduce cost.

3. Biological Resources

Goal COS-3 Protect Hughson's biological resources.

- Policy COS-3.1 New developments shall preserve, protect and incorporate established native trees into the site design.
- Policy COS-3.2 New development shall meet all federal, State and regional regulations for habitat and species protection.
- Policy COS-3.3 The City will encourage new development to use native vegetation in landscape plans where appropriate instead of invasive, non-native plant species.
- Policy COS-3.4 New development shall ensure that suitable habitat for Valley Elderberry Longhorn Beetle is adequately avoided, any elderberry shrubs are identified on project sites, and adequate mitigation is provided where development is proposed within 100 feet of elderberry shrubs.
- Policy COS-3.5 New development shall ensure that active nests for special status bird species shall be avoided during construction through pre-construction surveys, and if active nests are encountered, through restrictions on construction activities until any young have fledged. This shall include both ground nesting burrowing owl and tree nesting special-status birds.
- Policy COS-3.6 New development shall ensure that any jurisdictional waters are avoided to the maximum extent practicable, any re-

quired authorization is obtained from jurisdictional agencies, and adequate mitigation is provided for unavoidable impact.

4. Cultural Resources

Goal COS-4 Preserve Hughson's cultural resources.

- Policy COS-4.1 The City will support the efforts of the Hughson Historical Society to document and preserve the community's history and create a museum to highlight Hughson's past.
- Policy COS-4.2 Consistent with CEQA, prior to project approval developers will be required to provide an assessment by appropriate professionals regarding the presence and condition of on-site historical, archaeological and paleontological resources on and adjacent to a project site, the potential for adverse impacts on these resources and appropriate mitigation. This will apply to projects subject to CEQA, as well as for ministerial projects with the potential to affect buildings 45 years or older. As part of this assessment, historical buildings will be assessed as to the viability of their continued use and reuse. Areas within one mile off the Tuolumne River should receive special attention due to the higher potential for archeological resources.
- Policy COS-4.3 If cultural resources, including archaeological or paleontological resources, are uncovered during grading or other on-site excavation activities, construction should stop until appropriate mitigation is implemented.
- Action COS-4.1 Conduct a survey of structures in the Hughson area to determine any of historical or architectural significance to the City.

5. Energy Conservation

Goal COS-5 Minimize the consumption of energy, water and non-renewable resources.

- Policy COS-5.1 New development shall comply with State Title 24 energy resource conservation standards.
- Policy COS-5.2 The City will encourage the use of water conservation technology to reduce water consumption by irrigation, domestic and industrial uses.
- Policy COS-5.3 The City will encourage the use of solar energy design, including passive systems, active water heating and space heating systems in all civic buildings.
- Action COS-5.1 Explore the creation of incentives for development that will encourage the incorporation of energy conservation features into project design, such as photovoltaic cells, and promote the use of alternative-fuel vehicles. Incentives that may be explored include flexibility in design and regulations and financial assistance.
- Action COS-5.2 Consider providing information to residents and developers about "green building" and sustainable site design principles and practices applicable to both new construction and renovations.

6. Water Quality

Goal COS-6 Maintain Hughson's ground and surface water quality.

- Policy COS-6.1 New development proposals shall be designed and constructed using Best Management Practices (BMPs) to avoid negative impacts to water quality.
- Policy COS-6.2 The dumping of hazardous materials and other pollutants into waterways, storm drains and recharge areas will be prohibited.
- Policy COS-6.3 The City will enforce project design and construction regulations that limit amounts of impervious services and control erosion to minimize associated runoff and ground water pollution.
- Action COS-6.1 Monitor water and sewer distribution and collection lines to avoid cracks and leaks which may result in pollution of the aquifer and lower water quality.
- Action COS-6.2 Provide information for residents and businesses on the use of naturally pest-resistant landscaping and design features to reduce the need for chemical treatments.

7. Air Quality

Goal COS-7 Protect and improve air quality in the Hughson area.

- Policy COS-7.1 The City will support the efforts of the San Joaquin Valley Air Pollution Control District (SJVAPCD) and other regional air quality management planning, programs, educational and enforcement measures.
- Policy COS-7.2 New development proposals will be reviewed, and industrial activities monitored, for compliance with State and regional

air quality standards. Mitigation measures will be required if needed.

- Policy COS-7.3 Project-level environmental review, using the SJVAPCD analysis methods and significance thresholds, will be required to include impacts to air quality and consider alternatives that reduce emissions of air pollutants.
- Policy COS-7.4 New development projects will adopt and implement a construction-period air pollution control plan, consistent with SJVAPCD guidelines, as well as incorporate construction emissions control measures recommended by the SJVAPCD.
- Policy COS-7.5 Dust control measures consistent with San Joaquin Valley Air Pollution Control District rules shall be required as a condition of approval for subdivision maps, site plans, and all grading permits.
- Policy COS-7.6 New sources of toxic air pollutants shall prepare a Health Risk Assessment as required under the Air Toxics "Hot Spots" Act and, based on the results of the Assessment, establish appropriate land use buffer zones around those areas posing substantial health risks.
- Policy COS-7.7 Sensitive air quality receptors, such as residential uses, schools and hospitals, and industries that generate toxic emissions should not be located in proximity to one another.
- Policy COS-7.8 The City will encourage compact development patterns to minimize trip distance and resultant automobile emissions.
- Policy COS-7.9 EPA-certified wood stoves, fireplaces, pellet stoves and natural gas fireplaces shall be required in renovations, while new

- residential development will only be allowed to install gas burning fireplaces consistent with SJVAPCD regulations.
- Policy COS-7.10 Land use and transportation development and planning shall be coordinated with each other as a means to mitigate impacts on air quality.
- Policy COS-7.11 Developers will be referred to the SJVAPCD to discuss entering into an Air Quality Mitigation Agreement directly with the District to help reduce and mitigate emissions generated from future developments.
- Action COS-7.1 Conduct a study to identify current air pollution sources within the City that could be minimized or controlled and develop programs and partnerships for mitigation.
- Action COS-7.2 Implement the County's air quality improvement program with regards to the management of fugitive dust.
- Action COS-7.3 Consider implementing an air quality impact fee program as recommended by SJVAPCD to provide for partial mitigation of adverse environmental effects and establish a formalized process to assess air quality impacts of new development.

5 Public Services and Facilities Element

The Public Services and Facilities Element addresses the changing public services and infrastructure needs of the City and provides for their logical and timely extension to keep pace with growth. Policies supporting excellent police and fire services, quality schools and libraries and other services and infrastructure are essential to achieve broader community development objectives and support the future envisioned by the residents of Hughson.

Although the Public Services and Facilities Element is an optional element and is not required by State law, the topics addressed here are an integral part of the City's overall planning strategy and play an important role setting growth and development policy. In addition, as with a State mandated element, this optional element must be internally consistent with the rest of the General Plan. State law does require the Circulation Element to include information on "the general location and extent of existing and proposed... public utilities and facilities." For the City of Hughson's purposes, these components are included in this Element amongst the following topics:

- ♦ Law Enforcement
- ♦ Fire Protection
- ♦ Schools
- ♦ Libraries
- ♦ Government and Civic Facilities
- ♦ Water
- ♦ Wastewater
- ♦ Stormwater Drainage
- ♦ Solid Waste and Recycling
- ♦ Utilities

The Element is divided into two sections:

Background Information. Contains information on current public services and facilities, and the infrastructure serving Hughson and its community.

◆ Goals, Policies and Actions. Provides policy guidance for providing adequate public services and facilities as change occurs in the City, and action items to be pursued during the lifetime of the General Plan.

A. Background Information

The following sections outline the existing conditions in Hughson as they relate to public services and facilities. Many public services are provided by entities other than the City, such as the Hughson Fire Protection District, the Hughson Unified School District and Stanislaus County. Thus, this General Plan aims to build partnerships between all involved parties that provide services to the City.

1. Law Enforcement

Hughson experiences a relatively low level of crime. Emergency calls and complaints are usually related to traffic accidents or vehicle related problems. The City coordinates with the Stanislaus County Sheriff Department to develop and provide crime prevention programs and distribute information to the public on safety precautions and ways to protect themselves and their belongings.

The Stanislaus County Sheriff's Department is under a 5-year contract to supply the residents and businesses of Hughson with law enforcement and protection services. This contract expires in September 2006 and new negotiations will start six to 12 months prior to renew the contract. The contracted level of service includes four patrol vehicles dedicated to Hughson and an agreed staff allocation of 0.85 officers per 1,000 residents. Currently the department provides:

- ♦ One on-duty patrol officer: 24 hours per day, 7 days a week
- ♦ One clerical staff: normal business hours, 40 hours per week
- ♦ One Chief: normal duty hours, 40 hours per week

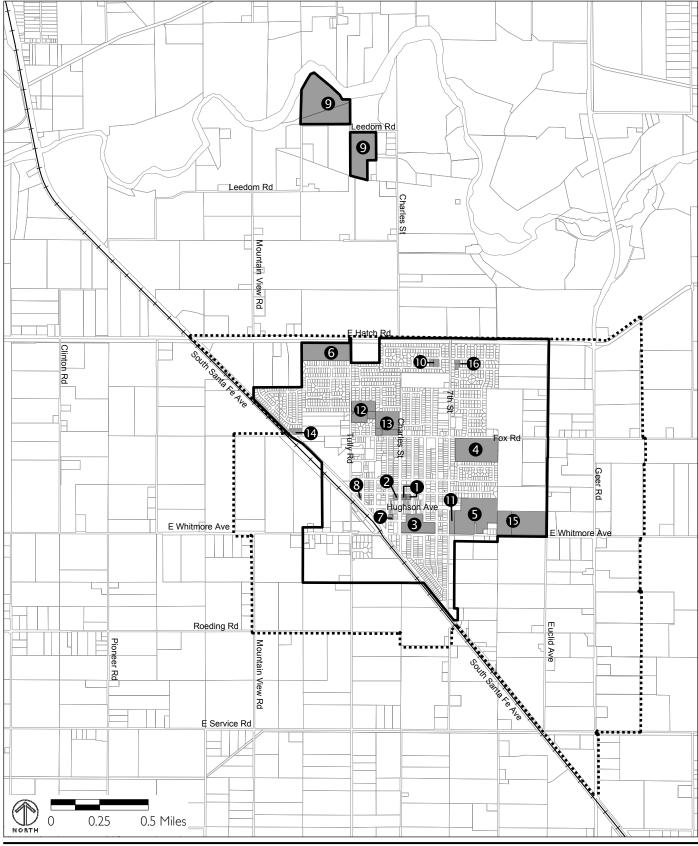
The Department operates a base station attached to City Hall, centrally located in the city at 7018 Pine Street, as shown in Figure PSF-1. It provides a maximum response time of three minutes.

The Department reviews new development proposals for crime prevention design and general safety and keeps abreast of population increases which might trigger a need for additional staff or facilities.

2. Fire Protection and Emergency Medical Service

The major fire threat within Hughson is urban fire in residences and businesses. Because the surrounding areas are cultivated agricultural lands and orchards, the risk of wildland fire that threatens much of California is very low. These agricultural properties are typically well maintained with little undergrowth and regularly trimmed to remove deadwood. There is a slight potential for wildland fire in the northern portion of the Planning Area along the river, but currently the only urban development subject to City jurisdiction in close proximity to this area is the sewage treatment plant.

The Hughson Fire Protection District (FPD), which was established in 1915, is responsible for primary provision of fire service and emergency medical response for Hughson and its residents. District staff consists of a full-time Fire Chief and 25 to 30 volunteers, and is administered by an elected board of three directors. The district area services approximately 10,000 people throughout approximately 35 square miles in and around the city. As of May 2004, the maximum response time to emergency calls was between three to five minutes, which affords the District a Class IV level by the Insurance Services Organization. The most frequent calls are for emergency medical assistance.



Data Source: City of Hughson

I City Hall and Police Department

- Fire Department 2
- **Hughson Elementary School**
- Fox Road Elementary & Emilie J. Ross Middle Schools
- 5 Hughson High School
- Hughson Christian School
- Hughson Public Library
- **Corporation Yard**
- 9 Wastewater Plant and Ponds
- 10 Rhapsody Mini-Park & Drainage Basin
- II Carrie Shrader Park
- 12 Starn Park
- 13 LeBright School Site/Park
- 14 Santa Fe Drainage Basin
- 15 Botanical Garden
- 16 Drainage Basin

City Limits Sphere of Influence FIGURE PSF-1

PUBLIC/SEMI-PUBLIC USES

CITY OF HUGHSON

GENERAL PLAN

The District's only station is located at 2315 Charles Street, in downtown Hughson, as shown on Figure PSF-1. The District currently has the following fire protection and emergency response vehicles:

- ♦ Three Type-1 engines
- ♦ Two Type-3 engines
- ♦ One Type-1 water tender
- ♦ One command vehicle
- ♦ One rescue boat

While the Hughson FPD provides primary fire protection to the community, the Hughson FPD has a mutual aid agreement with all neighboring fire protection service providers in the County. As a result, if the Hughson FPD is unavailable to answer a call in Hughson, a neighboring fire department or district will respond to the call.

The Stanislaus Consolidated Fire Protection District also cooperates with the City to reduce the risk of fires in the area. Prior to project approval, the Stanislaus Consolidated FPD reviews plans for new development to assess design issues such as provision of adequate water supply systems and compliance with minimum street widths, hydrant locations and distances. The Stanislaus Consolidated FPD also is responsible for fire prevention programs and fire investigations. The Hughson FPD assists Stanislaus Consolidated FPD with fire prevention, investigation and plan review.

The five-county emergency medical services (EMS) provider for Stanislaus County, Mountain Valley Emergency Medical Services Agency, contracts with Hughson Paramedic Ambulance Company to provide emergency medical service for the Hughson area.

3. Schools

The Hughson Unified School District (HUSD) provides Kindergarten through 12th grade education for students living in Hughson and the surrounding unincorporated areas. It is supported by over 100 faculty and staff, serving approximately 2,000 students in 2004. In addition, the District has

access to the use of supplementary services from the Stanislaus County Department of Education, including adaptive physical education and the School Attendance Review Board. The District completed a Facilities Master Plan in 2004 and revises its demographic information and projections on an annual basis. The capacity and enrollment records for the 2004-2005 academic year are shown in Table PSF-1.

HUSD establishes student generation rates according to housing type and grade level. For the 2004 to 2005 school year, it was estimated that every new residential dwelling unit generates 0.7 students. This total is further broken down to 0.4 Kindergarten through fifth grade students, 0.1 sixth through eighth grade students and 0.2 high school students per house. School facilities and services are partially supported through the assessment of development fees. HUSD charges every new residential dwelling unit \$3.15 per square foot, and commercial development \$0.36 per square foot. The District is limited by State law as to how much it can collect from new development.

HUSD operates two elementary schools, which were recently divided by grade level. Figure PSF-1 shows the location of HUSD schools. Hughson Elementary School, located on East Whitmore Avenue, opened on its current site in 1950 and now includes Kindergarten through third grade as well as a separate State pre-school program, which runs on a traditional calendar along with the rest of the school. Hughson Elementary also runs an active after-school program called Healthy Start that provides enrichment classes and homework assistance. Fox Road Elementary School, located on Fox Road, opened in for the 2003-2004 school year and educates fourth through fifth graders.

The Emile J. Ross Middle School is adjacent to Fox Road Elementary School and serves sixth through eighth graders. Hughson High School is located on East Whitmore Avenue and covers 10th through 12th grades. The Billy Joe Dickens Continuation program serves 33 additional high school students and

TABLE PSF-I HUSD CAPACITY AND ENROLLMENT FOR 2004-2005

School	Capacity*	Enrollment
Hughson Elementary School (K-3)	633 students	545 students
Fox Road Elementary School (4-5)	384 students	311 students
Ross (Emilie J.) Middle School (6-8)	605 students	474 students
Hughson High School (9-12)	972 students	760 students
Billy Joe Dickens Continuation (10-12)	33 students	33 students

^{*} Various modernizations/expansions are proposed at each facility for 2006-2008 (except Fox Road Elementary), which will increase capacities at each school.

Note: Enrollment was provided by HUSD in January 2005, but is in the process of being updated.

Source: Conversation with Jim Rallis, HUSD Superintendent. January 14, 2005.

is housed on the main campus. The District has plans to relocate the Continuation program, along with the Adult Education and Independent Study programs, to the LeBright School site, however the playing fields will be preserved. The District also has future plans to develop a Charter High School, as well as expand and modernize existing school facilities. To allow for the potential expansion of facilities, the District has purchased a 30-acre site to the south of the High School at Whitemore Avenue and 7th Street; however, the appropriate use for the site has not been determined.

In addition to the public school facilities in Hughson, there is one private school, the Hughson Christian School, shown in Figure PSF-1. Hughson Christian School had a recent enrollment of 55 students in Kindergarten through eighth grade.

4. Libraries

Hughson is a member of the Stanislaus County Library system, and the local branch, the Hughson Public Library, is one of the four largest in the system. The Hughson branch is located at 2412 Third Street and is also shown on Figure PSF-1. Stanislaus County Library cards are free of charge and can be used by residents at any of the 13 County branches. Other nearby branches are located in Turlock, Ceres and Empire.

In 1995, voters in Stanislaus County approved a ½ cent sales tax increase to support the County Library system. Both in 1999 and again in 2004, residents voted to extend the tax collection. It is scheduled for application through 2013 and will be reconsidered as the expiration date draws near. Currently the sales tax funds 75 percent of the County Library System's budget and has helped the Hughson Public Library increase its level of service. Prior to 1995, the City's library was only open 10 hours per week and offered a much more limited range of services. The City currently works with the Stanislaus County Library system to ensure adequate funding is available to maintain its level of service, whether through continuation of the sales tax or an appropriate alternative method in the future.

5. Government and Civic Facilities

The City of Hughson operates under the guidance of the City Council and the administration of appointed staff, led by the City Manager.

City administration occurs at the Hughson City Hall, located at 7018 Pine Street, which includes the City Council chambers as well as City offices. The Police Department and Planning and Building Departments are located adjacent to the City Hall building. The City is likely to need additional staff to support its functions. Therefore, the City is planning to pursue the development of a new City Hall complex to expand space and combine the administrative departments under one roof.

Other non-recreational City-owned facilities include the Corporation Yard, located at the intersection of Santa Fe Avenue and Pine Street, and the Wastewater Treatment Plant, located near the Tuolumne River to the north of the city. The Corporation Yard has outgrown its current location and will need to be relocated to provide adequate storage and operational space. Also, the current location is on one of the major arterials serving the city, and could

better be used for retail or other land use that would benefit from the traffic traveling along Santa Fe Avenue. The Wastewater Treatment Plant is described in more detail later in this Element.

6. Water

Hughson's potable water is all supplied from the Turlock groundwater basin, which comprises an area of about 540 square miles. Hughson's existing water infrastructure system contains a water distribution system and four active well sources to provide potable water to residential, commercial and industrial uses. There are also two inactive wells, one which was abandoned due to high uranium levels, and a second that is out of service due a deteriorated casing and pump. The active wells each produce between 1,000 and 1,200 gallons per minute (gpm) for a total of 4,500 gpm.

Generally, Hughson's potable water quality is good, meeting all current water quality standards in regards to allowable levels of regulated pollutants. However, while arsenic levels in Hughson's water meet current standards, the United States Environmental Protection Agency will be implementing more stringent standards for arsenic levels in drinking water in the near future. Once the new regulations come into effect, the City's potable water supply will exceed allowable arsenic levels. The City is already planning to work with the Department of Health Services to explore methods to reduce arsenic levels and comply with the new regulations.

The City continually makes improvements to the potable water system as needed to maintain service levels. In 1990, the City of Hughson Water Distribution System Study and Master Plan sited an average per capita water use of 250 gallons per day (gpd). The 2003 Water System Master Plan used this figure to evaluate the current system and estimate future demand, which is anticipated to double by 2023. Based on demand increases, the Plan recommends various system improvements, including pipe upsizing, additional back-up generators, and either a new potable well or underground storage tank. The City is working to implement these improvements.

In 1997, the City adopted the Groundwater Management Plan for the Turlock groundwater basin. As a result of the Management Plan, the Turlock Groundwater Basin Association, of which Hughson is a member, undertook a Water Budget Study in the early 2000's which concluded that, while the groundwater levels are lower than 30 years ago, overall the Basin appears to be in equilibrium between extraction and recharge. Now that the Water Budget Study is completed, the Groundwater Management Plan is being updated.

In the late 1980's and early 1990's, the City participated in a process lead by the Turlock Irrigation District (TID) to explore the feasibility of creating a regional surface water system in response to potential changes in water quality regulations that would have made the use of groundwater sources more costly. Under the proposal, the TID would build a water treatment plant to treat its water from the Don Pedro Dam for transfer to various local jurisdictions to allow for the transition from dependence on groundwater to surface water. While this idea was revisited in the early 2000's, the TID planning process is still in the conceptual stage and the feasibility of the project will depend on the eventual evaluation by local jurisdictions in regards to the costs associated with creating a surface water system versus the continued use of groundwater.

7. Wastewater

The City of Hughson provides wastewater treatment and collection for the incorporated City and operates a sewage treatment plant on the northern edge of the city, between Hatch Road and the Tuolumne River, as shown in Figure PSF-1. The facility was completed in 1986 to accommodate the City's growth and is currently approaching capacity. The plant includes a series of 10 evaporation and percolation ponds, one of which is used for emergency storage. Pond usage fluctuates according to flows; three ponds were in use in 2004. All new development within the city is required to connect to the wastewater collection system and septic systems are prohibited.

The facility has an existing design capacity for dry weather flows of 800,000 gpd and up to 2,330,000 gpd for peak wet weather flows. In 2004, the total average daily dry weather flow was 740,000 gpd, including residential, commercial and industrial uses. In 2003, Hughson adopted a Wastewater Treatment Master Plan, which considers a 20-year timeline for wastewater treatment needs. Based on current capacity and anticipated development, there is an immediate need to upgrade the treatment facility to comply with State and federal regulations. As a result of improving the treatment facility to meet government regulatory standards, there will be an increase in capacity. To pay for the needed improvements, the City has sold a portion of this excess capacity to developers.

In addition, the treatment plant has been found by the Regional Water Quality Control Board (RWQCB) to be in violation for total dissolved solids, electrical conductivity, total coliform organisms and nitrate as nitrogen. Additionally, the RWQCB has identified violations of acceptable sludge management practices and degradation of groundwater for total coliform, nitrate, salts and chloroform. The plant will require improvements to address these violations.

To analyze various approaches to expanding capacity and address violations, a preliminary technical study and peer review of the Wastewater Treatment Plant was completed in December 2004. Based on this review, interim improvements to upgrade the facility to comply with State and federal regulations will be implemented in 2005. Based on financial considerations and feasibility, long-term improvements to the treatment plant will most likely involve the expansion of the facility and increase water recycling and on-site treatment.

8. Stormwater Drainage

Historically, Hughson has discharged its stormwater into the TID canals, which are located along Hatch and Service Roads, through a Revocable License Agreement. As part of this agreement, the City enforces regulations prohibiting dumping into any portion of the storm drainage system and en-

sure that stormwater discharged into the TID system does not exceed allowable levels of contaminants. Current regulatory trends suggest that change in the future may require increased regulatory monitoring, handling, treatment and disposal of stormwater. In addition, with the increased growth within the region, the TID facilities are starting to meet capacity for stormwater conveyance and most of the TID system is already obligated to serving various jurisdictions. Hughson is therefore currently exploring alternative methods to dispose of stormwater, such as purchasing land to use for application and percolation of run-off or building a treatment facility to improve water quality prior to discharging into the Tuolumne River.

Currently, Hughson has several small stormwater facilities that were built to control run-off from specific projects, including the existing stormwater basins adjacent to the Santa Fe Estates subdivision and within the Rhapsody subdivision. The City's Standard Conditions of Approval provides guidelines for stormwater detention basins, such as dimensions and percolation requirements. They must be designed to be dry within 24 hours of use, and are encouraged to incorporate the opportunity for dual use as recreation areas.

For approval, new development projects must provide acceptable on- and offsite storm drainage infrastructure at the proponent's sole expense and comply with State storm drainage policies, the City of Hughson Municipal Code guidelines and the City's Standard Conditions of Approval. The Standard Conditions of Approval also outline requirements for the incorporation of Best Management Practices during project construction, to avoid substantial run-off and debris clogging the City's storm drain system. Applicants must submit a grading and drainage plan for review as part of the development approval process.

9. Solid Waste and Recycling

Solid waste and recycling is collected in Hughson by contracted private solid waste service providers. Household and commercial garbage is collected on location on a weekly basis under exclusive franchise agreement with R&R Disposal Service, a division of Waste Management, Inc. Recycling and yard

waste are also picked up at Hughson residences by the same company on an alternating bi-weekly schedule, in curbside blue and green bins respectively. The collection of industrial wastes, including construction and demolition debris, is not bound to the exclusivity agreement and may be collected by any service provider that holds both a City of Hughson Business License and a current and valid Industrial Waste Collection Permit.

Garbage is transported to the County landfill, Fink Road Landfill, located in Crow's Landing. Residents may also drop-off large amounts of garbage or debris in person at the landfill for a charge. The County operates a free drop-off center in Oakdale for bulky waste such as mattresses and appliances, which is open Fridays and Saturdays. This site does not accept hazardous waste or tires and customers must show proof of residency and garbage service payment. Hazardous waste facilities are discussed in detail in the Safety Element.

The City participates on the Stanislaus County Local Task Force on Solid Waste Management. This Task Force was formed pursuant to the Integrated Waste Management Act and is formed of representatives from jurisdictions within the County. The Task Force serves as an advisory board for regional solid waste disposal activities.

10. Utilities

Electricity is provided to Hughson's residents and businesses by the Turlock Irrigation District. Gas service is provided by Pacific Gas and Electric (PG&E) and cable television by Charter Communication. Local telephone service is provided by Pacific Bell, while wireless telephone service is available through a range of carriers.

The City of Hughson works to ensure that utilities are available throughout the City in a manner that is safe, environmentally acceptable, visibly unobtrusive and financially sound. The City's Standard Conditions of Approval place responsibility on proponents of new development for providing utility access, coordinating with service providers and providing the necessary easement dedications. The City's Standard Conditions of Approval also requires the undergrounding of all new utility connections as possible to minimize their visual impacts.

Wireless communication facilities are scattered throughout the region as necessary to provide adequate coverage as required by federal law. The City has permitting authority over the placement and visual characteristics of cellular installations, but cannot preclude installations in general or limit installations based on health concerns.

B. Goals, Policies and Actions

1. Law Enforcement

Goal PSF-1	Maintain a safe environment in Hughson through
	enforcement of the law, prevention of crime and
	the creation of community partnerships.

- Policy PSF-1.1 The City will continue to provide law enforcement services to maintain a low occurrence of criminal activity within the community.
- Action PSF-1.1 Review, as part of the Sheriff's Department contract renegotiation, staffing levels as compared to development trends to determine whether additional law enforcement staffing or facilities are needed.
- Action PSF-1.2 Review major land use development proposals for site design criteria and other law enforcement concerns.
- Action PSF-1.3 Maintain crime prevention and community awareness education programs to serve Hughson's existing population and businesses as well as any future growth.

2. Fire Prevention

Goal PSF-2	Minimize loss of life and property from fires, medical emergencies and public emergencies.
Policy PSF-2.1	The City will continue to support the Hughson Fire Protection District in its efforts to provide adequate fire protection to Hughson.
Policy PSF-2.2	The City will work with the Hughson Fire Protection District to explore methods that improve the level of fire protection provided in Hughson and reduce the insurance rates of residents.
Policy PSF-2.3	The City will continue to support the existing established mutual aid agreement between the Hughson Fire Protection District and other fire protection agencies.
Policy PSF-2.4	The City will enforce all relevant fire codes and ordinances.
Policy PSF-2.5	The City will require all new development to use fire-safe building materials and early warning systems, and install suf- ficient water supply systems for fire suppression.
Policy PSF-2.6	The City will encourage the installation of interior emergency sprinkler systems in new development or substantial renovations.
Action PSF-2.1	Work with the Hughson Fire Protection District to ensure adequate response time (three to five minute maximum) as well as ensure the necessary staff and equipment to maintain adequate service to new and existing development.
Action PSF-2.2	Forward development applications to the Stanislaus Consolidated Fire Protection District and Hughson Fire Protec-

tion District for review to ensure that new development incorporates fire resistant design and materials and is accessible to emergency vehicles, as well as ensuring that new development does not affect the ability of service providers to provide adequate emergency response.

3. Schools

Goal PSF-3 Provide educational facilities sufficient to meet the demands of existing and new development.

- Policy PSF-3.1 To the extent allowed by State law, the City shall ensure that school facilities to serve new development are available concurrently with need.
- Policy PSF-3.2 The City will collaborate with the Hughson Unified School District in its efforts to provide quality public education services to Hughson residents.
- Policy PSF-3.3 Schools should be located centrally to the student populations they serve.
- Policy PSF-3.4 Wherever possible, school sites should be integrated with parks to permit recreational experiences as part of the educational process and provide additional recreational opportunities for the community at large.
- Policy PSF-3.5 The City shall give the Hughson Unified School District the opportunity to review residential development proposals and make recommendations based on school-child projections, existing school capacity, access, traffic issues, need for additional facilities and other such factors in order to assist the City in acting on the proposal.

4. Libraries

Goal PSF-4 Provide sufficient library service to meet the informational, cultural and educational needs of the population of Hughson.

- Policy PSF-4.1 The City will work with the Stanislaus County Library system to ensure that adequate funding is available to continue the level of services currently provided by the Hughson Library.
- Action PSF-4.1 Support the Stanislaus County Library efforts in renewing county-wide sales tax library financing.

5. Government and Civic Facilities

Goal PSF-5	Maintain facilities and staff adequate to provide a
	high level of government services and administra-
	tion for the residents of Hughson.

- Policy PSF-5.1 The City should consider reviewing space requirements and staffing as need for additional service occurs.
- Action PSF-5.1 Explore the development of a new state-of-the-art City Hall complex that provides adequate space for all administrative and law enforcement functions of Hughson.
- Action PSF-5.2 Relocate the City Corporation Yard to a location that provides additional space and does not negatively affect adjacent property.

6. Water

Goal PSF-6 Provide sufficient water supplies and facilities to serve the City in the most efficient and financially-sound manner, while maintaining the highest standards required to enhance the quality of life for existing and future residents.

- Policy PSF-6.1 The City will continue to expand its water treatment and distribution facilities to provide good quality drinking water to current and future residents and businesses. Expansion may include the construction of additional storage facilities and/or additional wells.
- Policy PSF-6.2 The potable water distribution and storage system shall be sized to serve development allowed by the General Plan and shall not provide for additional growth and development beyond that anticipated under the General Plan.
- Policy PSF-6.3 Planning for the water system will be limited to the city limits and the City's Sphere of Influence.
- Policy PSF-6.4 The City will start planning and implementing additional improvements necessary to provide adequate water supply and storage for future demand anticipated by the General Plan at least two years in advance of reaching the capacity of existing facilities.
- Policy PSF-6.5 The City should consider exploring the possibility of creating a regional water supply partnership to identify alternative regional water supplies.
- Policy PSF-6.6 The approval of development shall be conditioned on the availability of sufficient water supply, storage and pressure requirements for the City.

- Policy PSF-6.7 The City will require the installation of water lines to occur concurrently with construction of new roadways to maximize efficiency and minimize disturbance due to construction activity.
- Action PSF-6.1 Continue to participate in regional groundwater basin planning efforts to determine the carrying capacity of the groundwater aquifer and ensure that future demand for water does not overdraft the groundwater supply.
- Action PSF-6.2 Develop and institute a City-sponsored program of mandatory water conservation measures for new development.

7. Wastewater

Goal PSF-7 Collect, treat and dispose of wastewater in ways that are safe, sanitary, environmentally acceptable and financially sound while maintaining the highest standards required to enhance the quality of life for existing and future residents.

- Policy PSF-7.1 The City will begin planning and implementing expansions to the existing wastewater treatment facilities to meet future demand for wastewater treatment generated by this General Plan at least four years prior to reaching the capacity of existing facilities.
- Policy PSF-7.2 The approval of new development shall be conditioned on the availability of adequate long-term capacity for wastewater conveyance, treatment and disposal sufficient to service the proposed development.
- Policy PSF-7.3 All new development shall demonstrate to the City that the downstream sanitary sewer system is adequately sized and

has sufficient capacity to accommodate anticipated sewage flows. If downstream lines are found to be inadequate, the developer shall provide facilities to convey the additional sewage expected to be generated by the development.

- Policy PSF-7.4 Sewer collection and transmission systems shall be designed and constructed in such a manner as to minimize potential inflow and infiltration.
- Policy PSF-7.5 Installation of sewer lines should occur concurrently with construction of new roadways to maximize efficiency and minimize disturbance from construction activity.
- Policy PSF-7.6 Future sewer expansions will be analyzed pursuant to CEQA, as required by State law.
- Action PSF-7.1 Implement and update the City's Wastewater Treatment Master Plan at least every five years, or more frequently if necessary.
- Action PSF-7.2 Investigate the potential for and implement, as appropriate, innovative recycled water use systems in Hughson, as well as identify sources of funding for implementation of the recycled water system.

8. Stormwater Drainage

Goal PSF-8 Collect, store and dispose of stormwater in ways that are safe, sanitary, environmentally acceptable and financially sound while maintaining the highest standards required to enhance the quality of life for existing and future residents.

- Policy PSF-8.1 The City will require local storm drainage improvements be built to carry appropriate design-year flows resulting from buildout of the General Plan.
- Policy PSF-8.2 The City will continue to discharge stormwater into Turlock Irrigation District (TID) facilities to the extent allowed by the TID, exploring and implementing methods to improve the quality of the stormwater run-off discharged into TID facilities.
- Policy PSF-8.3 The City should explore feasible alternative means to discharge stormwater, recognizing that current regulatory trends may lead to the need for more stringent monitoring, handing, treatment and disposal of stormwater.
- Policy PSF-8.4 The City will take all necessary measures to regulate runoff from urban uses to protect the quality of surface and ground water and other resources from detrimental conditions.
- Policy PSF-8.5 New development will be required to provide for its stormwater impacts.
- Policy PSF-8.6 Temporary drainage facilities shall be installed as necessary during construction activities.
- Policy PSF-8.7 Installation of stormwater collection systems should occur concurrently with construction of new roadways to maximize efficiency.
- Action PSF-8.1 Adopt and maintain a stormwater drainage master plan, which includes areas of future planned growth, and develop adequate financial resources to implement the master plan.
- Action PSF-8.2 Develop and adopt design standards for detention facilities that provide for both stormwater detention and other beneficial uses, such as recreation or habitat.

9. Solid Waste

Goal PSF-9	Collect, store, transport, recycle and dispose of solid
	waste in ways that are safe, sanitary and environ-
	mentally acceptable.

- Policy PSF-9.1 The City will work with the Stanislaus County Local Task Force on Solid Waste Management to ensure that services for solid waste collection, recycling and disposal meet the needs of the community.
- Policy PSF-9.2 The City will seek to meet or exceed State requirements with regard to waste diversion, recycling and composting.
- Policy PSF-9.3 Encourage Hughson's residents, businesses and industries to pursue waster reduction at the source, including packaging.
- Action PSF-9.1 Work with the County and private solid waste handlers to distribute public education materials on solid waste source reduction, recycling and composting, and the proper handling of household hazardous waste.
- Action PSF-9.2 Educate the public on importance of disposing of household wastes at the County's permanent collection site in Modesto or at one of the County's periodic mobile collection service in Hughson to reduce the amount of improperly disposed of hazardous waste.

10. Utilities

Goal PSF-10 Provide utilities in ways that are safe, environmentally acceptable and financially sound.

- Policy PSF-10.1 The City shall ensure that utilities, including electricity, natural gas, telecommunications and cable television are available or can be provided to serve the projected population within the City in a manner which is fiscally and environmentally responsible, aesthetically acceptable and safe. However, the ultimate responsibility for ensuring that the utilities are available to support new development rests on the sponsor of the proposed project.
- Policy PSF-10.2 The City shall review proposed utility projects to ensure their compatibility with surrounding land uses.
- Policy PSF-10.3 Wireless communications facilities shall be placed in a manner that minimizes adverse impacts on adjacent land uses. Where feasible, new telecommunication facilities should be located on existing structures, such as the water tower and existing buildings, in order to minimize the visual impact of the new facilities and avoid the need for dedicated telecommunication towers. New freestanding towers and structures should only be considered when no feasible alternative exists or when visual intrusion would be less than that associated with placement on an existing structure or building.

CITY OF HUGHSON GENERAL PLAN PUBLIC SERVICES AND FACILITIES ELEMENT

6 SAFETY ELEMENT

The Safety Element provides information about risks in Hughson due to natural and man-made hazards and contains policies designed to protect the community and its property as much as possible from seismic, water, geologic and toxic material hazards.

As required by State law, the Safety Element addresses the protection of the community from any unreasonable risks associated with the impacts of:

- Geologic hazards, including earthquakes, ground failure and subsidence
- ♦ Flooding, dam failure and inundation, and seiche
- ♦ Hazardous materials
- General emergency and disaster preparedness

The risks of urban fire and crime are addressed in the Public Services and Facilities Element.

The Safety Element is divided into two sections:

- ◆ Background Information. Contains information on current risks due to natural and man-made hazards.
- ◆ Goals, Policies and Actions. Provides policy guidance for addressing change as it occurs in the city, and action items to be pursued during the lifetime of the General Plan.

A. Background Information

Compared to many communities in California, Hughson faces a low risk of many of the natural hazards that threaten California cities. For example Hughson is relatively flat, far from fault lines and outside the floodplain. Nonetheless, geologic and soil considerations are important in the city.

In addition, as with all communities, Hughson is faced with minimizing hazards created by humans, which in the case of Hughson include the use and disposal of toxic materials and the risk of flooding associated with dams.

1. Geologic Hazards and Soils

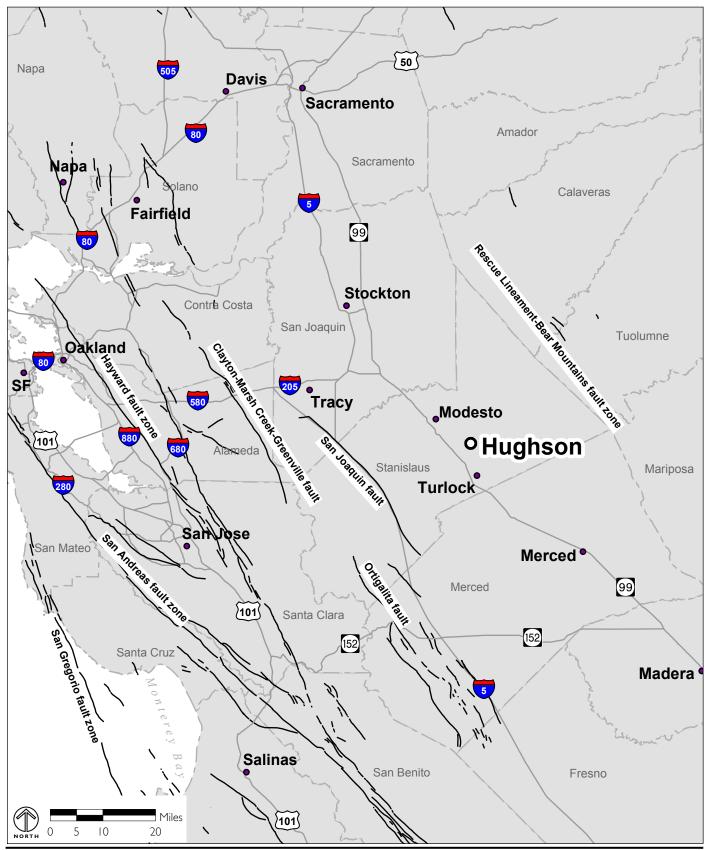
Hughson is fortunate that the risks related to seismic activity and soil conditions are generally low. The following provides a detailed discussion of Hughson's location and how its location relates to the threat of seismic activity and soils.

a. Seismic Hazards

Hughson is located between two seismically active regions, the Sierra foothills and the Coast Range and is therefore subject to risk of hazards associated with earthquakes. However, according to the US Geological Survey's National Seismic Hazard Mapping Project, ground-shaking seismic hazards in Hughson are lower then most of California. In addition, the California Department of Conservation's 2000 "Epicenters of and Areas Damaged by M>5 California Earthquakes, 1800-1999" map does not show any recorded damage from larger earthquakes in the Hughson area. As shown in Figure S-1, the closest fault line to Hughson is the San Joaquin Fault, which runs approximately 20 miles west of the Town.

While Hughson has a relatively low risk of seismic hazard when compared to the rest of California, the community is surrounded by seismically active regions and will on occasion experience earthquakes. Seismic activity presents two types of hazards: primary and secondary. Primary hazards include ground rupture and ground shaking. As there are no faults in direct proximity to the city, and Hughson is not within an Alquist-Priolo designated zone, the risk of seismically induced ground rupture is low. However, the

¹ Alquist-Priolo Earthquake Fault Zones are regulatory zones that encompass surface traces of active faults that have a potential for future surface fault rupture. If a property is located within an Earthquake Fault Zone it means that an active fault is present within the zone and the fault may pose a risk of surface fault rupture to existing or future structures. If property is not developed, a fault study may be required before the parcel can be subdivided or before most structures can be permitted. If a property is developed, the Alquist-Priolo Act requires that all real estate transactions within an Earthquake Fault Zone be disclosed by the seller to prospective buyers.



Data Source: United States Geological Survey, 2005. http://quake.usgs.gov/.

FIGURE S-1

Major named faults

REGIONAL EARTHQUAKE FAULTS

faults in the region are capable of generating earthquakes of significant magnitude on the Richter Scale, potentially producing ground shaking in Hughson.

Earthquake-related hazards can include secondary effects, such as earthquake induced land or mud slides, liquefaction and seiche. Since Hughson is relatively flat, the potential for land or mudslide is low.

The California Department of Conservation has not mapped the Hughson area to identify the potential for soil liquefaction.² However, as soils must be saturated to be at risk of liquefaction, the areas in Hughson most susceptible to liquefaction include areas along the Tuolumne River and where there are high groundwater levels.

Although the city's inland location protects it from risk of tsunami, Hughson could be at a low risk for seiches, which are waves generated in bodies of water that can be compared to the back-and-forth sloshing of water in a tub. However, this risk is considered very low since the only water bodies in Hughson that may be affected are swimming pools and water tanks.

Most loss of life and injuries that occur during an earthquake are related to the collapse of buildings and structures. Building codes and engineering requirements are now designed so that all new construction will better withstand forces associated with a major earthquake. Hughson requires all new development or substantial renovations comply with these regulations, which include seismic design, foundations and drainage and requirements for geotechnical engineering studies for all major new buildings or earth works. Older buildings, especially those constructed of unreinforced masonry, built prior to newer building codes could be subject to severe damage in an earthquake. Unreinforced masonry buildings would most likely be located in the downtown.

² Liquefaction is a phenomenon primarily associated with saturated, cohesionless soil layers located close to the ground surface. During liquefaction, soils lose strength and ground failure may occur.

b. Soils

Soil mapping is used to help identify potential geotechnical concerns, such as erosion and expansion, that are more common with certain soils types. Identifying local soil types and understanding the associated characteristics helps cities establish appropriate engineering and construction standards for new building and remodeling. As shown in Figure S-2, Hughson and its Sphere of Influence are underlain by Hanford and Tujunga series soils, with a little area of Greenfield series found at the intersection of Hatch and Geer Roads. Table S-1 identifies other soil types encountered in the Hughson area. The table also summarizes each soil type's potential for erosion and expansion.

Since Hughson is relatively flat, there is a limited potential for erosion. The greatest potential for erosion is due to wind, since the Tujunga series has a moderate to high potential for wind erosion and none of the soils have a high erosion potential for water erosion. The Hanford series has a moderate potential for erosion, but only once slopes exceed eight percent, which is not common in the city. The Greenfield series only has a slight potential for erosion.

Expansive soils contain higher levels of clay and present hazards for development since expansive soils expand and shrink depending on water content, damaging structures that were not appropriately engineered. Since all of the soils in the Hughson area are mainly comprised of sand, they pose a very low risk of expansion. The Greenfield series has the highest clay content, and therefore, would pose the greatest risk to structures. However, even the Greenfield series is considered to have a low expansion potential.

TABLE S-I SOIL TYPES AND CHARACTERISTICS

Soil Series	Erosion Potential	Expansion Potential
Dello	None	None to low
Dinuba	Slight	None to low
Grangeville	Slight	None to low
Greenfield	Slight	Low
Hanford	None to moderate	None to low
Tujunga	Slight to moderate for water erosion Moderate to high for wind erosion	None to low
Whitney	Slight	None to low

Source: USDA, Soil Survey Data (SSURGO); USDA Soil Survey for Eastern Stanislaus Area California, September 1964; Personal conversation with Bradley Hicks, USDA Field Office Modesto, February 4, 2005.

2. Flooding and Dam Inundation

The City of Hughson is not subject to flooding on a regular basis since it is outside the Tuolumne River floodplain, which is located to the north of the city. Floodplain zones are determined by the Federal Emergency Management Agency (FEMA) and used to create Flood Insurance Rate Maps (FIRMs) designating these areas. These tools assist cities in mitigating flooding hazards through land use planning and building permit requirements. To address the need for insurance to cover flooding issues, FEMA administers the National Flood Insurance Administration (NFIA) program. The NFIA program provides federal flood insurance and federally financed loans for property owners in flood prone areas. To quality for federal flood insurance, the City must identify flood hazard areas and implement a system of protective controls.

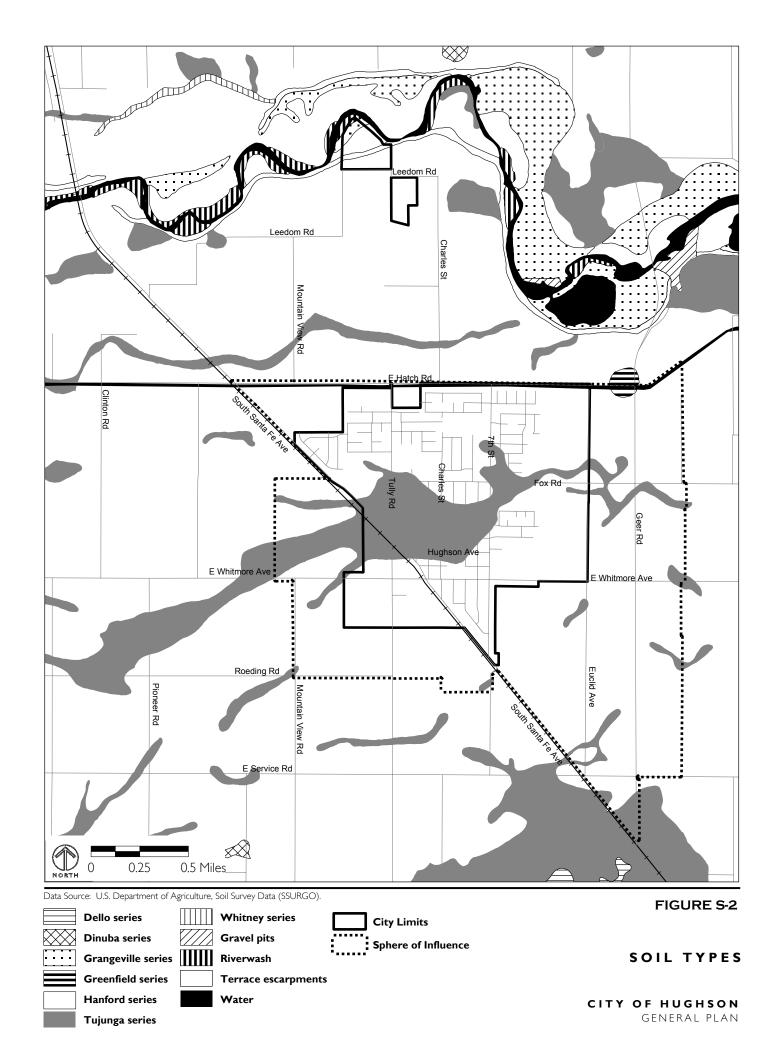


Figure S-3 shows which portions of the Planning Area are within the 100-year flood plain.³ The only part of Hughson within the 100-year floodplain is a portion of the wastewater treatment plant that contains ponding areas. This area does not contain any structures and is not proposed for future urban development. Since no urban areas are within the 100-year flood plain, the City has not adopted the regulations required by FEMA for participation in the NFIA and does not currently participate in the NFIA program.

There is a slight risk in Hughson of flooding related to dam inundation from failure of the Don Pedro Dam on the Tuolumne River. The dam is maintained by the Turlock Irrigation District. Flooding would only occur in the event of dam failure, and would affect the entire city and the surrounding areas, shown in Figure S-4. To minimize the risk of dam failure, the California Department of Water Resources Division of Safety of Dams inspects the Don Pedro Dam on an annual basis for safety.

3. Hazardous Materials and Wastes

Products as diverse as gasoline, paint solvents, film solvents, household cleaning products, refrigerants and radioactive substances are categorized as hazardous materials. What remains of a hazardous material after use, or processing, is considered to be a hazardous waste. The handling, transportation and disposal of such materials and wastes are of concern in all communities. Improper handling of hazardous materials or wastes may result in significant effects to human health and the environment.

Many of the commercial and industrial operations in Hughson use hazardous materials and generate hazardous materials as part of their daily operations. Some examples of commonly encountered hazardous material users include gasoline stations, dry cleaners and automotive repair shops. The commercial use of hazardous materials and wastes in Hughson are heavily regulated by a

³ A 100-year floodplain is the area subject to flooding based on a storm event that is expected to occur every 100 years on average, based on historical data, or that has a one percent chance of being inundated during any particular 12-month period.

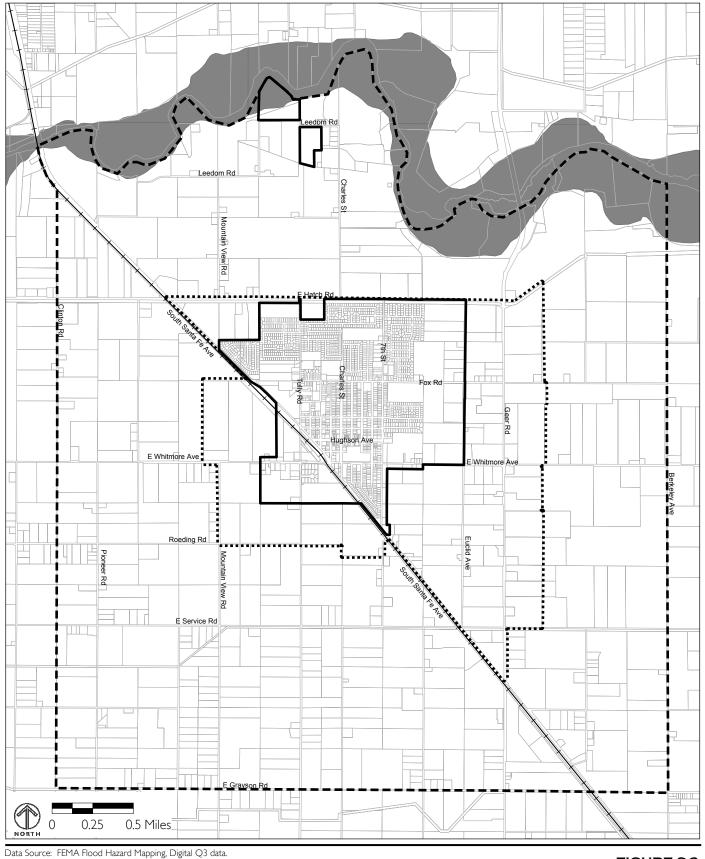
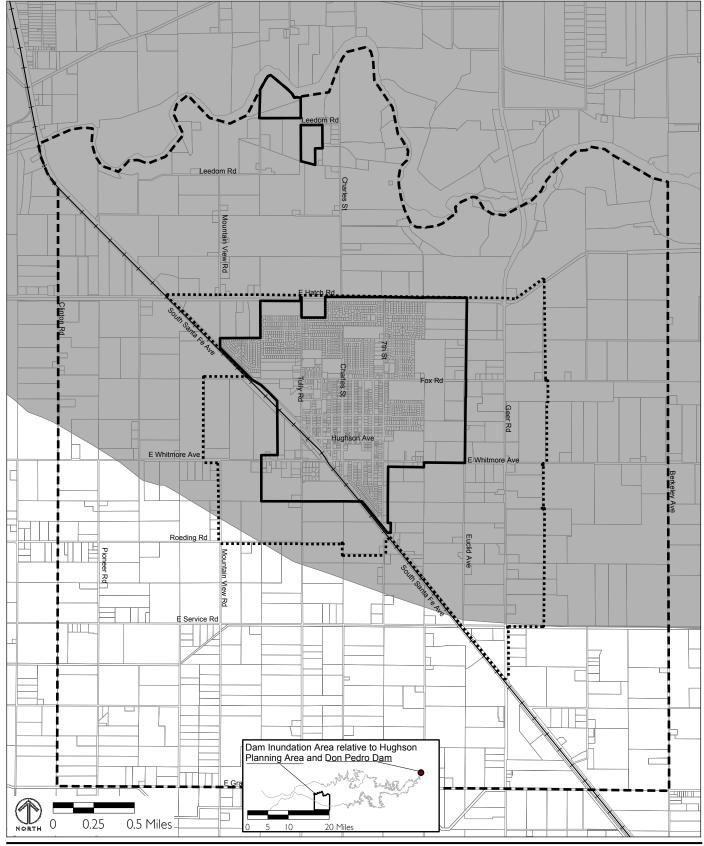


FIGURE S-3

Within 100-year flood zone **City Limits S**phere of Influence Planning Area

100-YEAR FLOOD ZONE

CITY OF HUGHSON GENERAL PLAN



Data Source: Dam Inundation Areas. State of California, Office of Emergency Services

FIGURE S-4

	Don Pedro Dam Inundation Area
	City Limits
	Sphere of Influence
— — 	Planning Area

DON PEDRO RESERVOIR DAM INUNDATION AREA

CITY OF HUGHSON GENERAL PLAN range of federal, State and local agencies. One of the primary hazardous materials regulatory agencies is the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), which is authorized by the United States Environmental Protection Agency (EPA) to enforce and implement federal hazardous materials laws and regulations, including disposal and transportation of hazardous materials.

Agricultural activities pose a special risk in regards to hazardous materials for Hughson since the community is surrounded by agricultural operations which use a range of hazardous materials, such as pesticides, herbicides and some fertilizers. The County Agricultural Commission and the California Environmental Protection Agency, Department of Pesticide Regulation are the major enforcement agencies responsible for controlling and monitoring pesticide use.

Individuals also use hazardous materials around their homes. Common products include cleaning supplies and paint. The County operates a household hazardous materials drop-off facility in Modesto to encourage the correct disposal of household hazardous materials. Mobile collection services also provided to communities in Stanislaus once or twice a year.

In additional to hazardous materials and wastes used and generated within Hughson, hazardous materials and wastes also pass through the community in route to other destinations via the railroad and major arterials, such as Hatch and Geer Roads. However, the City does not have direct authority to regulate the transport of hazardous materials on these roads and the rail line. Transportation of hazardous materials by truck and rail is regulated by the US Department of Transportation (DOT). DOT regulations establish criteria for safe handling procedures.

Stanislaus County maintains a Hazardous Material Area Plan, in accordance with the California Health and Safety Code (Division 20, Chapter 6.95, §25500 et seq.) and California Code of Regulations (Title 19, Article 3, §2270 et seq.), which is updated every five years. The Plan is designed to protect

human health and the environment through hazardous materials emergency planning, response and agency coordination and community right-to-know programs. It outlines the roles and responsibilities of federal, State, and local agencies in responding to hazardous material releases and incidents.

4. Emergency and Disaster Preparedness

As required by State law, Hughson has established emergency preparedness procedures and designated evacuation routes to respond to a variety of natural and man-made disasters that could confront the community. The City has recently adopted a citywide Emergency Operations Plan (EOP) that addresses the planned response to extraordinary emergency situations associated with natural disasters, technological incidents and national security emergencies in or affecting Hughson. In addition, the City is included in the Stanislaus County Operational Area Emergency Operations Plan (EOC). The Fire District Chief represents Hughson on the Operational Area Council. In the event of an emergency, Hughson employees, including Fire, Police and Public Works staff, will assess the situation and the damage and respond according to the emergency plan, coordinating with other agencies as necessary.

Educating the public about potential disasters and the City's EOP can affect the effectiveness of response efforts. An educated public will be better able to prevent injury and property damage during the after times of emergency and also know where to find help if needed. The City will work to expand community awareness and educate the public on emergency procedures, such as location of evacuation routes and temporary shelters.

B. Goals, Policies and Actions

1. Geologic Hazards and Soils

Goal S-1	Minimize the risks associated with seismic and other geologic hazards.
Policy S-1.1	All new developments shall be subjected to adequate professional geologic and engineering studies.
Policy S-1.2	The City will enforce the building codes adopted by the State of California in all new construction and renovations.
Policy S-1.3	Site preparation procedures and construction phasing shall be managed to minimize erosion, run-off, exposure of soils and loss of top soil.
Policy S-1.4	No new development shall occur on expansive soil unless conditions are properly mitigated.
Action S-1.1	Consider conducting a study to identify unreinforced masonry buildings and other structures within the city that would be at risk during seismic events, and promote their strengthening.
Action S-1.2	Continue the Building and Safety Division's building inspection and enforcement efforts.

2. Flooding and Inundation

Goal S-2	Minimize risk to the community associated wit	h
	flooding and inundation.	

Action S-2.1 Explore the possibility of adopting flood control regulations so that the City will qualify for NFIA insurance in the event it ever annexes land within the 100-year flood plain.

3. Hazardous Materials

Goal S-3	Protect the community from risks associated with
	hazardous materials.
Policy S-3.1	The City will limit the location of hazardous material producers and users to areas in the community that will not negatively impact residential areas.
Policy S-3.2	Producers and users of hazardous materials in Hughson shall conform to all State and federal regulations regarding the production, disposal and transportation of these materials.
Policy S-3.3	The City will work with the county, State, agribusiness and agricultural worker organizations to ensure that agricultural use of pesticides and fertilizers do not negatively affect public health and safety.
Policy S-3.4	The City will encourage the transition to organic farming practices in the Hughson area.
Action S-3.1	Conduct a study to explore the establishment of formally-designated carrier routes for hazardous materials through or in close proximity to Hughson.

4. Emergency and Disaster Preparedness

Goal S-4	Ensure the City's ability to respond effectively to natural and human-caused emergencies.
Policy S-4.1	The City will prepare, implement and regularly update local preparedness and evacuation plans.
Policy S-4.2	The City will participate in regional efforts in emergency planning.
Action S-4.1	Consider implementing community awareness and education programs that educate the public on emergency procedures, including locations of evacuation routes and temporary shelters, as well as ways to prepare to reduce the risk to life and property during an emergency.
Action S-4.2	Conduct periodic drills using emergency response systems to test the effectiveness of the City and County procedures.

CITY OF HUGHSON GENERAL PLAN SAFETY ELEMENT

7 Noise Element

The purpose of the Noise Element is to identify sources of noise generation in the community; establish goals, policies and actions to minimize problems from intrusive sound and ensure that new development does not generate unacceptable noise levels.

For the purposes of the General Plan, noise is defined as a sound or series of sounds that are deemed invasive, irritating, objectionable and/or disruptive to the quality of daily life. Noise varies in its range, source and volume and can derive from individual incidents such as lawnmowers, to sporadic disturbances such as car horns or train whistles, to more constant irritants such as traffic along major arterials. Noise is especially a concern in the vicinity of noise-sensitive uses such as residences, schools and churches.

The State-mandated Noise Element contains the following two sections:

- Background Information. Depicts information on the existing conditions of noise sources and their current and projected levels within Hughson.
- ◆ Goals, Policies and Actions. Provides policy guidance to minimize noise impacts on residents and action items to be pursued during the lifetime of the General Plan.

A. Background Information

The following provides a discussion of existing and future noise sources within Hughson, as well as how these noise sources affect the various land use types in the City. Major noise sources that will be addressed include railroad, industry and traffic related noise.

1. Regulatory Framework

State law requires a Noise Element as part of all city and county General Plans. The Noise Element should provide a systematic approach to the measurement and modeling of noise; the establishment of noise standards; the control of major noise sources; and community planning for the regulation of noise. This Noise Element provides baseline information on the existing

noise environment, including noise measurements taken throughout the city, and identifies noise sensitive uses in Hughson. The Element also provides goals, policies and actions for controlling noise in existing and future development.

According to State Government Code and the State Office of Noise Control Guidelines, the following major noise sources should be considered in the preparation of a Noise Element:

- ♦ Highways and freeways
- ♦ Primary arterials and major local streets
- ♦ Railroad operations
- ♦ Aircraft and airport operations
- ♦ Local industrial facilities
- ♦ Other stationary sources

The Noise Element establishes uniformity between City policy and programs undertaken to control and abate environmental noise. The California Government Code and State Office of Noise Control Guidelines require that certain major noise sources and areas containing noise sensitive land uses be identified and quantified by preparing generalized noise exposure contours for current and projected levels of activity within the community. The noise exposure information developed for the Noise Element is incorporated into the General Plan to serve as a basis for achieving land use compatibility with respect to noise. Noise exposure information is also used to provide baseline levels and noise source identification for use in the development and enforcement of a local noise control ordinance, and for ensuring compliance with the State's noise insulation standards, which are discussed in more detail below.

a. State Regulations

California's noise insulation standards were officially adopted by the California Commission of Housing and Community Development in 1974 and became effective on August 22, 1974. On November 14, 1988, the Building Standards Commission approved revisions to these standards (Title 24, Part 2, California Code of Regulations). The ruling states: "Interior noise levels at-

tributable to exterior sources shall not exceed 45 dBA in any habitable room. The noise metric shall be measured in either CNEL or Ldn, consistent with the noise element of the local general plan." Additionally, the commission specifies that residential buildings or structures proposed to be located within exterior Ldn contours of 60 dBA or greater, generated by an existing or planned freeway, expressway, parkway, major street, thoroughfare, rail line, rapid transit line or industrial noise source, shall require an acoustical analysis showing that the building has been designed to limit intruding noise to an interior Ldn of 45 dBA.

b. City Regulations

Hughson's Noise Ordinance is contained in Chapter 9.30 of the Municipal Code. The Noise Ordinance defines noise as "excessive undesirable sound" generated by people, animals, vehicles or equipment. The Ordinance states that it is unlawful to make "unnecessary or unusual noise which unreasonably disturbs the peace and quiet of any zone classified R-A, R-1, R-2, R-3, C-1, C-2 or C-3 which causes discomfort or annoyance" to an average person within those zones, and which is audible without amplification 50 feet or more from the source of the noise.

The City enforces the Noise Ordinance from 10:00 p.m. to 7:00 a.m. Monday through Friday, and from 10:00 p.m. to 8:00 a.m. on Saturday, Sunday and holidays.

2. Land Use Compatibility

Land uses deemed as noise sensitive by the State of California include schools, hospitals, rest homes, long-term care and mental care facilities. Many jurisdictions consider residential uses particularly noise sensitive because families and individuals expect to use time in the home for rest and relaxation, and noise can interfere with these activities. Some variability in standards for noise sensitivity may apply to different densities of residential development; single-family uses are frequently considered the most sensitive. Jurisdictions may identify other uses as noise sensitive such as churches, libraries, day care centers and parks.

Land uses that are relatively insensitive to noise include some office, commercial and retail developments. There is a range of insensitive noise receptors which generate significant noise levels or where human occupancy is typically low. Examples of insensitive uses include industrial and manufacturing uses, utilities, agriculture, vacant land, parking lots and transit terminals.

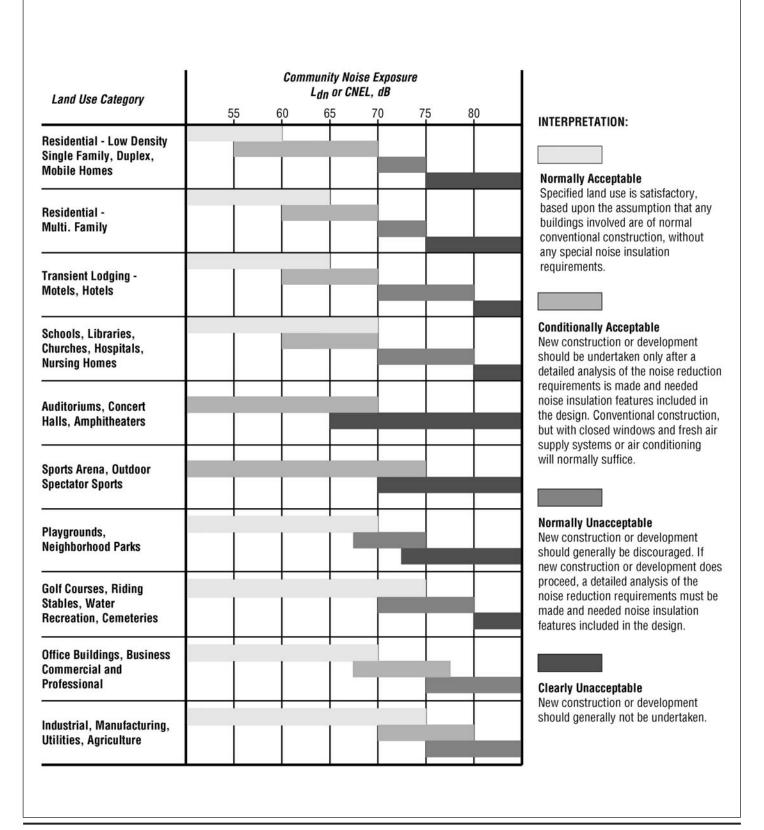
To assist with evaluating the compatibility of land uses with various noise levels, the California General Plan Guidelines compare the compatibility of noise levels with various land uses. Figure N-1 summarizes the Guidelines' recommendations.

3. Existing Noise Sources

A noise study was completed as part of the General Plan update and included noise measurements along major roadways and near significant stationary noise sources, such as the industrial area south of Santa Fe Avenue. The major noise sources in Hughson are vehicular traffic on major roadways, railroad operations along the Burlington Northern and Santa Fe (BNSF) Railroad line, and industrial activities. Hughson is not located within an airport plan or within two miles of any private airfields, so therefore aircraft noise is not considered a major noise source in the city.

a. Vehicular

Roadway traffic generates noise throughout the city. The three roadways that carry the highest traffic volumes in Hughson are Hatch Road, along the northern edge of the city; Geer Road, to the east of the city limits; and Santa Fe Avenue, along the railroad tracks. In addition to these three major roadways, segments of 7th Street, Whitmore Avenue and Tully Road also carry relatively high volumes of traffic. Table N-1 provides a summary of the existing Ldn traffic noise levels along major city roadways at a distance of 50 feet from the centerline of the roadway and a summary of the calculated distances from the centerline to Ldn contours.



Source: State of California, General Plan Guidelines 2003, page 250.

FIGURE N-1

CITY OF HUGHSON GENERAL PLAN NOISE ELEMENT

TABLE N-1 2004 VEHICULAR TRAFFIC NOISE ON MAJOR ROADWAYS

		from To	2004							
Road Hatch Road	Location from		Lanes	Daily Traffic Volume	Speed (mph)	Existing Ldn, dBA (50 ft from centerline)	70-Ldn Contour (feet)	65-Ldn Contour (feet)	60-Ldn Contour (feet)	
		Santa Fe Ave	2	10,525		74	90	200	430	
Uatah Daad	Santa Fe Ave	Tully Road	2	8,168	55	73	80	170	370	
Traten Road	Tully Road	7th Street	2	7,001	55	72	70	150	320	
	7th Street	Geer Road	2	5,725	55	71	60	130	270	
Fox Road	Euclid Road	Geer Rd	2	1,388	55	60	ኍ	*	50	
		Tully Road	2	6,117	45	67	ኍ	70	150	
	Tully Road	Santa Fe Ave	2	4,235	45	66	*	60	130	
Whitmore Ave	Santa Fe Ave	7th Street	2	3,000	45	64	*	*	90	
1100	7th Street	Euclid Ave	2	2,742	45	64	*	*	90	
	Euclid Ave	Geer Road	2	2,000	45	62	*	*	70	
		Tully Road	2	1,938	45	62	*	*	70	
Service Road	Tully Road	Santa Fe Ave	2	2,000	45	62	<i>ት</i>	*	70	
	Santa Fe Ave	Geer Road	2	1,500	45	61	ኍ	*	60	
		Hatch Rd	2	9,225	45	67	*	70	150	
	Hatch Rd	Alamos Dr	2	7,764	35	66	ኍ	60	130	
	Alamos Dr	Tully Rd	2	7,500	35	66	ኍ	60	130	
Santa Fe Ave	Tully Rd	Whitmore Ave	2	8,000	35	67	*	70	150	
Santa Fe Ave	Whitmore Ave	7th St	2	6,693	35	66	*	60	130	
	7th St	Service Rd	2	6,700	35	66	*	60	130	
	Service Rd	Geer Rd	2	6,704	35	66	*	60	130	
	Geer Rd		2	6,700	35	66	*	60	130	

		on from To	2004							
Road Tully Road	Location from		Lanes	Daily Traffic Volume	Speed (mph)	Existing Ldn, dBA (50 ft from centerline)	70-Ldn Contour (feet)	65-Ldn Contour (feet)	60-Ldn Contour (feet)	
	Hatch Rd	Narcisco Way	2	2,251	35	60	*	*	50	
	Narcisco Way	Fox Rd	2	2,545	25	60	*	*	50	
T11 D J	Fox Rd	Santa Fe Ave	2	3,000	25	61	*	*	60	
Tully Koad	Santa Fe Ave	Whitmore Ave	2	7,605	25	65	*	50	110	
	Whitmore Ave	Service Rd	2	1,728	25	59	*	*	ኍ	
	Service Rd		2	1,500	25	58	*	*	ኍ	
	Hatch Rd	Chantilly Way	2	2,754	25	57	*	*	ኍ	
	Chantilly Way	Fox Rd	2	2,095	25	56	*	*	ኍ	
7 th Street	Fox Rd	Whitmore Ave	2	2,762	25	57	*	*	ኍ	
	Whitmore Ave	Santa Fe Ave	2	1,242	25	54	*	*	ኍ	
	Santa Fe Ave	Service Rd	2	6,825	25	65	*	50	110	
Euclid Ave	Hatch Rd	Fox Rd	2	77	35	*	*	*	*	
Euclid Ave	Fox Rd	Whitmore Ave	2	100	45	*	*	*	ኍ	
		Hatch Rd	2	11,805	45	74	90	200	430	
	Hatch Rd	Fox Rd	2	8,359	55	72	70	150	320	
C D 1	Fox Rd	Whitmore Ave	2	8,000	55	72	70	150	320	
Geer Road	Whitmore Ave	Service Rd	2	6,949	55	71	60	130	270	
	Service Rd	Santa Fe Rd	2	7,000	55	71	60	130	270	
	Santa Fe Rd		2	10,630	55	73	80	170	370	

^{*} Distances of less than 50 feet are not included in this table.

Note: Existing noise levels along plan area roadways were modeled using Caltrans LeqV2 Traffic Noise Model. The traffic noise model was adjusted using noise measurements and corresponding traffic volume counts conducted during the noise monitoring survey. Existing average daily traffic volumes and speeds were collected as part of the General Plan traffic study were used to estimate Ldn values at some locations. Noise levels assume traffic along the roadway is the primary noise source and do not take shielding by terrain or structures into account.

b. Railroad

Railroad trains intermittently generate significant noise levels and ground-borne vibration along the railroad tracks. High-speed operations of Amtrak and other carriers on the BNSF railroad in Hughson occur on the mainline, which runs through Riverbank, the west side of Hughson, Empire and Denair, and on a branch line that connects the mainline at Riverbank with the Sierra Railroad in Oakdale.

According to noise measurements recorded within and just north of Hughson, approximately 33 train movements take place each day with approximately 54 percent daytime operations (7:00 a.m. to 7:00 p.m.), 11 percent evening operations (7:00 p.m. to 10:00 p.m.) and 35 percent nighttime operations (10:00 p.m. to 7:00 a.m.). Train movements ranged from a few seconds to more than two minutes in duration. Based on noise levels measured along the tracks for 2004 operations, the calculated distance from the center of the mainline to the 60 dBA Ldn railroad contour is approximately 950 feet. Figure N-2 depicts the noise contours generated by rail operations.

c. Non-Vehicular

Noise is also generated on individual parcels whether industrial, commercial or residential. Even with the best available noise control technology, industrial uses and the associated processes typically generate higher levels of constant noise as compared to most commercial and residential uses. The major industrial facilities within Hughson are located in the city's industrial area, southwest of the railroad along Whitmore Avenue, and include Builders Choice Truss Company and the Dairy Farmers of America plant. The Hughson Cold Storage facility, another larger industrial use, is located to the northeast of the railroad and on the western edge of the city.

B. Goals, Policies and Actions

Goal N-1 Minimize the exposure of community residents to excessive noise. The City will utilize the noise/land use compatibility Policy N-1.1 standards in Figure N-1 as a guide for future planning and development decisions, as well as the projected future noise contours for the buildout of the General Plan, shown in Figure N-2 and detailed in Table N-2. The City will maintain a pattern of land uses that separates Policy N-1.2 noise-sensitive land uses from major noise sources, to the extent feasible. Policy N-1.3 New development of residential or other noise sensitive land uses should not be allowed in noise impacted areas unless effective mitigation measures are incorporated into the project design to reduce noise levels in outdoor activity areas to 60 dBA Ldn or less. Interior levels should be reduced to 45dBA Ldn or less in all new residential developments. Policy N-1.4 The City should require new development deemed to be noise generators to minimize noise at the source through site design, building design, landscaping, hours of operation and other techniques. Policy N-1.5 During all phases of construction activity, the City will require project developers to incorporate mitigation measures that minimize the exposure of neighboring properties to excessive noise levels.

TABLE N-2 FUTURE VEHICULAR TRAFFIC NOISE ON MAJOR ROADWAYS

			Future							
Roadway	Location From	То	Lanes	Daily Traffic Volume	Speed (mph)	Existing Ldn, dBA (50 ft from centerline)	70-Ldn Contour (feet)	65-Ldn Contour (feet)	60-Ldn Contour (feet)	
		Santa Fe Avenue	2	16.900	55	76	130	270	590	
Roadway Hatch Road Fox Road Whitmore Ave Service Road	Santa Fe Avenue	Tully Road	2	13,300	55	75	110	240	510	
	Tully Road	7 th Street	2	9,500	55	73	80	180	390	
	7 th Street	Geer Road	2	6,900	55	72	70	140	310	
Fox Road	Euclid Avenue	Geer Road	2	2,775	45	63	*	*	80	
		Tully Road	2	14,400	45	71	50	120	260	
	Tully Road	Santa Fe Avenue	2	10,850	45	70	60	110	240	
	Santa Fe Avenue	7 th Street	2	8,000	45	68	*	80	180	
	7 th Street	Euclid Avenue	2	8,520	45	69	*	90	200	
	Euclid Avenue	Geer Road	2	3,800	45	65	*	50	100	
		Tully Road	2	8,00	45	68	*	80	170	
Service Road	Tully Road	Santa Fe Avenue	2	8,900	45	68	*	90	180	
	Santa Fe Avenue	Geer Road	2	6,500	45	67	*	70	150	
		Hatch Road		17,385	35	70	50	100	220	
	Hatch Road	Alamos Drive	2	18,325	35	70	50	100	220	
	Alamos Drive	Tully Road	2	19,500	35	70	50	110	240	
Santa Fe Ave	Tully Road	Whitmore Avenue	2	19,400	35	71	60	120	260	
	Whitmore Avenue	7 th Street	2	19,550	35	71	60	120	260	
	7 th Street	Service Road	2	18,900	35	71	50	120	250	
	Service Road	Geer Road	2	20,800	35	71	60	120	270	
	Geer Road		2	18,100	35	70	50	110	240	

TABLE N-2 (CONTINUED) FUTURE VEHICULAR TRAFFIC NOISE ON MAJOR ROADWAYS

			Future							
Roadway Tully Road 7th Street Euclid Avenue	Location From	То	Lanes	Daily Traffic Volume	Speed (mph)	Existing Ldn, dBA (50 ft from centerline)	70-Ldn Contour (feet)	65-Ldn Contour (feet)	60-Ldn Contour (feet)	
	Hatch Road	Narcisco Way	2	5,375	25	64	*	*	90	
	Narcisco Way	Fox Road	2	7,800	25	65	*	50	110	
יד וו יח ו	Fox Road	Santa Fe Avenue	2	9,580	25	66	*	60	130	
Tully Koad	Santa Fe Ave	Whitmore Avenue	2	13,350	25	67	*	70	160	
	Whitmore Avenue	Service Road	2	7,500	25	65	*	50	110	
	Service Road		2	6,250	25	64	*	*	100	
	Hatch Road	Chantilly Way	2	3,850	25	58	*	*	*	
	Chantilly Way	Fox Road	2	5,875	25	60	*	*	50	
7 th Street	Fox Road	Whitmore Avenue	2	8,975	25	62	*	*	70	
	Whitmore Avenue	Santa Fe Avenue	2	6,800	25	61	*	*	60	
	Santa Fe Ave	Service Road	2	8,250	35	66	*	60	120	
Euclid	Hatch Road	Fox Road	2	1,750	45	64	*	*	90	
Avenue	Fox Road	Whitmore Avenue	2	2,000	45	64	*	*	90	
		Hatch Road	2	19,600	55	76	130	280	600	
Geer Road	Hatch Road	Fox Road	2	15,350	55	75	100	220	470	
	Fox Road	Whitmore Avenue	2	15,400	55	75	110	230	490	
	Whitmore Avenue	Service Road	2	13,000	55	74	90	190	410	
	Service Road	Santa Fe Road	2	13,175	55	74	90	190	410	
	Santa Fe Road		2	17,850	55	75	110	240	520	

^{*} Distances of less than 50 feet are not included in this table.

Note: Existing noise levels along plan area roadways were modeled using Caltrans LeqV2 Traffic Noise Model. The traffic noise model was adjusted using noise measurements and corresponding traffic volume counts conducted during the noise monitoring survey. Existing average daily traffic volumes and speeds were collected as part of the General Plan traffic study were used to estimate Ldn values at some locations. Noise levels assume traffic along the roadway is the primary noise source and do not take shielding by terrain or structures into account.

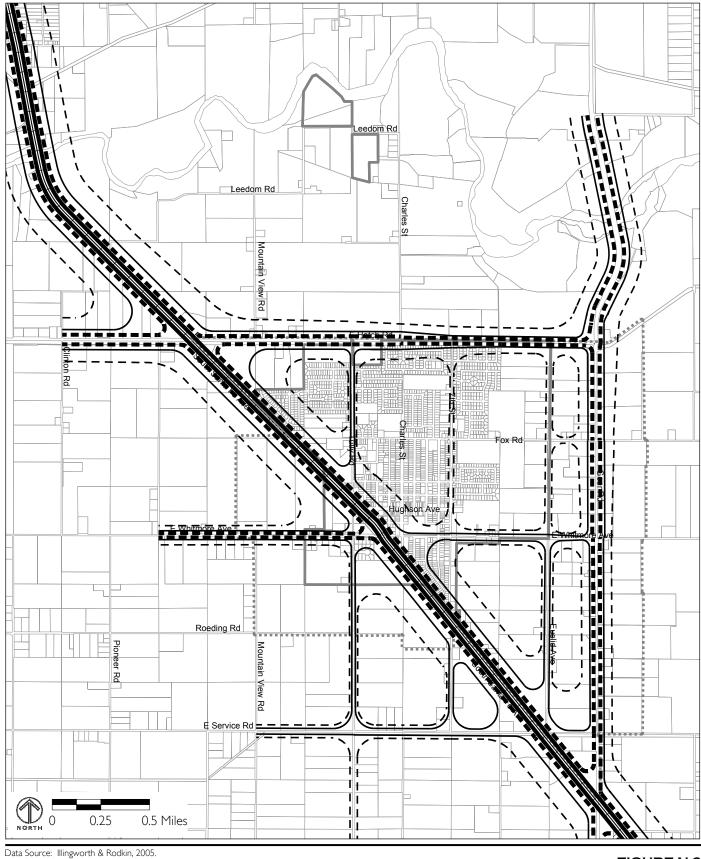


FIGURE N-2



FUTURE NOISE CONTOURS

- Action N-1.1 Enforce the Hughson Noise Ordinance to avoid unnecessary and unusual noise during the hours of 10 p.m. to 7 a.m. Monday through Friday, and 10 p.m. to 8 a.m. Saturday, Sunday and holidays.
- Action N-1.2 Require acoustical analyses for proposed sensitive land uses to be located within the 60 dBA Ldn noise contour, or in the vicinity of existing and proposed commercial and industrial areas. Acoustical analyses will also be required for commercial and industrial uses proposed in the vicinity of existing or proposed sensitive land uses. Where the noise analyses indicate that the noise compatibility standards contained in the Noise Element will be exceeded, require noise control measures to be incorporated into the proposed development to reduce noise levels to the extent feasible.
- Action N-1.3 Require construction techniques for noise buffering, barriers or setbacks in development subject to high noise levels, such as the railroad and major roadways, to reduce noise to a level within the noise/land use compatibility standards, as shown in Figure N-1. Sound walls are discouraged, unless there is no other feasible design available to minimize noise impacts along major roadways and the railroad.

Goal N-2 Reduce noise levels from traffic and railroad operation.

Policy N-2.1 The City should minimize potential transportation-related noise through street circulation design, coordination of routing and other traffic control measures, and consider use of "quiet" pavements when resurfacing roadways.

- Policy N-2.2 Truck traffic will be routed through and adjacent to Hughson in a manner that reduces truck-related noise impacts to sensitive land uses, as possible.
- Policy N-2.3 The City will seek to reduce impacts from ground borne vibrations associated with rail operations by requiring that habitable buildings are sited at least 100-feet from the center-line of the tracks, whenever feasible.
- Policy N-2.4 New residential development exposed to exterior railroad generated noise levels of 60 dBA Ldn or greater should be designed to limit maximum single incident noise levels not to exceed 50 dBA Lmax in bed-rooms and 55 dBA Lmax in other rooms.
- Action N-2.1 Encourage the BNSF Railroad to maintain existing track in good condition and minimize train horn soundings to the extent allowed by law.
- Action N-2.2 Require development of habitable buildings within 100-feet from the centerline of the railroad tracks to provide a study demonstrating that ground borne vibration issues associated with rail operations have been adequately addressed (i.e., through building siting or construction techniques).
- Action N-2.3 Coordinate with the County Sheriff's Department to enforce the California Vehicle Code as it relates to adequate vehicle mufflers, modified exhaust systems and vehicle stereo systems.²

¹ Section 27150 of the California Motor Vehicle Code discusses the control of excessive exhaust noise.

² Section 27007 of the California Motor Vehicle Code prohibits amplified sound which can be heard 50 or more feet from a vehicle.

Action N-2.4 Establish a noise abatement protocol for existing sensitive land uses located in areas anticipated to experience significant noise increases with the implementation of the General Plan, as well as identify potential funding for an abatement program. Cumulative traffic noise impacts on existing noise sensitive uses could be reduced through the inclusion of exterior and/or interior sound reduction measures such as noise barriers, forced-air mechanical ventilation, and sound-rated window construction.

CITY OF HUGHSON GENERAL PLAN NOISE ELEMENT

8 GENERAL PLAN PREPARERS

City Council Members

Thomas E. Crowder, Mayor Kenneth A. Moore, Mayor Pro Tem Ramon Bawanan Stephen Qualls Greg Adams

Planning Commission Members

Matt Beekman, Chair Michael Brooks Jean Henley Jerry Ledermann Lawrence Montoya

Key City Staff

Joseph E. Donabed, City Manager
Barry Siebe, Director of Planning and Building
David Chase, PE, Public Works Director
Jane Cantrell, CMC, Director of Administrative Services
Erica Hollander, Planning and Building Assistant



The City was assisted in the preparation of the General Plan by:

Design, Community & Environment, Inc. – Primary Consultant 1600 Shattuck Avenue, Suite 222 Berkeley, CA 94709

kdANDERSON Transportation Engineers – Traffic Consultant 3853 Taylor Road, Suite G Loomis, CA 95650

Illingworth & Rodkin – Air Quality Consultant 505 Petaluma Boulevard South Petaluma, CA 94952

Environmental Collaborative – Biological Resources Consultant 1268 64th Street Emeryville, CA 94608

The project consultant team included:

Design Community & Environment David Early, Principal-in-Charge Catherine Reilly, Project Manager Lisa Fisher, Planner Rick Kos, GIS Manager kdANDERSON Transportation Engineers Kenneth Anderson, Principal Engineer Julia L. Townsend, Traffic Engineer Wayne Shijo, Transportation Planner

Illingworth & Rodkin
Richard Rodkin, Principal-in-Charge
Dana Lodico, Noise Specialist
James A. Reyff, Project Scientist

Environmental Collaborative Jim Martin, Principal

9 GLOSSARY

This glossary explains the technical terms used in the City of Hughson General Plan. Definitions come from several sources, including existing Hughson codes, the California Office of Planning and Research and the American Planning Association Glossary of Zoning, Development and Planning Terms.

A. Programmed and Planned Improvements

ARB: California Air Resources Board **BMPs:** Best Management Practices

BNSF: Burlington Northern and Santa Fe Railway Caltrans: California Department of Transportation CEQA: California Environmental Quality Act CNDDB: California Natural Diversity Database CNEL: Community Noise Equivalent Level

dB: Decibel

DFG: California Department of Fish and Game

DOT: US Department of Transportation

DTSC: California Environmental Protection Agency, Department of

Toxic Substances Control **DU:** Dwelling Unit

EIR: Environmental Impact Report (State)

EOC: Stanislaus County Operational Area Emergency Operations Plan

EOP: Emergency Operations Plan

EPA: US Environmental Protection Agency

FAR: Floor Area Ratio

FEMA: Federal Emergency Management Agency

FPD: Fire Protection District **FIRM:** Flood Insurance Rate Map

gpd: Gallons per Daygpm: Gallons per Minute

HUSD: Hughson Unified School District

LAFCO: Stanislaus County Local Agency Formation Commission

LOS: Level of Service

NFIA: National Flood Insurance Administration

PE: professional engineer

RWQCB: Regional Water Quality Control Board **SEMS:** Standardized Emergency Management System

SOI: Sphere of Influence

SJVAPCD: San Joaquin Valley Air Pollution Control District

StanCOG: Stanislaus County Council of Governments

StaRT: Stanislaus Regional Transit TAC: Technical Advisory Committee TID: Turlock Irrigation District

UST: underground storage tank

USFWS: United States Fish and Wildlife Service

VMT: Vehicle Miles Traveled

B. Terminology

Acreage, Gross

The land area that exists prior to any dedications for public use, health and safety purposes.

Acreage, Net

The portion of a site that can actually be built upon, which is the land area remaining after dedication of ultimate rights-of-way for:

- ♦ Exterior boundary streets
- ♦ Flood ways
- ◆ Public parks and other open space developed to meet minimum standards required by City ordinance
- ◆ Utility Easements and rights-of-way may not be counted as net acreage

Action

An action is a program, implementation measure, procedure, or technique intended to help to achieve a specified goal. (See "Goal")

Adverse Impact

A negative consequence for the physical, social, or economic environment resulting from an action or project.

Appropriate

An act, condition, or state that is considered suitable.

Archaeological Resource

Material evidence of past human activity found below the surface of the ground or water, portions of which may be visible above the surface.

Arterials

Major thoroughfares intended to serve as the major routes of travel within the city. Arterials are typically larger roadways designed to gather traffic from the collector system and provide major connections between regional destinations and highway and freeway systems.

Bicycle Lane (Class II facility)

A corridor expressly reserved for bicycles, existing on a street or roadway in addition to any lanes for use by motorized vehicles.

Bicycle Path (Class I facility)

A paved route not on a street or roadway and expressly reserved for bicycles traversing an otherwise unpaved area. Bicycle paths may parallel roads but typically are separated from them by landscaping.

Bicycle Route (Class III facility)

A facility shared with motorists and identified only by signs, a bicycle route has no pavement markings or lane stripes.

Big Box Retail

The term used for stores which cover very large floor areas and usually are more similar to a warehouse than a conventional store in their appearance. These businesses typically require high parking to building area ratios and have a regional sales market.

Bikeways

A term that encompasses bicycle lanes, bicycle paths, and bicycle routes.

Capital Improvements Program

A program, administered by a City and reviewed by its Planning Commission, which schedules permanent improvements, usually for a minimum of five years in the future, to fit the projected fiscal capability of the

local jurisdiction. The program generally is reviewed annually for conformance to and consistency with the General Plan.

City

City with a capital "C" generally refers to the Hughson city government or administration. City with a lower case "c" may mean any city or may refer to the geographical area of Hughson (e.g. the City bikeway system).

City Limits

The legal boundaries of the geographical area subject to the jurisdiction of Hughson's city government. For example, development applications for properties located within the city limits must be reviewed by the City.

Clustered Development

Development in which a number of dwelling units are placed in closer proximity than usual, or are attached, with the purpose of retaining an open space area.

Collectors

Intermediaries between arterials and local roads; collecting traffic from local roads and distributing it to the arterial system. Collector roadways also provide direct access to residential subdivisions as well as shopping centers and industrial complexes, and should be spaced at quarter-mile to half-mile intervals.

Community Care Facility

Housing licensed by the State Health and Welfare Agency, Department of Social Services, typically for residents who are frail and need supervision. Services normally include three meals daily, housekeeping, security and emergency response, a full activities program, supervision in the dispensing of medicine, personal services such as assistance in grooming and bathing, but no nursing care. Sometimes referred to as residential care or personal care.

Community Noise Equivalent Level (CNEL)

A 24-hour energy equivalent level derived from a variety of single-noise events, with weighting factors of 5 and 10 dBA applied to the evening (7 PM to 10 PM) and nighttime (10 PM to 7 AM) periods, respectively, to allow for the greater sensitivity to noise during these hours.

Compatible

Capable of existing together without conflict or ill effects.

Conditional Use Permit

The discretionary and conditional review of an activity or function or operation on a site or in a building or facility.

Congregate Care

A facility for long-term residence which shall include, without limitation, common dining and social and recreational features, special safety and convenience features designed for the needs of the elderly and other persons with disabilities, such as emergency call systems, passageways and doorways designed to accommodate wheelchairs. (See also "Community Care Facility.")

Cul-de-sac

A short street or alley with only a single means of ingress and egress at one end and with a large turnaround at its other end.

Cultural Resources

Includes historic, archaeological and paleontological resources, as well as human remains.

dB

Decibel; a unit used to express the relative intensity of a sound as it is heard by the human ear. The lowest volume a normal ear can detect under laboratory conditions is 0 dB, the threshold of human hearing. Since

CITY OF HUGHSON
GENERAL PLAN
GLOSSARY

the decibel scale is logarithmic, 10 decibels are ten times more intense and 20 decibels are a hundred times more intense than 1 db.

dBA

The "A-weighted" scale for measuring sound in decibels; weighs or reduces the effects of low and high frequencies in order to simulate human hearing. Every increase of 10 dBA doubles the perceived loudness even though the noise is actually ten times more intense.

Dedication

The turning over by an owner or developer of private land for public use, and the acceptance of land for such use by the governmental agency having jurisdiction over the public function for which it will be used. Dedications for roads, parks, school sites, or other public uses often are made conditions for approval of a development by a city or county.

Dedication, In lieu of

Cash payments that may be required of an owner or developer as a substitute for a dedication of land, usually calculated in dollars per lot, and referred to as in lieu fees or in lieu contributions.

Density

The amount of development on a property. (See also "Density, residential" and "Floor Area Ratio")

Density, Residential

The number of permanent residential dwelling units per acre of land. Densities specified in the General Plan are expressed in dwelling units per gross acre. (See "Acres, Gross")

Development

The physical extension and/or construction of non-farm land uses. Development activities include: subdivision of land; construction or alteration of structures, roads, utilities, and other facilities; grading; deposit of refuse, debris, or fill materials; and clearing of natural vegetative cover (with the exception of agricultural activities). The construction of a single-family home on an existing lot, and routine repair and maintenance activities, are exempted.

Dwelling Unit

The place of customary abode of a person or household which is either considered to be real property under State law or cannot be easily moved.

Element

California State Government Code Section 65302 requires each General Plan to contain seven separate "elements" that set goals, policies and actions for each mandated subject. Topics can sometimes be combined or included into other elements, as allowed by State law.

Entry Corridor

Entrance to an urban area, or to an important part of a city, along a major roadway.

Environmental Impact Report (EIR)

A report required pursuant to the California Environmental Quality Act (CEQA) that assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts. (See "California Environmental Quality Act")

Fault

A fracture in the earth's crust that forms a boundary between rock masses that have shifted.

Floor Area Ratio (FAR)

The size of a building in square feet (gross floor area) divided by net land area, expressed as a decimal number. For example, a 60,000 square foot building on a 120,000 square-foot parcel would have a floor area ratio of 0.50. The FAR is used in calculating the building intensity of non-residential development.

Floodplain, (100-year)

The area which has a one percent chance of being inundated during any particular 12-month period. The risk of this area being flooded in any century is 1 percent, but statistically, the risk is almost 40 percent in a 50-year period.

Gateway

An area of Hughson, located where a major street meets the City limits. It is a point along a roadway at which a motorist or cyclist gains a sense of having left the environs and of having entered the City.

General Plan

A compendium of City policies regarding its long-term development, in the form of maps and accompanying text. The General Plan is a legal document required of each local agency by the State of California Government Code Section 65301 and adopted by the City Council. In California, the General Plan has seven mandatory elements (Circulation, Conservation, Housing, Land Use, Noise, Open Space, Public Safety) and may include any number of optional elements.

Goal

A description of the general desired results that Hughson seeks to create through the implementation of the General Plan. Goals are included in each element of the Plan and may include the key physical or community characteristics that the City and its residents wish to maintain or develop.

Groundwater

Water that exists beneath the earth's surface, typically found between saturated soils and rock, and is used to supply wells and springs.

Habitat

The physical location or type of environment in which an organism or biological population lives or occurs.

Household

All persons occupying a single dwelling unit.

Impact Fee

A fee charged to a developer by the City according to the proposed development project, typically by number of units, square footage or acreage. The fee is often used to offset costs incurred by the municipality for services and infrastructure such as schools, roads, police and fire services, and parks.

Implementation

Actions, procedures, programs, or techniques that carry out policies.

Infill Development

Development that occurs on vacant or underutilized land within areas that area already largely developed.

Land Use

The occupation or utilization of an area of land for any human activity or any purpose.

Land Use Designation

One particular category in a classification series of appropriate use of properties established by the General Plan Land Use Element.

Level of Service (LOS) Standard

A standard used by government agencies to measure the quality or effectiveness of a municipal service, such as police, fire, or library, or the performance of a facility, such as a street or highway.

Level of Service (Traffic)

A scale that measures the amount of traffic that a roadway or intersection can accommodate, based on such factors as maneuverability, driver dissatisfaction, and delay.

Level of Service A

A relatively free flow of traffic, with little or no limitation on vehicle movement or speed.

Level of Service B

Describes a steady flow of traffic, with only slight delays in vehicle movement and speed.

Level of Service C

Denotes a reasonably steady, high-volume flow of traffic, with some limitations on movement and speed, and occasional backups on critical approaches.

Level of Service D

Designates the level where traffic nears an unstable flow. Intersections still function, but short queues develop and cars may have to wait through one cycle during short peaks.

Level of Service E

Represents traffic characterized by slow movement and frequent stoppages. This level of service is considered to be the limit of acceptable delay.

Level of Service F

Describes unsatisfactory stop-and-go traffic characterized by "traffic jams" and stoppages of long duration.

Local Agency Formation Commission (LAFCO)

A five- or seven-member commission within each county that reviews and evaluates all proposals for formation of special districts, incorporation of cities, annexation to special districts or cities, consolidation of districts and merger of districts with cities. Each county's LAFCO is empowered to approve, disapprove or conditionally approve such proposals.

Local Street

Provides direct access to properties and connects travelers to collectors and arterials.

Manufactured Housing

Residential structures that are constructed entirely in the factory, and that since June 15, 1976, have been regulated by the federal *Manufactured Home Construction and Safety Standards Act of 1974* under the administration of HUD.

Mobile Home

A structure, transportable in one or more sections, built on a permanent chassis and designed for use as a single-family dwelling unit and which (1) has a minimum of 400 square feet of living space; (2) has a minimum width in excess of 102 inches; (3) is connected to all available permanent utilities; and (4) is tied down (a) to a permanent foundation on a lot either owned or leased by the homeowner or (b) is set on piers, with wheels removed and skirted, in a mobile home park.

Modular Unit

A factory-fabricated, transportable building or major component designed for use by itself or for incorporation with similar units onsite into a structure for residential, commercial, educational, or industrial use. The modular unit differs from mobile homes and manufactured housing by (in addition to lacking an integral chassis or permanent hitch to allow future movement) being subject to California housing law design standards. California standards are more restrictive than federal standards in some respects (e.g., plumbing and energy conservation). Also called Factory-Built Housing.

Mobile Home Park

A parcel of land under one ownership that has been planned and improved for the placement of two or more mobile homes for rental purposes for nontransient use.

Mixed Use

Any mixture of land uses, including mixtures of residences with commercial, offices with retail, or visitor accommodation with offices and retail. As distinguished from a single use land use designation or zone, mixed use refers to an authorized variety of uses for buildings and structures in a particular area.

Parcel

A lot, or contiguous group of lots, in single ownership or under single control, usually considered a unit for purposes of development.

Pedestrian-Oriented Design

An approach to site and neighborhood design intended to facilitate movement on foot in an area, as opposed to design that primarily serves automobile movement. Examples of pedestrian-oriented design include pathways following the most direct route from sidewalk to front door, continuous building streetwalls with shop windows, outdoor cafes, street trees and benches.

Planning Area

The Planning Area is the land area addressed by the General Plan. The Planning Area does not lead to regulatory powers outside of the City limits. Instead, it signals to the County and to other nearby local and regional authorities that City residents recognize that development within this area has an impact on the future of their community, and vice versa. The unincorporated land within the Hughson Planning Area will remain under the jurisdiction of the County of Stanislaus. (See also Sphere of Influence)

Policy

A specific statement of principle or of guiding actions that implies clear commitment but is not mandatory. A general direction that a governmental agency sets to follow, in order to meet its goals and objectives before undertaking an implementing action or program. (See "Action")

Seiche

A seiche is a wave that occurs on a lake, bay or other body of water, such as a swimming pool, and is caused by changes in atmospheric pressure, underwater earthquakes or landslides. The movement of the wave can be compared to the back-and-forth sloshing of water in a bathtub.

Sensitive Receptors

Uses sensitive to noise such as residential areas, hospitals, convalescent homes and facilities, and schools.

Specific Plan

Under Article 8 of the Government Code (Section 65450 et seq), a legal tool for detailed design and implementation of a defined portion of the area covered by a General Plan. A Specific Plan may include all detailed regulations, conditions, programs, and/or proposed legislation which may be necessary or convenient for the systematic implementation of any General Plan element(s).

Sphere of Influence

Under State law, the term used for the area outside of the city limits which a city expects to annex in future years. (See also Planning Area)

Traffic Calming

Measures designed to reduce motor vehicle speeds and to encourage pedestrian use, including:

- ♦ narrow streets
- ♦ tight turning radii
- ♦ sidewalk bulbouts
- parking bays
- textured paving at intersections
- parkways between sidewalks and streets

Unincorporated Area

Encompasses properties that are located outside of cities. Development in the unincorporated area is subject to County jurisdiction.

Use

The purpose for which a lot or structure is or may be leased, occupied, maintained, arranged, designed, intended, constructed, erected, moved, altered, and/or enlarged in accordance with the City zoning ordinance and General Plan land use designations.

Wastewater

Water that has already been used for washing, flushing, or in a manufacturing process, and therefore contains waste products such as sewage or chemical byproducts.

Zoning

The division of a city by ordinance or other legislative regulation into districts, or zones, which specify allowable uses for real property and size

CITY OF HUGHSON GENERAL PLAN GLOSSARY

restrictions for buildings constructed in these areas; a program that implements the land use policies of the General Plan.

Zoning District

A designated area of the City for which prescribed land use requirements and building and development standards are or will be established.