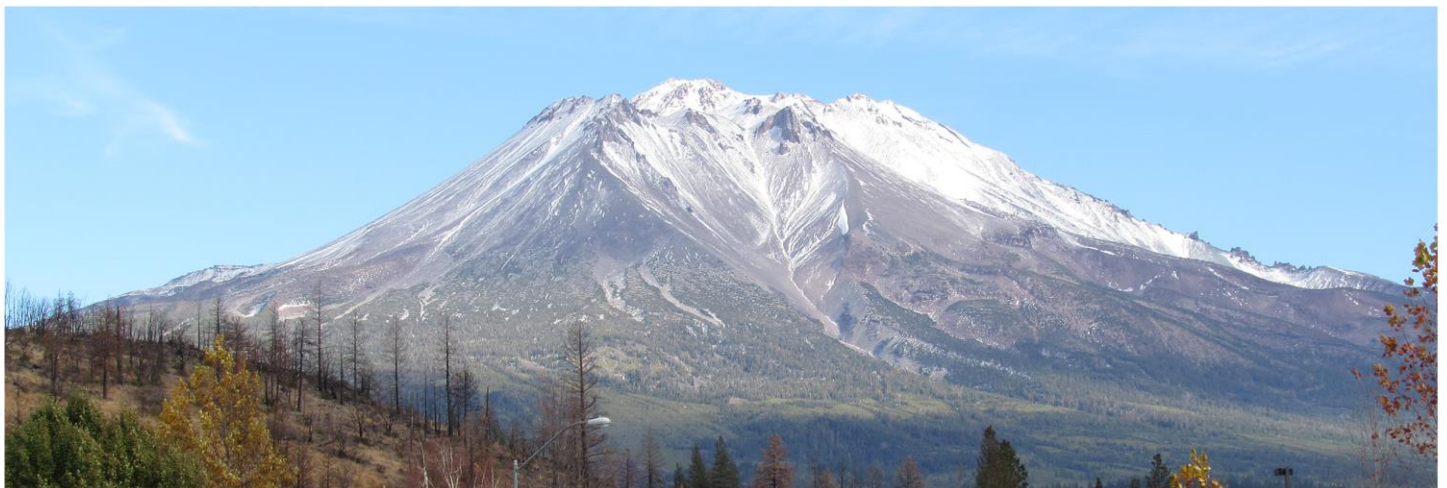
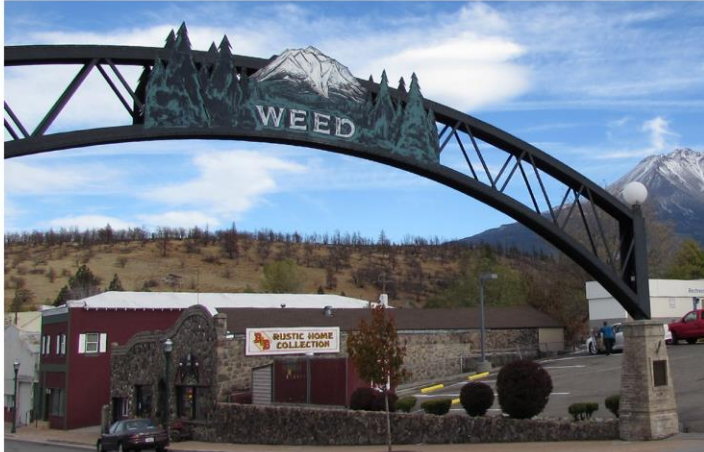


City of Weed

General Plan Update

Background Report 2015-2016



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EXECUTIVE SUMMARY

Introduction

This Background Report provides guidance for the development of the 2040 City of Weed General Plan. The Report covers the planning and outreach process, demographics, and community outlook for the City. The Report is an overview of existing conditions, issues and opportunities, and emerging directions, organized by the topical areas (or elements) of the General Plan as follows:

- Land Use
- Circulation
- Housing
- Open Space
- Conservation
- Air Quality
- Noise
- Safety
- Economic Development
- Public Facilities
- Health
- Community Design

In order to understand the future needs of the City of Weed, an in-depth assessment of these elements is provided in this report. The objective of the report is to inform appropriate goals, objectives, policies, and programs for the 2040 City of Weed General Plan.

California law requires cities and counties to adopt a General Plan to guide future development. The General Plan is the policy of acceptable land uses in jurisdictions, and serves as a foundation upon which all land use decisions are based.

Under the supervision of a faculty member, graduate students in the City and Regional Planning Department at California Polytechnic State University, San Luis Obispo produced this Background Report. Students collected data and information from existing documents, community engagement meetings and activities, and surveys from community members and City officials. The following sections summarize information in various chapters of the Report.

Background

The City of Weed is located in Siskiyou County, about 70 miles north of Redding, CA and about 50 miles south of the Oregon, California border. The City is approximately five square miles within a sphere of influence of approximately 28 square miles

The local pioneer, Abner Weed, founded the City of Weed in 1897 with the purchase of the 280-acre Siskiyou Lumber and Mercantile Mill. Weed was a busy and growing community described as a booming logging town by 1905. By the 1940's the City boasted the world's largest sawmill. The success of the mill was due in part to the fast moving mountain air currents that descend over Black Butte summit, which are perfect for drying green lumber. In the late 1950's the mill was sold to an International Paper Company. Though the City's origins began as a company town, it was incorporated as a General Law City in 1961. Today the City has one of the remaining lumber mills in the State and has diversified to provide educational services through the College of the Siskiyous and service for travelers between major cities to its north and south.

In 2010, Weed had a population of 2,967 residents, which was 6.6 percent of the population of Siskiyou County. Between 2000 and 2010, the population of Weed declined by 0.37 percent, or 0.04 percent annually. However, the population of Siskiyou County grew by a total of 1.35 percent, or 0.14 percent annually. The slow, but steady decline shifted drastically after the 2014 Boles fire, when the population dropped almost 9 percent (Department of Finance, 2015).

This General Plan project is a step by the people of Weed to create a vision for the future of the City as it embarked on recovery from the fire disaster. The Plan is to guide growth and future development of the City. This Background Report provides the foundation upon which the General Plan is developed.

Element Summaries

Land Use

The Land Use Element is mandatory and designates the location, distribution, and intensity of types of uses including: housing, commercial, industry, recreation, open space, agriculture, education, and public services and facilities. This element is to guide planners, the public, developers, and decision makers about the future development and growth of the City.

The Land Use Element considers constraints to land use resulting from physical, legal, and environmental issues, as well as the needs and wants of the community. These considerations influence the goals and policies developed to guide future land use in the City.

In 2015, land within the City of Weed was 39 percent vacant. The next greatest uses of land were circulation, open space, public facilities, and residential, each of which occupied roughly 15 percent of total land area. Industrial facilities made up 2 percent and commercial uses made up 3 percent of land within the City limits.

Community input revealed that in terms of land use, participants were most concerned with the following:

- Sprawling of land uses
- Lack of a plan, process, or vision for future growth
- Enforcement of city codes and ordinances

Emerging directions for Weed relate to how the City can:

- Improve the downtown core to provide more to citizens and visitors
- Promote infill development within the City limits
- Update zoning codes and planning documents
- Promote diversity of businesses and residents within neighborhoods.

Circulation

The Circulation Element is one of the seven mandatory elements of the General Plan. The element focuses on the transportation of people and goods throughout the City, region, and beyond. The goals, objectives, policies, and programs developed throughout the data collection and community engagement process helped to inform future transportation and land use decisions. The Circulation Element covers the regulatory framework, roadways, railway facilities, aviation, parking, truck routes, bus transit services, non-motorized transportation facilities, transportation demand and systems management, pavement management, and traffic safety within the City.

In 2015, the City of Weed's transportation network featured access to two major highways: Interstate 5 and US Route 97, which provide good regional connectivity to the State. The automobile was the primary mode of transportation, with 93 percent of the City's population having access to at least one vehicle. The residents of Weed had access to public transit that served Siskiyou County via the Siskiyou Transit and General Express (STAGE); however, transit ridership in Weed was minimal. Despite having few sidewalks outside of the downtown or South Weed, ten percent of the City's population commuted to work by walking, which was a higher share than the County or State.

Community input revealed that in terms of circulation, participants were most concerned with the following:

- Limited local connectivity
- Lack of safety, access, and connectivity for non-motorized modes of transportation
- Lack of sidewalks
- Insufficient street and pavement maintenance

Emerging directions for Weed relate to how the City can:

- Expand funding sources for local transportation projects
- Improve circulation for all modes of transportation
- Promote safe and accessible transportation options for non-drivers
- Prioritize roadway and pavement repair
- Expand the City's sidewalk network, especially in Central Weed.

Housing

The Housing Element is one of the seven mandatory elements of the general plan. The purpose of the housing element is to guide long-term, comprehensive housing needs for residents of various income levels within the City by providing a variety of housing types. This element, which is required by state law, reports on the City of Weed's ability to meet the existing and projected housing needs of all economic segments of the community. The chapter describes the existing conditions of housing in Weed. Existing housing conditions include affordability, quality of housing types, and household size.

In addition to an analysis of the regulatory requirements of the Housing Element and existing housing conditions, the chapter also discusses the future housing needs and emerging directions of housing in the City of Weed. In 2015, housing conditions in the City of Weed were adequate overall. The majority, approximately 77.2 percent of housing in the City was in good condition, 11.9 percent was in fair condition, and only 2.3 percent was in poor or bad condition. 56.1 percent of the City's housing units were single-family detached, making up 88.4 percent of total residential acreage. Single family attached, apartments, multi-family housing, and mobile homes made up the remaining housing stock.

Community input revealed that in terms of housing, participants were most concerned with the following:

- Increasing the supply of affordable housing units for all income levels
- Increasing diversity of the housing stock
- Improving housing upkeep on behalf of residents, homeowners, and property managers

The Emerging directions for Weed relate to how the City can:

- Promote and enhance the quality and amount of single family homes
- Provide residents with more affordable housing options
- Provide adequate housing for all income groups
- Expand workforce, senior, and student housing options.

Open Space

The Open Space Element presents information on two types of open space within the City of Weed: parks and open space for natural resource management. Open space is any parcel, area, or waterway that is essentially unimproved and devoted to open space use. As defined broadly under Section 65560 of the California Government Code, open space land is land designated for the preservation of natural resources, managed production of resources, outdoor recreation and space for public health and safety.

The City of Weed owns 33.4 acres of park space, operated and maintained by the Weed Parks and Recreation District (WPRD). The City of Weed had no local standards regarding parks or open space. However, the National Recreation and Parks Association has established standards for neighborhood and community parks which show that Weed currently has

adequate park space to serve the population. If the City were to grow to exceed 3,000 total residents, current park space would not be adequate.

Community input revealed that in terms of open space, participants were most concerned with the following:

- Increasing access to neighborhood and community parks
- Expanding recreational opportunities and programs for the youth
- Increasing upkeep and maintenance of local recreational trails

Emerging directions for parks and open space in Weed relate to how the City can:

- Expand events and activities offered in city parks
- Increase access to biking and walking trails
- Increase the variation in types of parks within the City.

Conservation

The Conservation Element discusses the natural resources within the City. As defined by the California Office of Planning and Research, conservation is the “management of natural resources to prevent waste, destruction, or neglect.” Topics of discussion include geology and minerals, soil, water resources, water quality, air quality, and biological resources. The Conservation Element provides directions for the conservation, development, and utilization of natural resources.

Information gathered from existing conditions was used to derive emerging directions for the conservation, development, and utilization of natural resources. In 2015, the City of Weed met citywide water needs from two wells and one spring. Due to the City’s proximity to Mount Shasta, there is likely to be sufficient water supply to meet future demand.

Biological diversity in Weed is high due to the surrounding area’s mountainous terrain, which fosters a range of natural ecosystems. Timber is the main extractive industry in Weed and is an important part of the City’s economy. Although sustainable practices were observed, the extraction and manufacturing of timber resources can have negative effects on biological resources and air quality.

Community input revealed that in terms of conservation, participants were most concerned with the following:

- Limitations on water resources within the City limits
- Emissions from major highways and industrial activities

Emerging directions for Weed relate to how the City can:

- Maintain access to clean drinking water sources
- Maintain timber resources to avoid depletion
- Promote and enhance biodiversity within Weed’s surrounding areas
- Harness the City’s strong winds to generate wind power.

Air Quality

The Air Quality Element is intended to promote and protect public health and welfare. The City of Weed recognizes the importance of air quality to public health and safety as well as the City's economic well-being. This element discusses the status of the City in meeting federal, state, and local air quality standards and provides an overview of ambient air quality conditions, an emissions inventory, a description of the local setting including air quality conditions, and major pollutant sources and air quality issues pertinent to the City's future.

Weed is regulated under the Siskiyou County Air Pollution Control District for air quality standards, and is listed as in attainment for many major air pollutants such as particulate matter and carbon monoxide according to the standards set by the State and Federal Clean Air Act. Most air pollutants affecting Weed come from mobile sources such as automobile traffic, trucking, and rail. Stationary sources include fuel combustion or processing at industrial sites.

Community input revealed that in terms of air quality, participants were most concerned with the following:

- Poor air quality due to local industry and vehicle emissions
- Excessive air pollution along Interstate 5 and US Route 97

Emerging directions for Weed relate to how the City can:

- Regulate and reduce causes of air pollution
- Explore alternative renewable energy sources, particularly wind energy.

Noise

The Noise Element identifies noise sources and sensitive receptors within the City. The element provides information for the development of goals, objectives, policies, and programs to alleviate unwanted sound produced within Weed. The Noise Element is one of the seven mandatory elements of the General Plan. The State of California requires that all local jurisdictions prepare policy statements on noise and sources, establish maximum noise levels for each land use category, set standards for noise generation from transportation facilities and immobile noise sources, and develop a program for implementation of noise control measures. The City of Weed is generally a quiet town, but there are a number of stationary and temporary noise sources throughout the City. Stationary noise sources in Weed include highway noise from I-5 and US 97, the CORP rail line, and Roseburg Forest Products Company.

Community input revealed that in terms of noise, participants were most concerned with the following:

- Proximity of noise generating land uses to sensitive receptors

Emerging directions for Weed relate to how the City can:

- Keep new developments away from noise sources.

Safety

The Safety Element identifies natural and human-made hazards in the City and proposes actions to ensure that the City takes adequate mitigation measures when possible, so that public health and safety are not compromised. The goals are to reduce risks of injury, death, and property damage that result from hazards such as fire, flooding, and earthquakes. The Safety Element also addresses hazards created by human activity: hazardous materials and waste, aircraft hazards, and incidents that require emergency response. The Safety Element describes the City's policy directions and implementation actions to prepare for and respond to emergencies.

The City of Weed is located in a seismically active region. The active faults that are capable of ground shaking in the City are two unnamed faults cascading Mount Shasta and the Yellow-Butte Fault. In addition to seismic activity, Mount Shasta is a stratovolcano which has potential to erupt and cause damage to the City of Weed. Flooding is not a significant hazard in Weed; however, a 100-year flood could potentially cause damage in areas surrounding Boles Creek. High-severity fire zones surround weed. Fires are a major threat to the City due to high winds, dry conditions, and recreational activities that may encourage incidental fires. Emergency preparedness in Weed may be inadequate, as The City has not published official evacuation routes, preparedness checklists, warning systems, or a chain of command for emergency response services.

Community input revealed that in terms of safety, participants were most concerned with the following:

- High potential for wildfire
- Crime related activities

Emerging directions for Weed relate to how the City can:

- Improve disaster preparedness and emergency response systems
- Enhance fire prevention strategies and defensible spaces
- Expand drug and alcohol prevention and treatment programs
- Create more recreational and employment opportunities for the youth.

Economic Development

The Economic Development Element is an optional element in the General Plan. This chapter provides the background information for development of General Plan goals, objectives, policies, and programs to improve and enhance the City's economy. By aligning and analyzing key factors that drive Weed's local economy, as well as the City's role within the Siskiyou County region, the City can help guide economic development through the appropriate allocation of land uses. According to the Governor's Office of Planning and Research, economic development plays a significant role in the physical development of the planning area and stability of the local tax base. For the City to remain competitive and support ongoing and developing industries, economic strengths and weaknesses are identified under this element.

In 2015, the South Weed highway commercial service industry captured the majority of the City's revenue from retail and services. Weed had a limited amount of big box retailers, which supported the development of local business but caused residents to travel to other municipalities to acquire goods and services. Furthermore, many commercial properties in the downtown core were vacant, which detracted from the local economic condition. The economic base of Weed consisted of educational services, accommodation and food services, and the retail trade sector. The largest employers in Weed were the College of the Siskiyous followed by Crystal Geyser, and Roseburg Forest Products Co., of which the latter primarily provided blue-collar jobs to city and county residents.

Community input revealed that in terms of economic development, participants were most concerned with the following:

- Competition for revenue between downtown Weed and South Weed
- High rates of vacancy and lack of investment in downtown businesses
- Limited skill set of the local workforce
- Lack of well-paying jobs
- Limited work opportunities and out-migration of the youth population
- Lack of investment in downtown businesses

Emerging directions for Weed relate to how the City can:

- Promote a more thriving and vibrant downtown with a mix of shopping, dining, and recreational activities for local residents and visitors to enjoy
- Promote sustainable local businesses, especially by harnessing the region's strong winds
- Bolster the revenue stream from the I-5 highway commercial corridor
- Attract and retain a diversity of employment opportunities
- Increase investment in local businesses.

Public Facilities

The Public Facilities Element describes the existing services and utilities provided by the City and identifies deficiencies or inadequacies in meeting the needs of the City. The element provides a comprehensive overview of existing public service infrastructure and facilities in the City of Weed. Public services and facilities are important to and support quality of life in the community. The element identifies key areas to develop goals, policies, programs that focus on community development, safety services, and water management in the City.

Weed's public facilities include water, utilities, waste management, public schools, law enforcement, fire protection, and emergency medical services. Water is supplied and distributed to the residents of Weed through a system of ground water wells and a spring. The City owns and operates two wastewater treatment facilities as well as a solid waste management plant. Solid waste is diverted to the Black Butte Transfer Recycle Station in Mount Shasta and the City receives trash-collecting services through C & D Waste Removal. The City of Weed has two public schools for children: an elementary-middle school and a high school. Weed is also home

to the College of the Siskiyous, a local community college. The City provides police services while the Weed Volunteer Fire Department provides fire services.

Community input revealed that in terms of public facilities, participants were most concerned with the following:

- Maintenance of city streets
- Inadequate funding for infrastructure improvements and programs
- Declining school enrollment and performance

Emerging directions for Weed relate to how the City can:

- Work with the school district to expand services and programs for children, teens, and families
- Maintain water resources and improve water infrastructure.

Health

The Health Element identifies measures of physical and mental wellness in the community. Its objectives include access to recreation and open space, healthy foods, medical services, public transit, safe active transportation, quality housing, economic and educational opportunities, and environmental quality. This optional element addresses health disparities, promotes healthy living, and uses the General Plan to encourage public health through land use policy. This element uses various indicators and standards to measure health and wellness conditions established by federal, state, and local agencies.

In 2015, the main challenges pertaining to the health of residents in Weed related to access to healthy food options, proximity to mental healthcare services, and limited safe alternative transportation options. City residents had decent access to medical services in the surrounding area, including a full-service medical center in Mount Shasta. Access to parks and recreational opportunities were sufficient, and air quality and water supply were in good condition according to state mandated standards.

Community input revealed that in terms of health, participants were most concerned with the following:

- Accessibility and proximity to a range of medical services
- Limited healthy food options
- Limited after school programs for kids and teenagers

Emerging directions for Weed relate to how the City can:

- Improve access to healthy food options
- Encourage the expansion of a range of accessible medical facilities in the City and surrounding areas
- Promote an active lifestyle through enhanced recreational opportunities
- Increase health education and awareness
- Expand recreational opportunities and afterschool programs for the youth.

Community Design

The Community Design Element addresses the unique character and features of the City's built environment and visual quality. The Community Design Element serves two purposes: (a) identify existing conditions of Weed's built environment; and (b) provide ways to preserve and enhance desirable community attributes. The goal of the element is to enhance the physical character of the City and to guide the form and appearance of neighborhoods, streets, parks and public facilities as well as new development.

In 2015, the City of Weed had no formal design districts but did follow a "Mountain Western Theme". Gateway signage identified main entrances into Weed, contributing to the City's identity. Landmarks such as the scenic Mount Shasta, the statue of Abner Weed outside City Hall, and the Weed Mercantile Mall also enhanced the City's sense of place.

Community input revealed that in terms of community design, participants were most concerned with the following:

- Enhancing the character and vibrancy of Main Street
- Maintaining the small town feel of Weed
- Highlighting the history of Weed in the City's physical design

Emerging directions for Weed relate to how the City can:

- Improve and enhance the City's gateways and landmarks
- Create more wayfinding and signage to help visitors and residents navigate the City
- Promote diversity and civic pride in the City.

1 INTRODUCTION

1.1 Setting

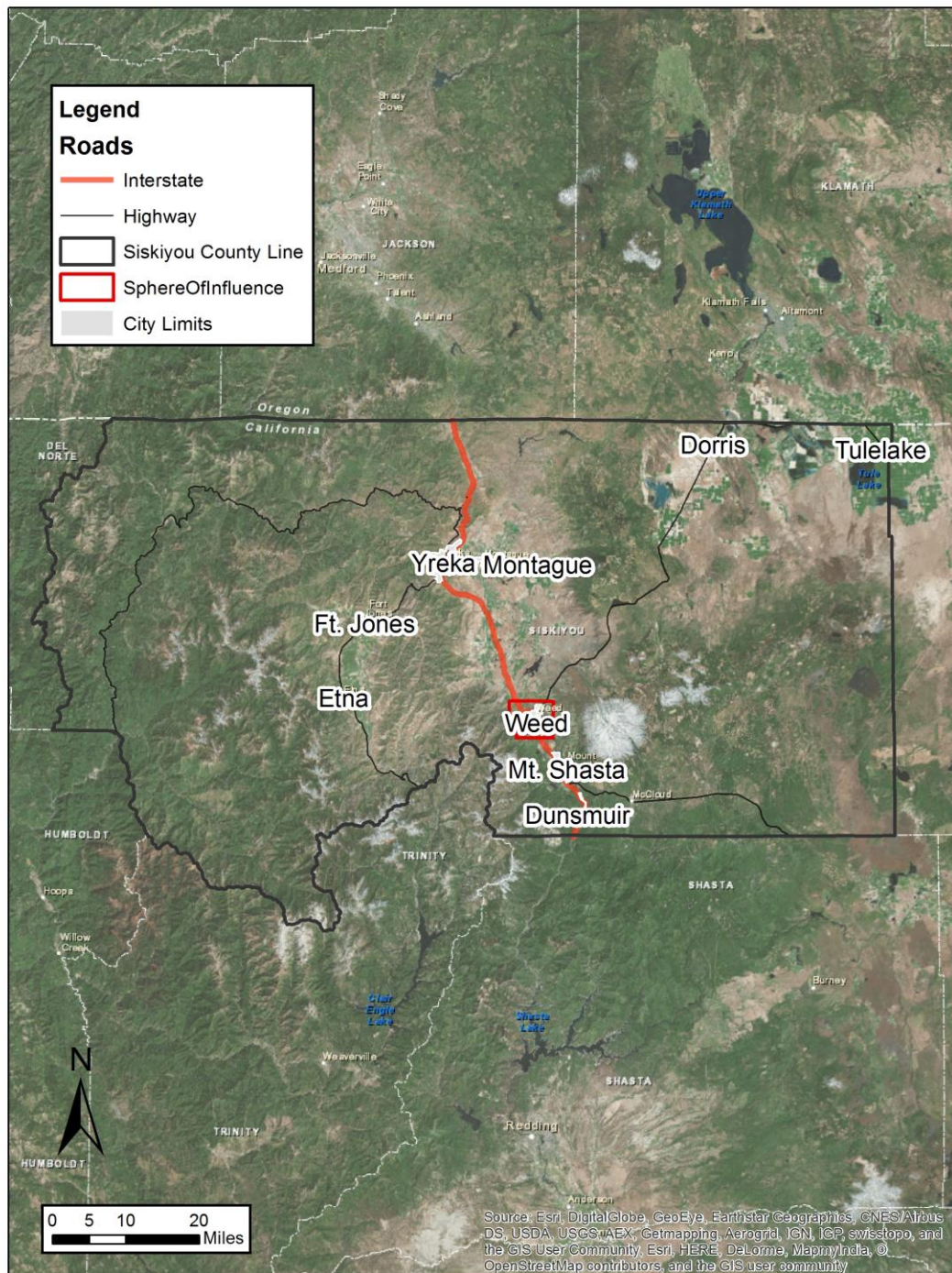
1.1.1 Location

The City of Weed is located in Siskiyou County, about nine miles north of Mount Shasta. The City is roughly 70 miles north of Redding, CA and about 50 miles south of the Oregon, California border, as shown on Map 1.1. The City is approximately five square miles within a sphere of influence of approximately 28 square miles. Map 1.1 shows that Interstate 5 (I-5) bisects the City from north to south. US Route 97 (US 97) intersects I-5 in central Weed and bisects a section of the City along its corridor to the northeast. I-5 and US 97 are major connectors between Oregon and California.

1.1.2 Climate

The City's climate is characterized by four distinct seasons. Average daytime temperatures range between 80 and 90 degrees in the summer and 30 to 40 degrees in the winter. The City averages about 12 inches of rainfall per year with over half occurring during the winter months. The winter season can begin as early as September and end as late as May. The growing season for the City averages 100 days.

Map 1.1 Location Map



1.2 History

The City of Weed was founded by the local pioneer, Abner Weed, in 1897 with the purchase of the 280 acre Siskiyou Lumber and Mercantile Mill for the sum of \$400. Categorized as a booming logging town by 1905, Weed was a busy and growing community. The mill was a great success and by the 1940's the City boasted the world's largest sawmill. The success of the mill was due in part to the fast moving mountain air currents descending over Black Butte summit, perfect for drying green lumber.

In its infancy, Weed was like any other Wild West town. In the late 1950's the mill was sold to an International Paper Company, which sold all company-owned homes to the residents. Since that time, the size of the mill has not changed significantly in the town. It operates 6 days per week, 20 hours per day and processes nearly 90 million board-feet (MMBF) of logs annually while sustaining a payroll of about 175 full-time equivalent employees. Though the City's origins began as a company town, it was incorporated as a General Law City in 1961 (Weed Historic Lumber Town Museum). Today, the City has one of the remaining lumber mills in the State. Weed has diversified to provide strong educational services through the College of the Siskiyous and services for travelers between major cities to its north and south.

1.3 Long Range Planning

California law requires both cities and counties to adopt a General Plan to guide future development (Government Code Sections 65300 et seq.). The General Plan outlines goals and policies to guide long-range planning within a city or county, and to "act as a 'constitution' for development. The General Plan is the foundation upon which all land use decisions are to be based (California Governor's Office of Planning and Research [OPR], 2003). According to OPR guidelines, the General Plan 'expresses community development goals and embodies public policy relative to the distribution of future land use, both public and private' (OPR, 2003).

California law mandates that a General Plan cover seven elements: Land Use, Circulation, Housing, Conservation, Open Space, Safety, and Noise. Five additional elements are included in this plan for depth: Public Facilities, Economic Development, Air Quality, Community Design, and Health.

Weed's most current General Plan was completed in 1982. This Background Report is intended to guide the General Plan Update by providing existing conditions and community feedback that will inform the development of the Plan. In collaboration with the City of Weed, this Background Report is the work of a team of second-year graduate students and a faculty advisor in the City and Regional Planning Department at California Polytechnic State University, San Luis Obispo.

1.4 Planning Boundaries

A General Plan must cover the territory within the boundaries of the adopting city as well as any land outside these boundaries, which the planning agency finds relates to the City's planning

(§65300; OPR, 2003). This section describes the planning area for the City of Weed. Map 1.2 shows the city limits and Sphere of Influence.

1.4.1 City Limit

Weed's city limit is comprised of land on which use is controlled by the City (OPR, 2003). The city limit encompasses an area of about 3,077 acres or 4.8 square miles. Land Use within the city limit includes residential, commercial, circulation, industrial, open space, public facilities, and vacant land.

1.4.2 Sphere of Influence

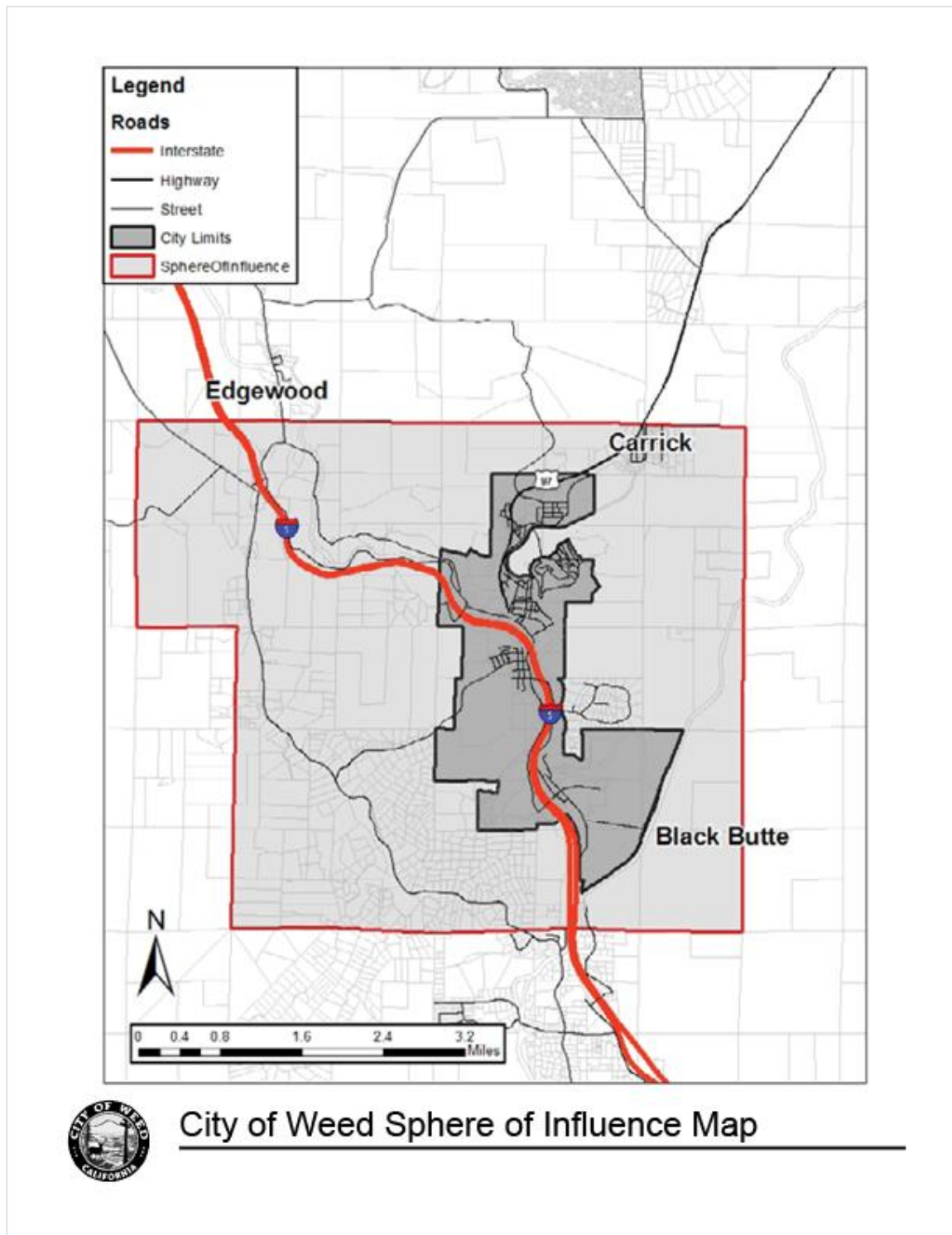
A city's Sphere of Influence (SOI), is adopted by the Local Agency Formation Commission (LAFCO), and includes incorporated land and unincorporated territory for which the City provides public services (OPR, 2003). The City of Weed's SOI includes approximately 28 square miles of unincorporated land. Unincorporated areas surrounding Weed include: Edgewood, Carrick, and Black Butte. Map 1.2 shows Weed's SOI.

The SOI contains valleys, rolling, moderate and steep hillsides (20 to 60 percent), alluvial plains, hilltops, ridgelines, and flowing creeks. Existing land uses and structures in Weed's SOI range from open space, agriculture uses, animal grazing, and single-family residences, to industrial and manufacturing land uses. In addition, the SOI holds transmission lines and oil and gas pipeline easements.

1.4.3 Planning Area

A city's planning area boundary includes incorporated and unincorporated territory bearing relation to the City's planning. The planning area may extend beyond the SOI (OPR, 2003). In Weed's case, the planning area does not extend past the city limits; however, areas outside the city limits are addressed only in the case of concepts pending future evaluations of appropriate land uses for annexations. Land outside the city limits is also addressed as it pertains to access and connectivity of goods and services to city residents.

Map 1.2 City of Weed Sphere of Influence



Source: City of Weed, 2015

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2 PLANNING PROCESS

2.1 Introduction

This section describes the community planning process employed to engage residents, leaders, and officials of the City of Weed in the update of the City's General Plan. The General Plan Update is a community-based project that draws heavily on the input of local residents and stakeholders to guide future development of the City. This plan is a partnership between the City of Weed, the Ford Family Foundation, and Cal Poly San Luis Obispo. The information in the background report contains a body of research conducted by second year graduate students in the City and Regional Planning Department at Cal Poly, San Luis Obispo under the direction of Dr. Cornelius Nuworsoo. The background report serves as a foundation for the General Plan Update, and contains information regarding the existing conditions, policies, regulations, programs, infrastructure, and services for the City of Weed, Siskiyou County, and the State of California, as they relate to planning activities. The issues, opportunities, and emerging directions for the City of Weed as they pertain to each element of the General Plan Update are based on research of existing conditions and community feedback gathered during public meetings held on October 10, 2015 and November 7, 2015.

2.2 Research Methods

The City of Weed Background Report was generated using data gathered from the months of September through November 2015. Three research methods were used to gather information to guide the planning team and inform existing conditions in the City of Weed and Siskiyou County. The research process identified emerging directions, which serve as a guide to the development of goals, objectives, policies, and programs in the General Plan. The following sections describe the research methods used during the data gathering process.

2.2.1 Secondary Research

Secondary research refers to the collection and synthesis of existing data and resources in order to build upon existing information. Secondary research provided the planning team with the necessary background information and regulatory framework in order to understand current conditions in the City of Weed. Through an analysis of past demographic conditions and relevant city and county policies, the planning team was able to identify emerging trends in the City as they pertain to each element.

The initial step for the research process began with an analysis of the California Office of Planning and Research (OPR) guidelines. The guidelines provide the underlying framework and outline the components of each mandatory General Plan element. The OPR guidelines identify data and information needs of each element, which led the team to the appropriate documents for further study and analysis.

The next step involved the examination and analysis of city and county planning documents. Relevant documents for analysis include current city and county plans, policies, reports, and programs pertaining to the City of Weed. These documents provide the historical context necessary for the development of the General Plan and identify additional resources for gathering information about the City.

Data from the U.S. Census Bureau was used to describe demographic trends, economic trends, travel behavior, and housing characteristics in the City of Weed. Complete census data is collected every ten years in cities across the U.S. 2010 census data was used for a majority of the analyses performed in the Background Report. The American Community Survey (ACS) is published every three to five years depending on the topic, and is based on a sample of the population. ACS data was also used to perform much of the analyses in this report.

2.2.2 Land Use Inventory

The City of Weed's city limits consist of 1,473 parcels. In order to use reliable data for the development of goals, objectives, policies, and programs for the General Plan, a thorough inventory of existing land uses within the City was conducted in person by the planning team in early October of 2015.

The team surveyed every parcel and gathered the following information:

- Active land use(s): whether primary, secondary, or tertiary
- Occupancy: whether the parcel was occupied or vacant
- Absence or presence of sidewalk: the condition of the sidewalk, if present

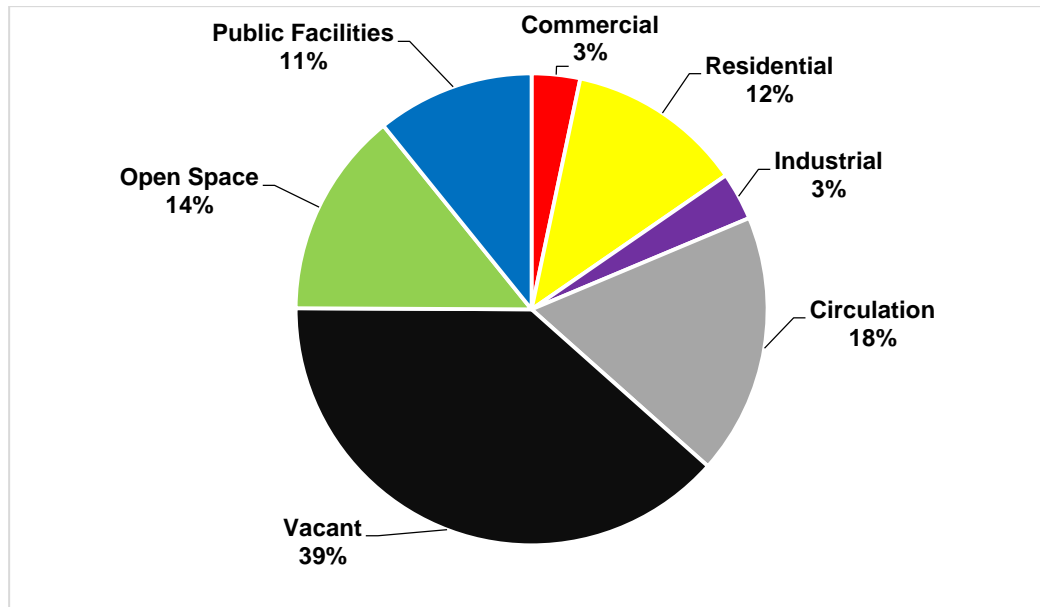
In addition to gathering information for each parcel, the following information was recorded for any, and all, structures located on each parcel or lot:

- Occupancy: whether the structure was vacant or occupied
- Number of structures
- Type of each structure
- Number of stories for each structure
- Physical condition of each structure: ranked good, fair, poor, or bad quality

Active land use identified the primary use of each parcel, such as residential, commercial, industrial, circulation, public facility, open space, and other uses. Within each category, additional data was collected on the specific characteristics of each land use category. For example, residential land uses can be subdivided into single family detached, single family attached, multi-family, mobile home, or apartment structure. Commercial uses included subcategories of retail, office, service, and industry.

Data collected from the land use inventory is shown in Figure 2.1.

Figure 2.1 Land Use within City Limits



Source: Cal Poly Land Use Inventory, 2015

2.2.3 Primary Research

Primary research refers to data that is collected first-hand through surveys, interviews, focus groups, or public meetings. This report draws from primary research conducted during public meetings held at City Hall in Weed on October 10, 2015 and November 7, 2015. The following section describes public outreach, community involvement, and themes in community feedback that were gathered during the planning process.

2.2.3.1 Public Outreach & Community Involvement

Community outreach is fundamental to the planning process by ensuring that the General Plan incorporates the thoughts, opinions, and preferences of residents. The planning team identified the following goals for public participation in Weed:

- Involve all stakeholders
- Identify issues and opportunities regarding the City's current state
- Educate community members about the planning process
- Have meaningful involvement throughout the planning process
- Incorporate community feedback into the plan
- Reach a representative portion of the population that reflects the City's diversity

In order to reach these goals, the planning team held two community meetings as well as outreach events at various locations, which included interviews and distribution of surveys. Public outreach was conducted at the local grocery store, local churches, College of the Siskiyous, community parks, and along Main Street. Residents were asked to fill out surveys that were aimed at capturing the same information gathered during the formal community

meetings in order to receive feedback from as many residents as possible, especially those who were unable to attend the meeting. The City of Weed planning staff assisted with establishing connections with other city staff and with the distribution of meeting materials through inclusion of information flyers in water bills.

The Cal Poly team developed and maintained a database of stakeholders (including contact information for all community meeting attendees). The outreach process utilized the following tools to inform the public of meetings and planning progress:

- Community Plan website (<http://plancityofweed.wix.com/plancityofweed>)
- Facebook and email blasts
- Telephone calls
- Newspaper announcements
- Printed fliers
- Bill stuffers
- Street Interactions

The following sections summarize the two community meetings and the major themes identified at each meeting.

2.2.3.2 Community Meeting 1: Focus Groups

The first community meeting was held on October 10, 2015 at City Hall in downtown Weed. The meeting began with an introduction to the General Plan, the contents of each element, and the process of updating the Plan. The meeting attendees were asked three questions about Weed. The questions were:

- What are the strengths of your community?
- What is holding your community back?
- What would make your community better?

Twenty community members, including City staff attended the meeting. Fifteen additional residents responded to the focus group questions via an online survey link following requests by Facebook and other electronic media. Participants were asked to list the strengths and barriers of Weed individually as well as their wishes for the future. Each question was then discussed in small focus groups. All the feedback was collected and analyzed based on how it pertained to each element of the Plan. The information gathered during this meeting was incorporated into a presentation for the November 7, 2015 meeting. Community members liked the City's geographic location, reasonable housing prices, variety of neighborhoods, good schools, clean air, variety of outdoor recreational opportunities, quiet atmosphere, local entrepreneurship, and small-town character. The community disliked the limited economic diversity, limited medical services, drug related activities, limitations on water resources, pollution from major highways and industry, and lack of local connectivity. To improve the City, participants felt that the City needs to have better enforcement of codes and ordinances, more mixed use and diverse neighborhoods, more sidewalks, more affordable housing for all income levels, expanded facilities for arts and culture, and better open space connectivity and maintenance. The following photos show the focus group activity at the first community meeting.



Community Meeting #1, Small Group Discussion



Community Meeting #1, Small Group Discussion



Community Meeting #1, Re-Group



Community Meeting #1, Re-Group

2.2.3.3 Community Meeting 2: Visioning and Emerging Directions

The second community meeting was held on November 7, 2015 and was aimed at identifying preferences for the future of Weed based on each element of the General Plan. A presentation was created based on the community input received during the first meeting, the Land Use Inventory, and research on existing conditions. The purpose of the presentation was to show Weed's current state, some of the main issues and opportunities facing the City, and what changes could reasonably be expected given community preferences. The planning team developed emerging directions that adequately reflected the community's interest and fit within the background research and regulatory framework conducted throughout the planning process. Approximately 35 community members attended the November 7, 2015 meeting, held at City Hall on Main Street. The presentation consisted of three breakout sessions where community members were given the opportunity to vote on their individual preferences for potential options under various emerging directions for each element of the Plan. These preferences were based upon the information gathered at the October 10, 2015 meeting, outreach events, and the online surveys. The following photos show the preference activity conducted during the second community meeting.



Community Meeting #2, Breakout Session



Community Meeting #2, Breakout Session

2.3 Themes in Community Feedback

Several common themes emerged during the community outreach process. The following sections summarize some of the main strengths, barriers, opportunities, and constraints for the future of Weed as identified by community members. Additional themes can be found in the Issues and Opportunities section of each chapter.

2.3.1 Community Meeting I

2.3.1.1 Strengths

Residents identified the following strengths in the City of Weed:

- Good regional connectivity due to the highway system
- The City's small-town character and strong sense of place
- Relatively reasonable housing prices in the City
- Variety of neighborhoods and generally quiet atmosphere
- Clean air and scenic backdrop of Mount Shasta
- Variety of outdoor recreational spaces and activities
- Intimate, clean, diverse, and relatively safe community in Weed
- Decent physical health care services
- Presence of the College of the Siskiyous
- Strong sense of local entrepreneurship and blue-collar job market

2.3.1.2 Barriers

Residents identified the following as barriers challenging the City of Weed:

- Sprawling development that has occurred in the past
- No clear process or vision for future growth
- The limited infrastructure and services for alternative transportation
- The lack of affordable and diverse housing stock for all income levels
- Declining school enrollment and performance
- Insufficient access to parks and youth-centered recreation programs
- Limitations on water resources
- Pollution from local highways and industry
- Lack of employment opportunities and well-paying jobs
- Limited medical services, high wildfire danger, and substance abuse

2.3.1.3 Wishes

Residents wished for the following:

- Better enforcement of the City's codes and ordinances
- Recreational centers and activities for kids and youth
A greater mix of land uses, more diverse neighborhoods, and incorporation of nearby communities
More connectivity between parks and public open space with better maintenance
- Improved safety and accessibility for alternative transportation modes
- Sufficient affordable housing for all income levels
- Enhanced relationship with College of the Siskiyous
- Protection of water resources
- Development of alternative energy sources and sustainable businesses
- Reinvestment and revitalization of the downtown core
A diversity of shopping, entertainment, and restaurant services
Identifiable landmarks, gateways, and signage in the City
More specialized medical services and better access to healthy food options
Promotion of neighborhood watch groups and drug and alcohol education and prevention programs for the youth.

2.3.2 Community Meeting 2

This section summarizes input from the preference poster activity conducted during the second community meeting on November 7, 2015. All chapters in the background report include information gathered from this meeting. The following information summarizes the community's preferences based on each element.

Land Use

- Focus on redevelopment and infill of vacant lots
- Incorporate adjoining communities

- Concentrate development in Central Weed and South Weed

Circulation

- Focus on biking and walking as alternative transportation modes
- Prioritize sidewalk repair in Central Weed
- Prioritize road pavement repair

Housing

- Prioritize student, senior, and workforce housing in terms of special needs housing
- Prioritize apartments and secondary dwelling units (granny flats) as the main type of affordable housing
- Single-family detached housing is the most preferred type of housing in Weed

Open Space

- More biking and walking trails in Weed's parks
- Prioritize small neighborhood parks (pocket parks)

Conservation

- Water should be the top conservation priority in Weed
- Solar panels are the most preferred way to conserve energy
- Air pollution is the most pressing environmental health concern

Air Quality

- Residents would prefer to use clean energy sources to improve air quality

Noise

- Industrial noise is the most bothersome noise source in Weed
- Noise is most excessive in South Weed

Safety

- Crime and fire prevention are the most pressing safety concerns in Weed
- Monitoring drug related activity is the preferred way to reduce crime in Weed
- Residents feel most safe near the College of the Siskiyous
- Residents feel most unsafe in South Weed

Economic Development

- Boutique stores are the most preferred type of commercial development for downtown Weed
- Weed should prioritize vocational workforce training for renewable energy

- Retail and services, skilled trade and vocational work, health care services, and specialty shops are the most needed types of economic activity in Weed
- Weed should promote outdoor recreational activity as the main type of tourism
- Economic development should be promoted in downtown/Central Weed

Public Facilities

- The most needed recreational or community facility in Weed is improved access to College of the Siskiyous facilities
- Education and drug abuse require the most attention in Weed
- A teen activity center is the most preferred youth activity
- The existing services that need the most attention are public infrastructure and youth recreation programs

Health

- Senior care, physical and mental rehabilitation centers, and health education are the most pressing health needs in Weed
- Social recreation is the most needed type of activity for senior citizens
- Career tutoring is the most needed type of activity for youth
- Healthy supermarkets would be the best way to encourage healthier food choices
- Recreational trails, activities, and facilities would be the best way to promote physical activity in Weed

Community Design

- Gateway signage should be located at the approach to Central Weed on I-5 at the US 97 exit
- Public art and landmarks are the most preferred type of wayfinding amenities along Main Street
- Sidewalks and street trees should be prioritized along Main Street
- Paving, streetscaping, sidewalks, and bike lanes should be prioritized in residential neighborhoods

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3 DEMOGRAPHIC TRENDS

3.1 Introduction

This chapter provides an overview of demographic trends within the City of Weed. The City's current demographic composition and projected growth estimates are fundamental to the General Plan by informing the land use, circulation, and housing elements. Demographic trends pertain to land use by determining the amount of residential, commercial, open space, and public facilities land necessary to accommodate future growth. Population growth estimates are required to allocate sufficient space for housing, and to determine location, density, and intensity of future residential land uses. Similarly, commercial land use is impacted by demographic trends in income and employment levels. Open space and public facilities allocation are guided by population growth as well. The distribution of land use is also critical to establishing circulation patterns within the City that ensure sustainable development patterns, foster economic growth, and conserve natural resources within the City and Sphere of Influence.

The California Office of Planning and Research (OPR) recommends that General Plans incorporate population projections from the California Department of Finance or the regional Council of Governments (COG) (OPR Guidelines, pg. 40). This chapter describes historical demographic trends in the City of Weed and Siskiyou County based on U.S. Census data, and provides County population forecasts into 2060 from the Department of Finance as emerging directions. These demographic growth projections will be used to inform the planning process for each element in the 2040 General Plan in order to ensure that goals, objectives, policies, and implementation programs reflect the unique socio-economic characteristics of Weed. In addition to ensuring consistency between elements, this chapter will serve as a foundation for assessing the type and location of growth that will best support a safe, healthy, happy, and productive city.

3.2 Existing Conditions

This section describes the community composition of the City of Weed. The demographic trends in Weed serve as a foundation that informs the entire planning process. Identifying the unique qualities of Weed's population is important in developing a plan that adequately addresses the needs, concerns, and desires of the community. This chapter examines population trends, age and sex composition, racial and ethnic composition, income, and educational attainment within the City of Weed based on data from the United States Census. A more in-depth discussion of socio-economic characteristics within the city is provided in the Housing and Economic Development Element.

3.2.1 Population Growth

In 2010, Weed had a population of 2,967 residents, which was 6.6 percent of the population of Siskiyou County. Between 2000 and 2010, the population of Weed declined by 0.37 percent,

which is 0.04 percent annually. However, the population of Siskiyou County grew by a total of 1.35 percent, or 0.14 percent annually. This steady decline shifted drastically after the 2014 Boles fire, when the population dropped almost 9 percent (Department of Finance, 2015). Table 3.2.1 and 3.2.2 show the comparative population trends in the City of Weed and Siskiyou County before and after the Boles fire.

Table 3.1 Population Growth 2000 to 2010

| | 2000 | 2010 | Percent Change | Annual Change |
|------------------------|--------|--------|----------------|---------------|
| Weed | 2,978 | 2,967 | -0.37% | -0.04% |
| Siskiyou County | 44,301 | 44,900 | 1.35% | 0.14% |

Source: U.S. Census Bureau Table DP-1, 2000 and 2010

Table 3.2 Population Growth 2014 to 2015

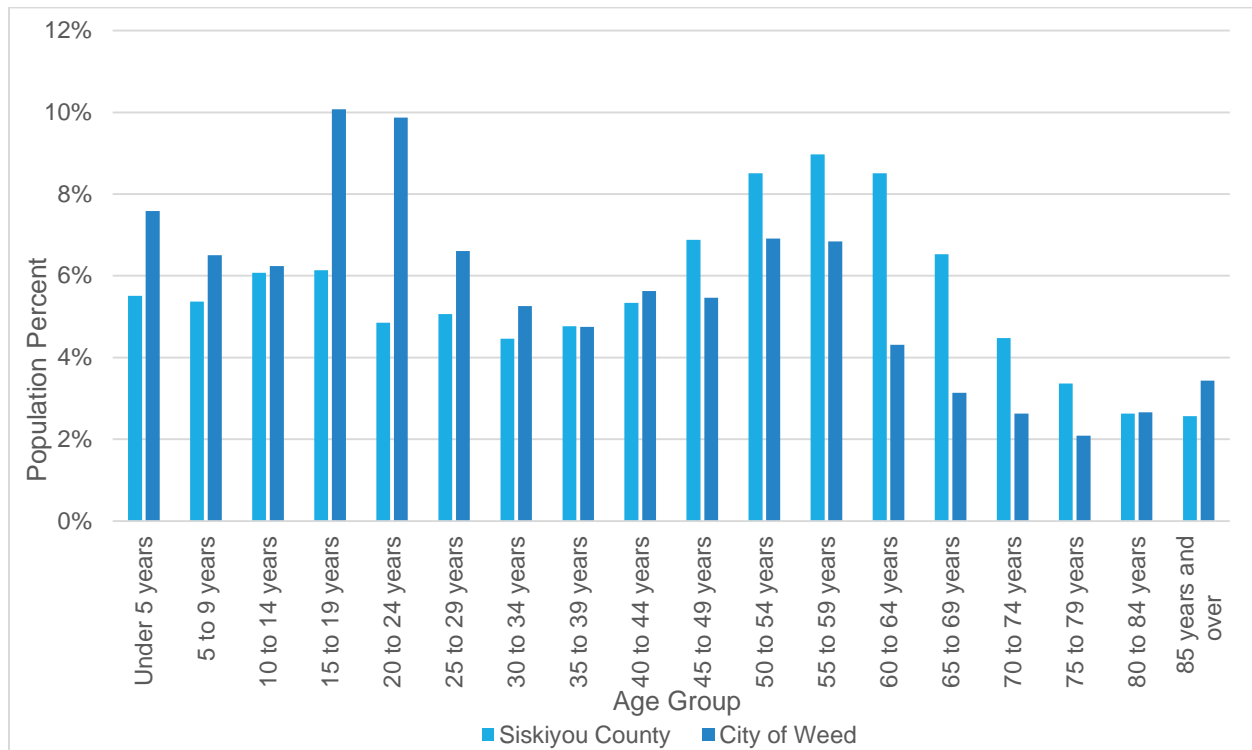
| | 2014 | 2015 | Annual Change |
|------------------------|--------|--------|---------------|
| Weed | 2,961 | 2,699 | -8.85% |
| Siskiyou County | 45,311 | 45,119 | -0.42% |

Source: California Department of Finance E-1: City/County Population Estimates

3.2.2 Age

The City of Weed has a much younger population compared to Siskiyou County. The median age in Siskiyou County is 47 while Weed's median age is 32.7, which is likely due to the presence of the College of the Siskiyous. Figure 3.2.1 illustrates the percent population by age for both the City of Weed and Siskiyou County. Weed has a greater percent of the population in all age cohorts below 34, and Siskiyou County has a greater percent of the population in all age cohorts over 34, with the exception of 40 to 44 and over 85 years old. Due to the concentration of young people in the City, it is important to address the unique needs of that demographic group by providing appropriate programs, services, and facilities. Although the middle-aged population in Weed is a smaller share of the total population than in Siskiyou County, the percentage of middle-aged residents in Weed is larger than that of other cohorts. Therefore, addressing the needs of middle-aged residents in Weed will be of great importance as well.

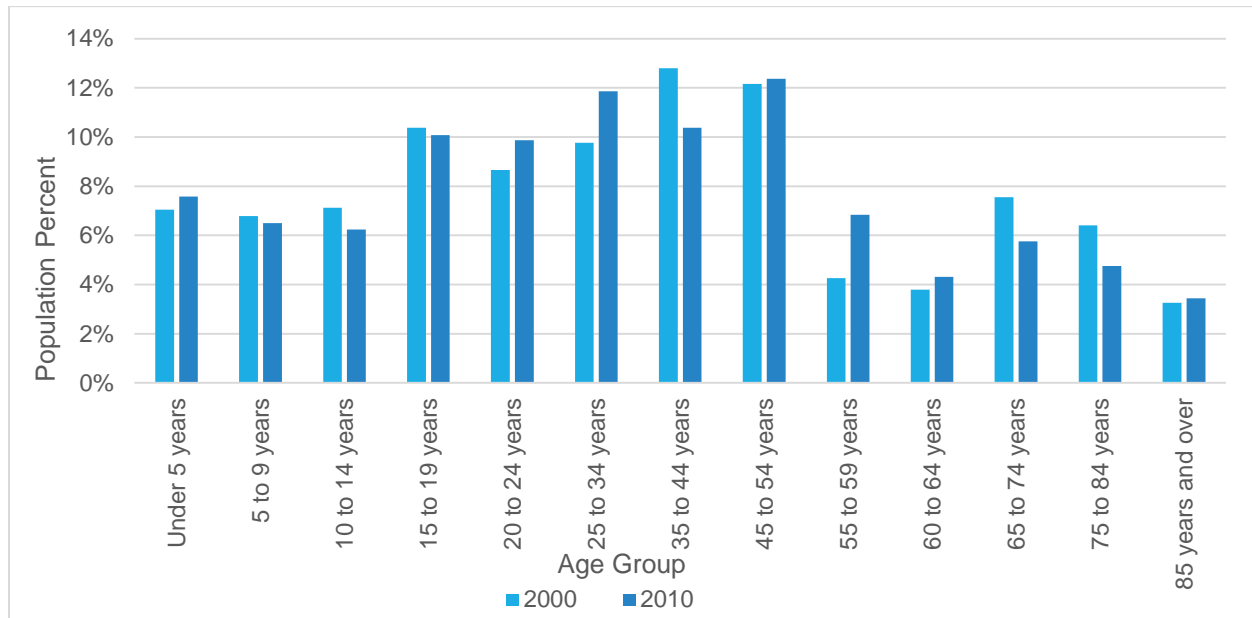
Figure 3.1 Population Percentage by Age, City vs. County



Source: U.S. Census Bureau Table DP-1 2010 City and County

Figure 3.2.2 shows the change in age distribution in the City of Weed from 2000 to 2010. There was minimal change in the population age distribution; however, there was a slight increase in the 20- to 34-age cohort, a slight increase in the 55- to 59-age cohort, and a decrease in ages 65 to 84.

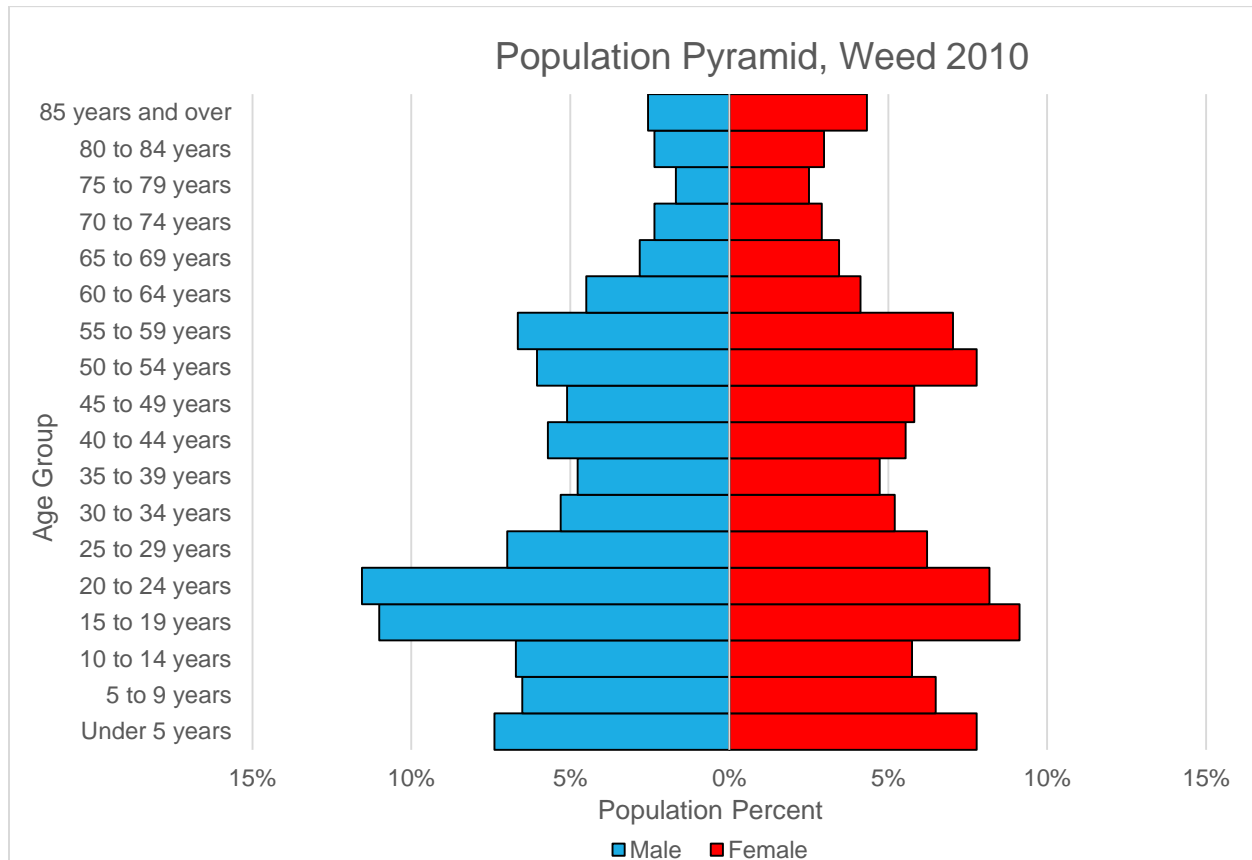
Figure 3.2 Weed Population by Age, 2000 vs. 2010



Source: U.S. Census Bureau Table DP-1 City; 2000 and 2010

The population pyramid in Figure 3.2.3 illustrates the distribution of ages by sex in Weed. The population age structure further depicts the large concentration of young people as displayed in Figure 3.2.1 and 3.2.2; however, it also shows that a greater percentage of the young people are males. The pyramid demonstrates that women between ages 50 and 59 outnumber men of that age group. Similarly, there are more women over the age of 85 than men. This information suggests that it is increasingly important to ensure adequate workforce opportunities to retain the large population of young people, to promote community development opportunities for families, and to invest in services to accommodate the growing aging population.

Figure 3.3 Population by Age and Sex

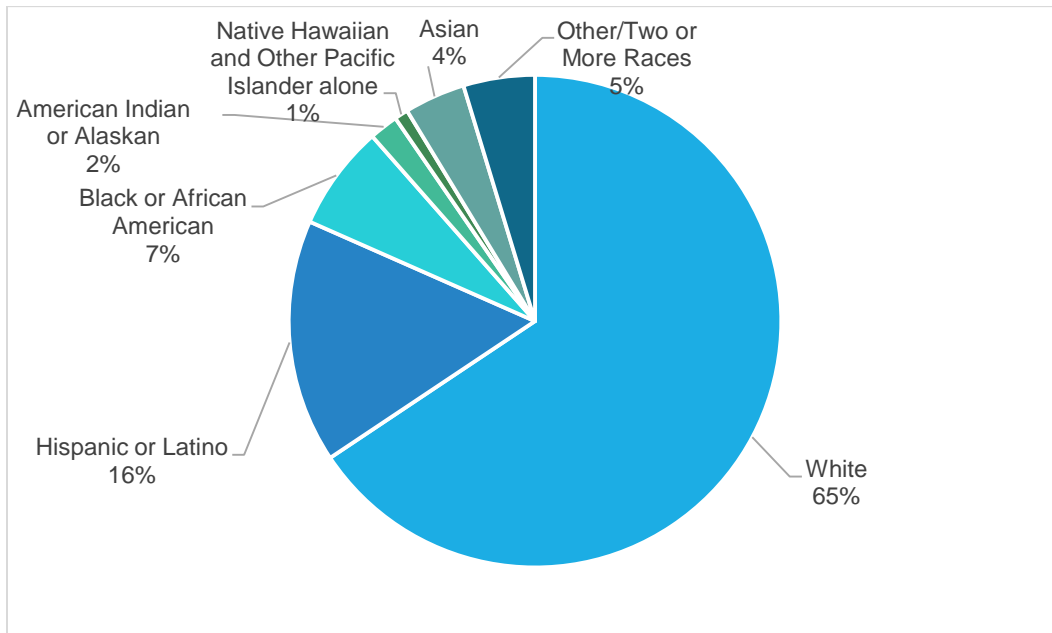


Source: U.S. Census Bureau Table DP-1 City 2010

3.2.3 Race and Ethnicity

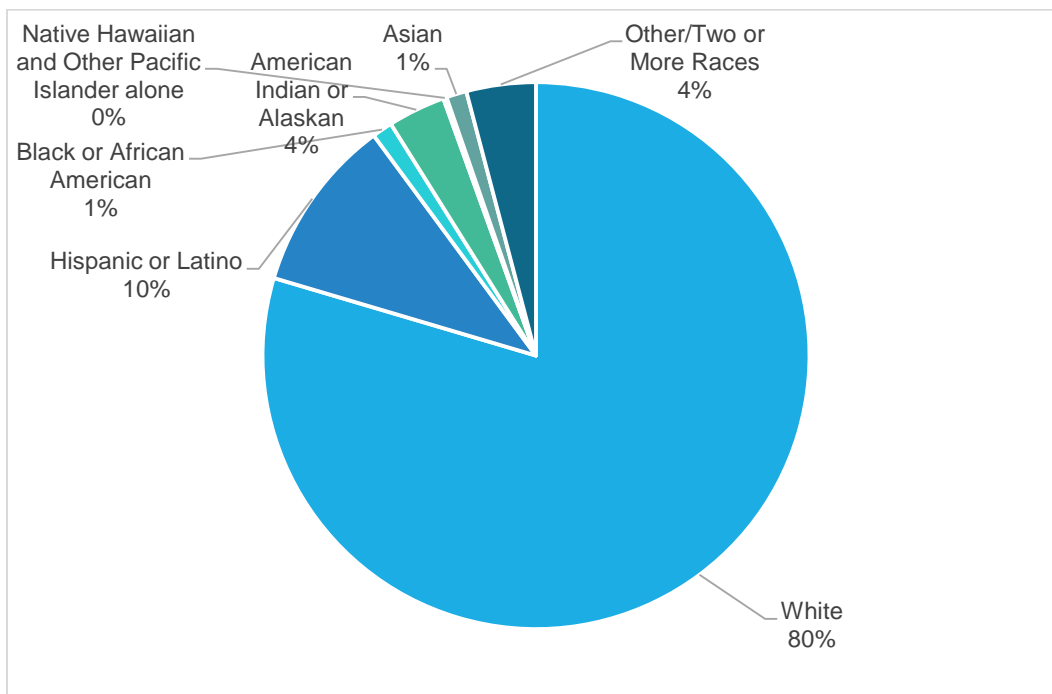
The ethnic composition of Weed is predominantly White, which comprises 65 percent of the total population. The second largest ethnic group is Hispanic or Latino, which makes up 16 percent of the population. In comparison to Siskiyou County, Weed contains a more diverse population. As demonstrated in Figure 3.2.4 and Figure 3.2.5, there is a 15 percent greater concentration of white residents in the County, and a smaller concentration of Hispanic and Latino, Black or African American, and Asian residents. Given Weed's ethnic diversity, it is important to ensure programs and services that fit the distinct needs of different cultural groups within the City.

Figure 3.4 Ethnicity of Weed



Source: U.S. Census Bureau Table DP-1 City 2010

Figure 3.5 Ethnicity of Siskiyou County

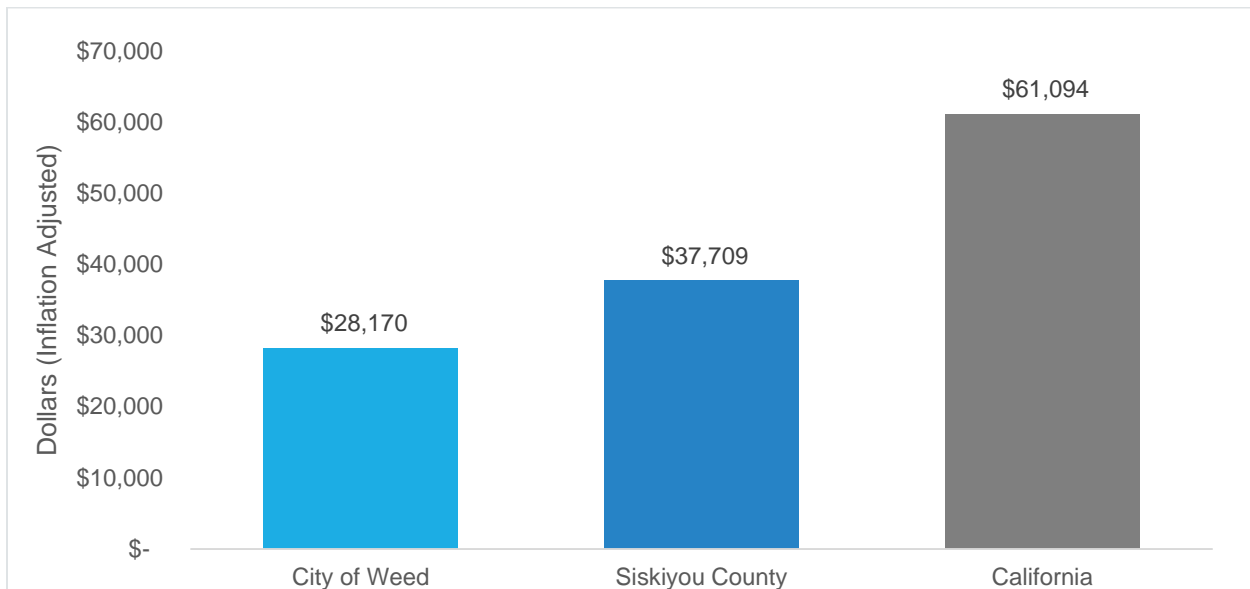


Source: U.S. Census Bureau Table DP-1 City 2010

3.2.4 Income

In 2013, the median household income in Weed was \$28,170. This is significantly lower than the median household incomes in both Siskiyou County and California, which were \$37,709 and \$61,094, respectively. Figure 3.2.6 shows the comparison. The median household income of Weed is nearly one half as much as California's median household income, and about three quarters as much as the median income in Siskiyou County. The low median household income in Weed can be partially attributed to the large college population.

Figure 3.6 Median Household Income, 2013

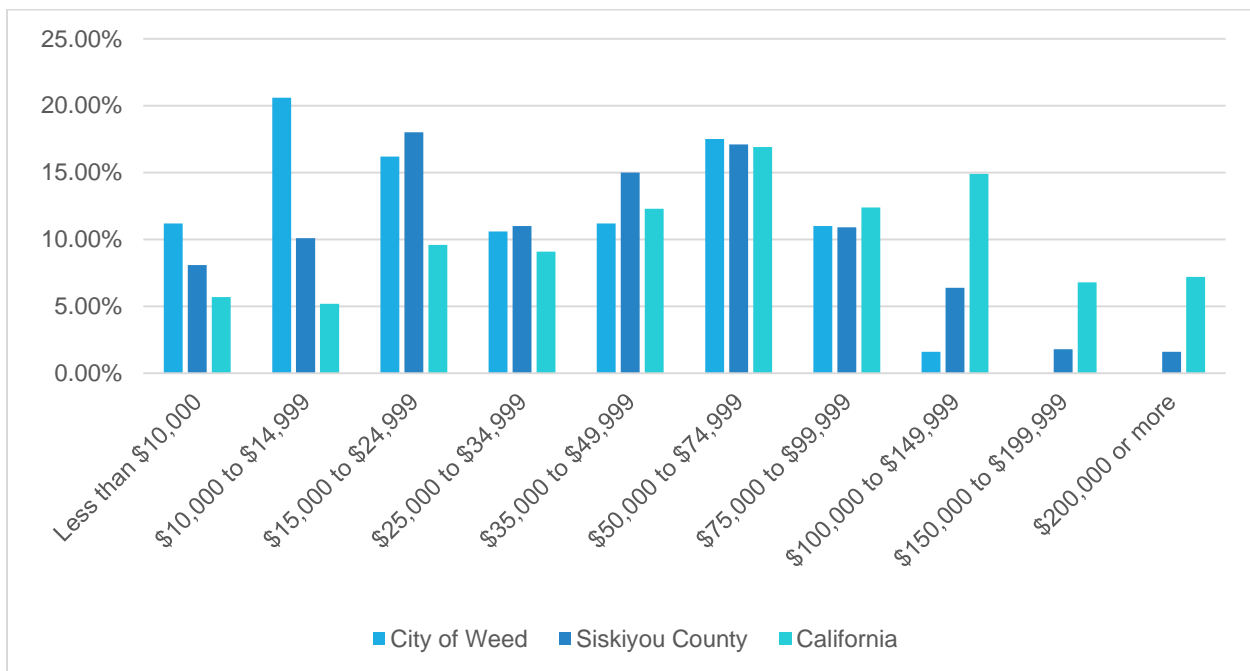


Source: U.S. Census Bureau American Community Survey Table B19001 2010

Figure 3.2.7 illustrates household income distribution by population percentage for Weed, Siskiyou County, and California. The City of Weed has a significantly greater percentage of households earning \$14,999 or less per year than Siskiyou County or California. The comparison of household income percentages across all three locations are relatively aligned for incomes between \$25,000 and \$100,000. However, the percentage of households in Weed earning more than \$100,000 per year is nearly non-existent. Figure 3.2.8 shows the distribution of household income in the City of Weed from 2000 to 2010. While the percentage of households earning less than \$10,000 per year decreased by 7 percent over the ten-year period, there was also a significant decrease in the percentage of households earning more than \$100,000 annually. With lower median household incomes than Siskiyou County, the greatest number of households in Weed earn between \$25,000 and \$34,000 annually.

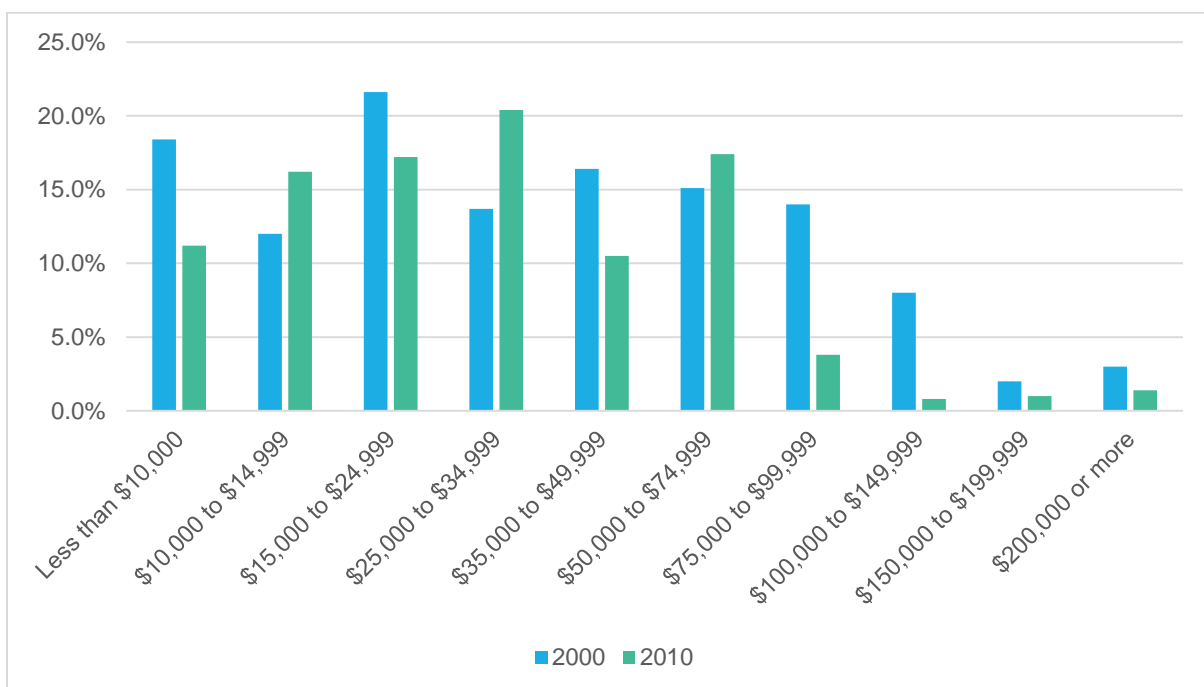
The U.S. Census Bureau defines the poverty line as “one person under 65 years old - \$11,702 annual income, two person households with no children - \$15,063” and “a family of four with two children under 18 - \$22,811.” The average family household has 2.49 persons, suggesting that the median household income of \$28,170 might be enough for the average household.

Figure 3.7 Comparative Household Income Distribution 2010



Source: U.S. Census Bureau American Community Survey Table B19001 2010

Figure 3.8 Weed Income Distribution 2000 and 2010

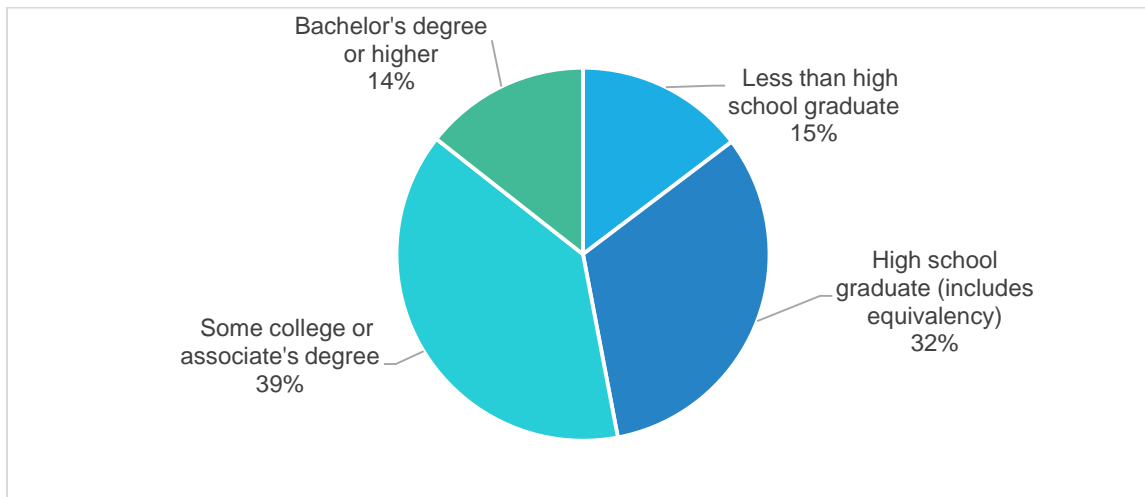


Source: U.S. Census Bureau American Community Survey Table B19001 2010

3.2.5 Education

In 2013, over half the population of Weed was recorded to have some college or associate degree or a bachelor's degree, making Weed a relatively well-educated city. However, 15 percent of the population never graduated from high school, which is higher than Siskiyou County and lower than California. Figure 3.2.9 shows the educational attainment in Weed. While 30 percent of Californians are recorded to have a bachelor's degree, only 14 percent of Weed's population has obtained a bachelor's degree. The percentage of the population who graduated high school is relatively uniform with levels in Siskiyou County and California. Low levels of educational attainment limit employment opportunities for individuals, as many careers require a minimum level of education or a professional degree. Weed can address education and employment by providing job-training resources and community development programs that help facilitate an economic environment that matches the skill set of the community.

Figure 3.9 Educational Attainment in Weed



Source: U.S. Census Bureau American Community Survey Table B16010 2010

3.3 Emerging Directions

3.3.1 Population Targets

The Department of Finance is responsible for forecasting population growth in Counties across California. The most recent population estimate of Siskiyou County shows that the population is projected to decline to 44,138 by 2060, which translates to a 1.6 percent decrease (Department of Finance, 2013). Estimating population trends is fundamental to the 2040 General Plan Update by informing future land use patterns including housing development, circulation, public facilities, and open space. While population trends in Siskiyou County can provide insight to growth patterns in Weed, the relatively denser and urbanized nature of the City will contribute to growth trends that diverge from those of the County. In order to forecast population trends in Weed, the 2040 General Plan relies on projections modeled by the Cal Poly team. The team utilizes the cohort component model, which relies on birth rates, death rates, migration rates,

and historical population trends to estimate future growth patterns. The results are summarized in the 2040 General Plan and used as a basis for the development of the Plan.

3.3.2 Community Outlook

Although the City of Weed observed a large outmigration of residents after the occurrence of the Boles fire, it is likely that the population will continue to grow steadily as the City rebuilds its housing and infrastructure. Based on the historical demographic trends presented in this Chapter, Weed will likely continue to have a large percentage of college-aged and middle-aged residents. During the community meeting on October 10, 2015, participants expressed deep concern for the continued investment in public services and public spaces that serve the greater community. Based on Weed's current demographic profile, it will be important for the City to develop programs and services targeted at the college-aged population and retaining these young people through adequate housing options, medical care, and other family support services. Similarly, the growing aging population will require additional senior care facilities, and programs and services targeted at elderly residents. Focusing on economic development opportunities will also help create jobs that will boost household income and retain jobs that match the skill level of Weed's workforce

3.4 References

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4 LAND USE

4.1 Introduction

Land Use is a mandatory element of the general plan under the California State Government Code §65302(b). The purpose of the Land Use Element is to designate the location, distribution, and intensity of the following uses: housing, commercial and industrial development, recreation, open space, agriculture, education, public buildings and facilities, and waste management facilities. The Element functions as a blueprint to guide planners, the general public, and decision makers on the future development of Weed. This element considers the physical, legal, and environmental constraints of land use as well as the preferences of the community in guiding the development of all land uses within the City.

4.2 Regulatory Setting

This section describes and summarizes the key federal, state, county and city statutes, regulations and policies that apply to land use in the City of Weed. Subsequent sections provide context regarding the discussion of existing conditions and emerging directions as a part of the General Plan update process.

4.2.1 Federal Regulations

While no Federal regulations directly dictate land use at the local level, the basic foundation for planning and zoning in the U.S. was laid by two standard state enabling acts published by the U.S. Department of Commerce in the 1920s. These Standard Acts still define the institutional structure in many states although certain procedural and substantive components may have changed.

The Standard State Zoning Enabling Act (SZEA), 1926

The Standard State Zoning Enabling Act (SZEA) was developed by an advisory committee on zoning appointed by Secretary of Commerce in 1921. After several revisions, the Government Printing Office published the first edition in May 1924 and a revised edition in 1926.

The Standard City Planning Enabling Act (SCPEA), 1928

The Standard City Planning Enabling Act (SCPEA) was first released in March 1927 and a final version was published in 1928.

4.2.2 State Regulations

California Governor's Office of Planning and Research

Pursuant to Public Resources Code, Section 2762 (a) and the California Government Code, Section 65302 (a) the element must identify all land use areas within the Weed planning

boundary. The California Governor's Office of Planning and Research (OPR) requires a land use map in addition to the allowable density and extent of the buildings located within these uses (OPR, 2003). Distribution refers to the number of acres of each land use in the City and the percent of each land use compared to the total acreage of the City. Allowable densities for each use are determined by the maximum number of housing units per acre or the maximum floor area ratio (FAR) for commercial and industrial buildings. FAR values can be derived by dividing the square footage of a building by the square footage of the parcel. The extent of a building refers to the allowable width, length, and height of each building depending on the designated land use and the size of the parcel. In addition, OPR requires that the Land Use Element be consistent with the Circulation Element to ensure accessibility of the projected population to designated land uses.

A land use diagram is required to be included in the Land Use Element by law. However, the land use diagram does not need to be as specific as a parcel map. OPR also requires that the Land Use Element contain quantifiable standards of density and intensity for each land use category. OPR recommends that the intensity standard should include permitted land uses or building types, and concentration of land use. OPR also recommends that the following topics be addressed within the Land Use Element.

- Housing, Business, and Industry
- Open Space
- Agricultural Resources
- Mineral Resources
- Enjoyment of scenic Beauty
- Education
- Solid and Liquid waste facilities
- Assessment of the potential for flooding
- Timber production
- Other private and public uses of land
- Public Buildings and Grounds

4.2.3 Local and Regional Regulations

Planning for Weed is influenced by such multiple agencies as the California Department of Transportation, the County of Siskiyou Planning Department, the Siskiyou County Environmental Health Division, the Siskiyou County Building Division, and the City of Weed local government. Documents produced by these agencies contain policies that impact land use within the Weed Planning Area. Key documents are identified as follows:

City of Weed Municipal Code; Title 18 - Zoning

Title 18 of the City of Weed Zoning Code provides regulations concerning zoning districts and Planned Unit Developments within the City of Weed. The Planned Unit Development District is intended to accommodate a range of development types such as neighborhood and district shopping centers, professional and administrative areas, multiple housing developments, single-family housing developments, commercial service centers and industrial parks. In addition, Title

18 provides regulations pertaining to various zoning designations such as areas for rural residential and commercial uses.

Siskiyou County Comprehensive Land & Resource Management Plan

The Siskiyou County Comprehensive Land & Resource Management Plan describes ethnic & cultural populations within the county area in terms of common actions, economic activity, and distinct use of land. This description is then used to advise federal and state agencies of the existence of these cultural populations so that no action can be taken which would diminish their ability to prosper. Land use in the City of Weed is impacted by the Plan's requirement that state and federal agencies must coordinate with county agencies when administering, regulating, or managing lands or natural resources within the county.

Siskiyou County General Plan

The Siskiyou County General Plan Land Use Element provides a variety of policies concerning land use in Siskiyou County. Land use in the City of Weed is directly impacted by this plan through its policies that affect land use in areas within the City's Sphere of Influence.

Siskiyou County Strategic Plan

The 2008 Siskiyou County Strategic Plan was developed over a period of seven months by the Board of Supervisors and County Staff. It contains seven goals that act as a 1 to 5-year guide to enhance the area. The document impacts land use in Weed through its first goal, which is the development of a comprehensive plan for growth and future land use.

Siskiyou County Regional Transportation Plan

The 2010 Siskiyou County Regional Transportation Plan serves as a guide for transportation investments within the county for a 20-year period. The Plan impacts future land use in Weed surrounding U.S. 97 and Interstate 5.

4.3 Existing Conditions

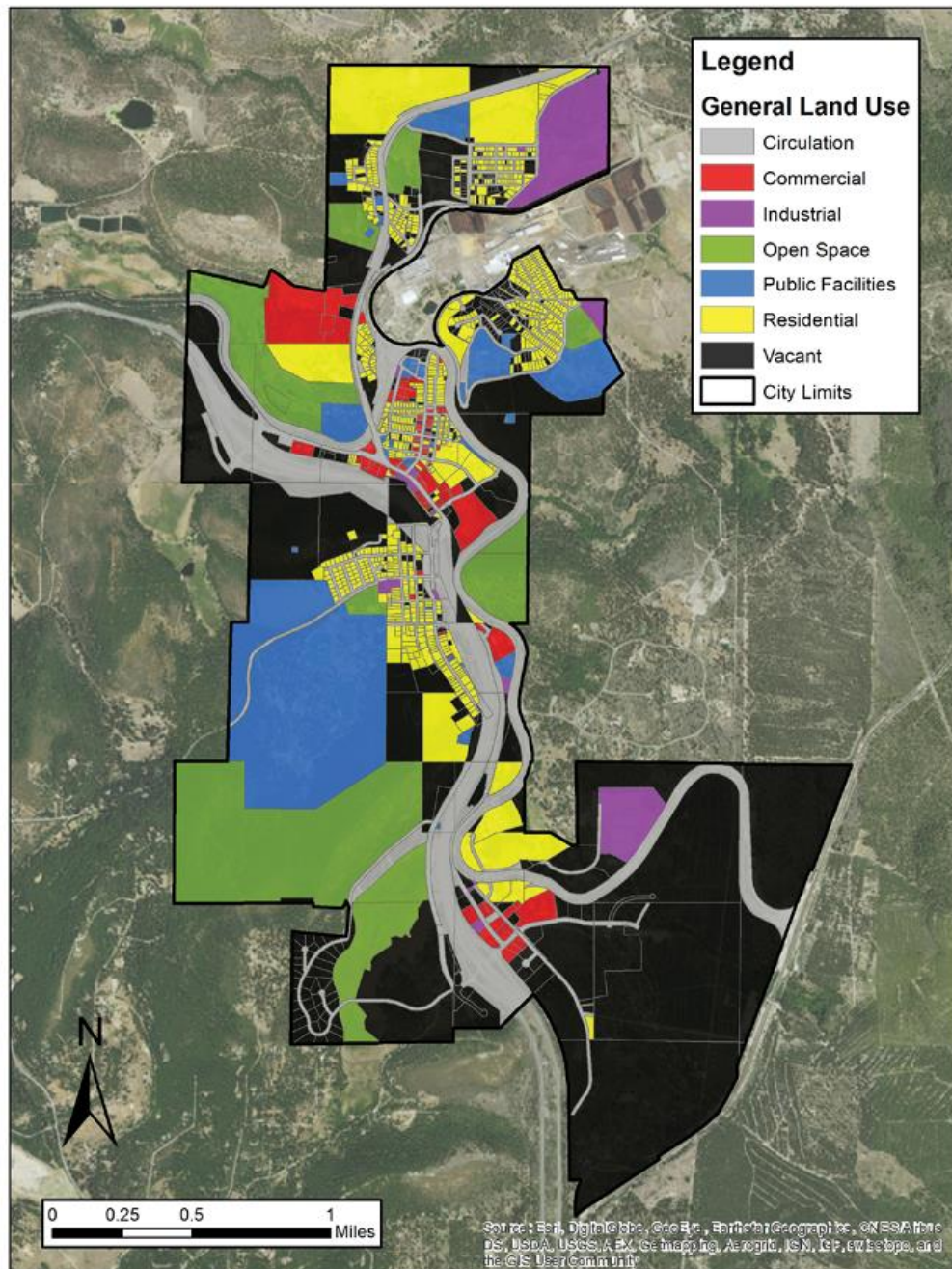
4.3.1 Inventory of Existing Land Use

A Land Use Inventory conducted in October, 2015 categorized all 1,473 parcels in the City into commercial, circulation, industrial, open space, public facilities, and vacant uses. The categories encompass similar use types. The commercial category, for instance, includes commercial office, retail, and services. The residential category includes such multiple housing types as single family, multi-family, and mobile homes. Open Space includes open space lands and parks. Public facilities include waste, streams (drainage or retention basins), local cemeteries, government offices, and churches. Map 4.1 shows the existing land uses within the City. Table 4.1 is a summary by categories. Figure 4.1 depicts the shares of land uses in acres. Subsequent sections discuss the acreage and permitted uses for each land use category along with existing land use standards in Weed.

The City of Weed encompasses an area of 3,077 acres or 4.8 square miles. Of this, 14 percent, or 435 acres, are made up of open space. Residential uses make up 12 percent, 38 percent is vacant land, 11 percent is public facilities, 3 percent is commercial, and 3 percent is industrial land use. Circulation, including roadways, makes up 18 percent of the land area. Figure 4.1 shows the distribution of land uses by acreage.

The City's Sphere of Influence (SOI) is nearly six times the size of the City, with 17,920 acres, or 28 square miles. Two unincorporated communities, Black Butte and Carrick, fall within Weed's SOI to the southeast and northeast respectively and a third, Edgewood, lays on the northwestern edge of the sphere.

Map 4.1 City of Weed Existing Land Use Map



General Land Use Map

Land Use Element

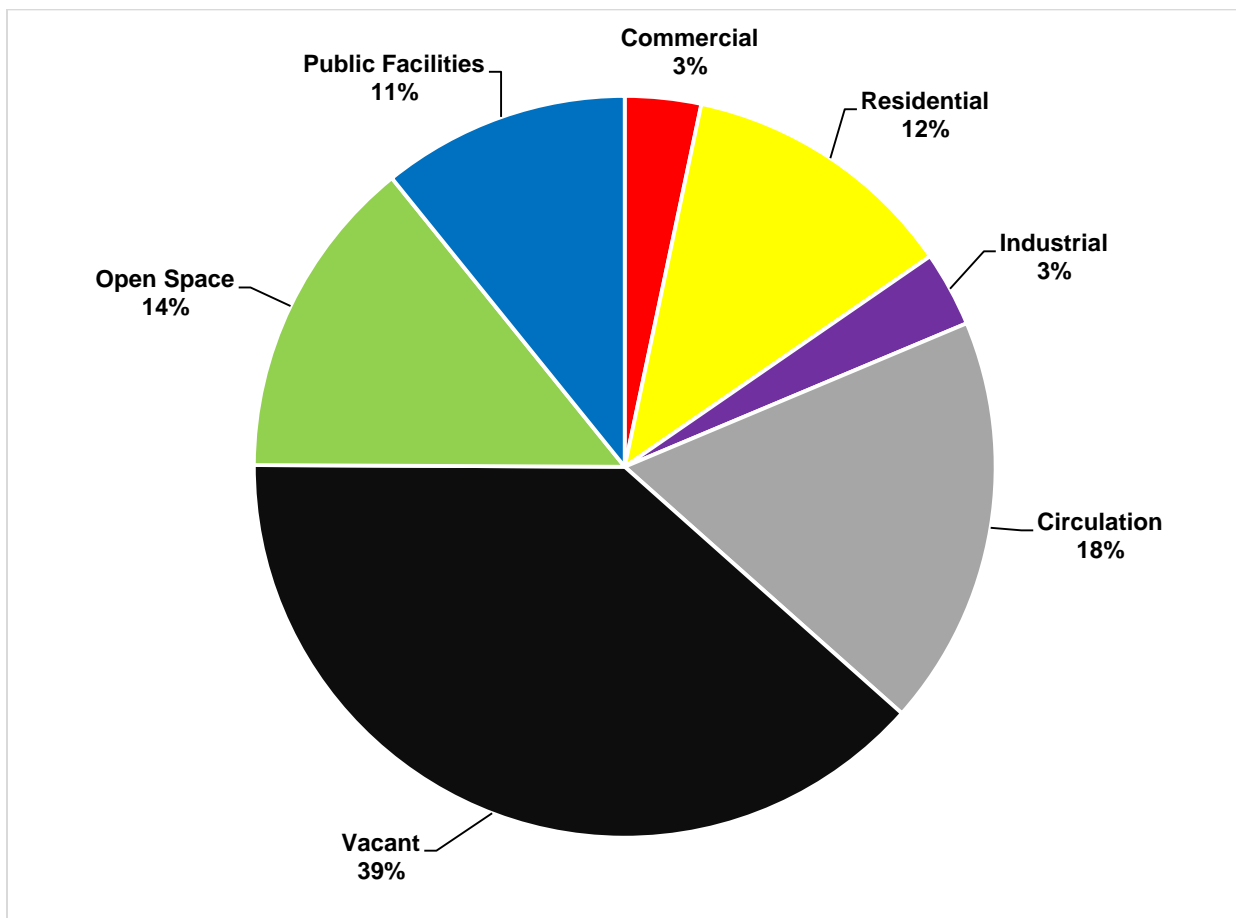
Source: Cal Poly Land Use Inventory, 2015

Table 4.1 Land Distribution Use by Parcel and Acreage

| Land Use | Parcels | Acres | Percent of Acreage |
|-------------------|-------------|-------------|--------------------|
| Commercial | 92 | 103 | 3% |
| Residential | 831 | 371 | 12% |
| Industrial | 19 | 101 | 3% |
| Circulation | 112 | 550 | 18% |
| Vacant | 358 | 1183 | 38% |
| Open Space | 14 | 435 | 14% |
| Public Facilities | 47 | 334 | 11% |
| Total | 1473 | 3077 | 100% |

Source: Cal Poly Land Use Inventory, 2015.

Figure 4.1 Land Use Breakdown by Acreage



Source: Cal Poly Land Use Inventory, 2015.

4.3.2 Residential Land Use

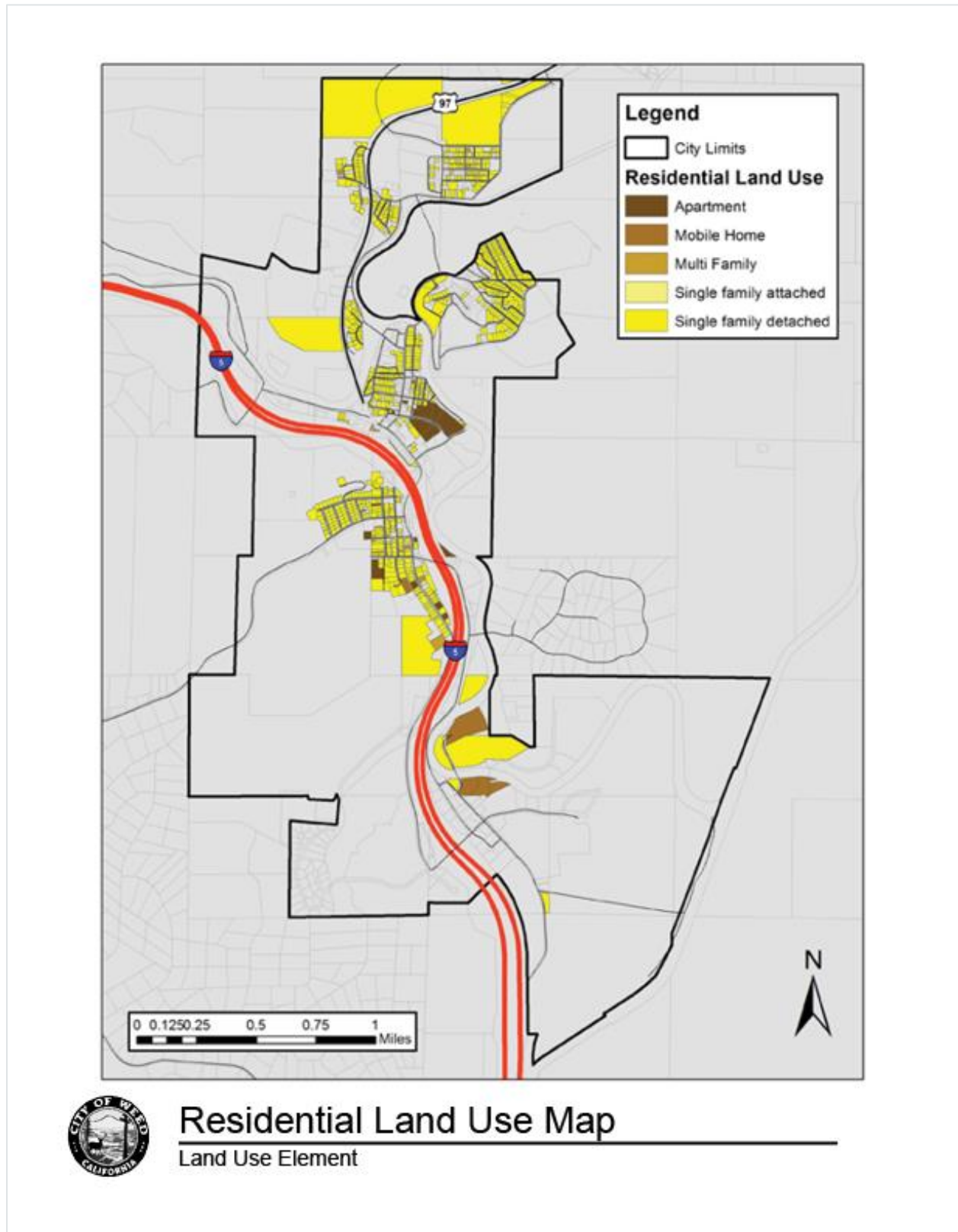
Residential properties occupy 371 acres or 12 percent of the land in Weed. Map 4.2 shows the distribution of residential properties across the City. Residential land uses are centralized around the City's grid circulation network in northern and central Weed. As shown in Table 4.2, the majority of residential land in Weed consists of single-family detached houses, which make up approximately 88.4 percent of the City's residential acreage, or 94.2 percent of residential parcels. The majority of single-family homes are located east of Interstate 5 and US 97. Apartments make up the second largest residential land use, with approximately 5 percent of the total residential acreage.

Table 4.2 Residential Land Use Breakdown by Parcel and Acreage

| Residential | Parcels | Acres | Percent of Acreage | Percent of Parcels |
|------------------------|------------|------------|--------------------|--------------------|
| Single Family attached | 7 | 1 | 0.3% | 1.0% |
| Single Family detached | 784 | 328 | 88.4% | 94.2% |
| Multifamily (duplex) | 10 | 2 | 0.5% | 1.2% |
| Multifamily (triplex) | 2 | 1 | 0.3% | 0.2% |
| Multifamily (quad) | 5 | 2 | 0.5% | 0.6% |
| Apartment | 16 | 19 | 5.1% | 2.0% |
| Mobile Home | 7 | 18 | 4.9% | 0.8% |
| Total | 831 | 371 | 100% | 100.0% |

Source: Cal Poly Land Use Inventory, 2015.

Map 4.2 Residential Land Use Map



Source: Cal Poly Land Use Inventory

4.3.2.1 Low Density Residential (R-1)

This Land Use Category is intended to provide areas for single-family houses and single-family subdivisions. Secondary residential units are allowed as existing uses on the rear half of the lot. New secondary residential units are permitted when they conform to state law regulating such uses. Lot sizes range from 5,400 to 10,000 square feet. Density is not to exceed five units per net acre.

Figure 4.2 Example of Low Density Residential Property



Source: Cal Poly Land Use Inventory, 2015.

4.3.2.2 Medium Density Residential (R-2)

This land use category is mainly intended to provide sites for duplexes and triplexes, although single-family houses are also allowed. Public and semi-public uses such as public buildings and facilities, churches and medical facilities may also be allowed if compatible with surrounding residential uses and subject to a use permit. Lot sizes range from 5,400 to 7,000 square feet. Density is not to exceed eight units per net acres.

Figure 4.3 Example of Medium Density Residential Land Use



Source: Cal Poly Land Use Inventory, 2015.

4.3.2.3 High Density Residential (R-3)

This land use category is intended to provide areas for multi-family residences including duplexes, triplexes, and apartments; although single-family houses are also permitted. Lodges, clubs, rest homes, group homes and boarding houses may also be allowed subject to a use permit. Lot sizes range from 6,000 to 7,000 square feet and are not to exceed 12 units per net acre.

Figure 4.4 Example of High Density Residential Land Use



Source: Cal Poly Land Use Inventory, 2015.

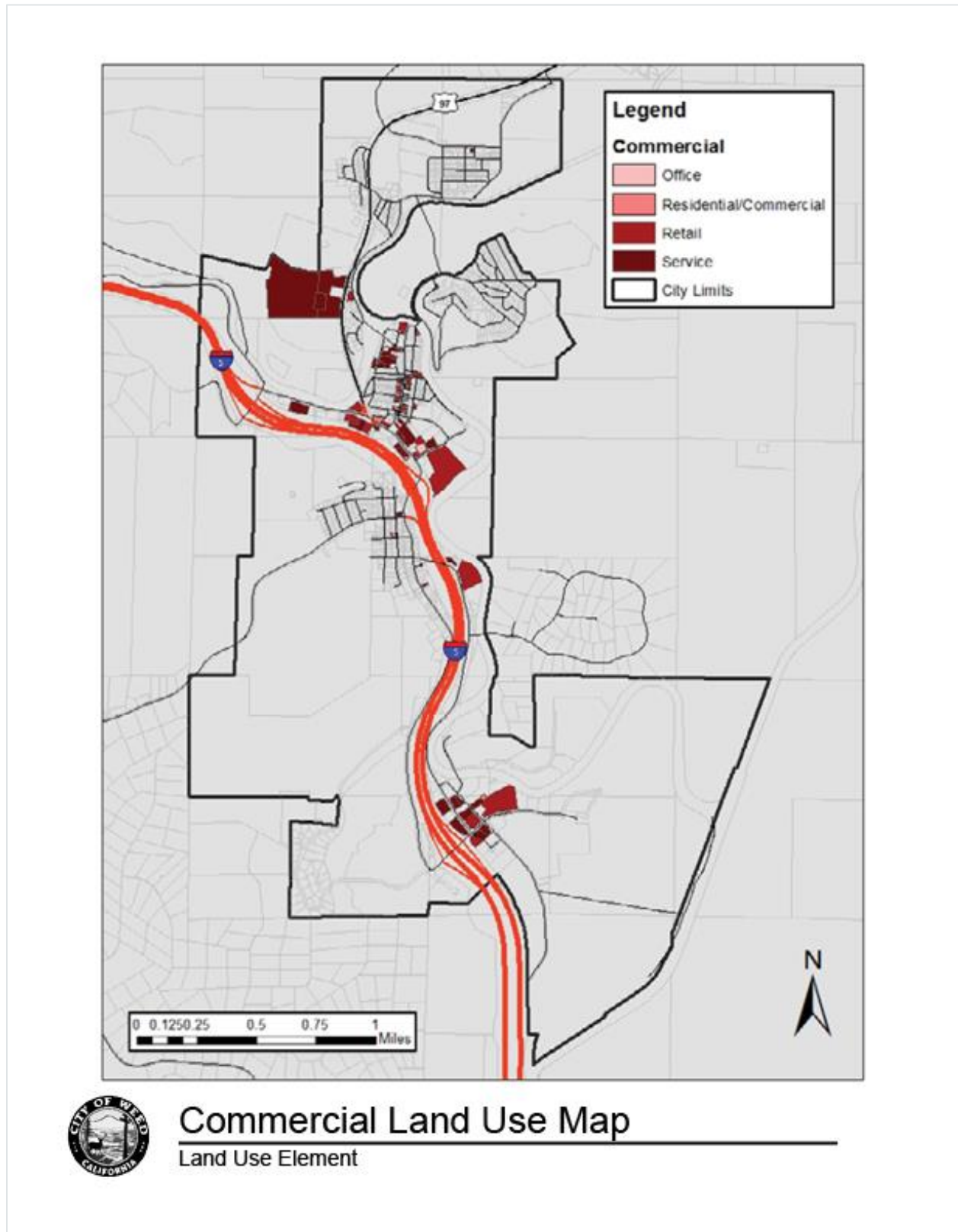
4.3.2.4 Rural Residential (R-R)

This land use category is intended to provide sites for large lot rural residential and small acreage farming with limited livestock. This designation is appropriate for areas of the City where there are constraints such as topography, geology, drainage, natural habitats, or public facilities that limit the density of housing development. The minimum lot size for rural residential development is five acres.

4.3.3 Commercial Land Use

Commercial properties occupy 103 acres of land in Weed. This accounts for 3 percent of total city acreage. Map 4.3 shows that Commercial uses are concentrated along South Weed Boulevard, which runs through central Weed and along Main Street in downtown Weed. Additional commercial land uses are located along Shastina Drive in the southern portion of the City.

Map 4.3 Commercial Land Use Map



Source: Cal Poly Land Use Inventory, 2015

Current commercial businesses along South Weed Boulevard are predominantly local retail, specialty shops, and the primary banking center. Commercial spaces along I-5 are geared more towards fast-food establishments, specialty services, and tourist-serving activities. Table 4.3 gives a parcel and acre breakdown of existing commercial land uses in the City of Weed.

Table 4.3 Commercial Land Use Breakdown by Parcel and Acreage

| Commercial | Parcels | Acres | Percent of Acreage |
|-------------------------------|-----------|------------|--------------------|
| Mixed Commercial/ Residential | 15 | 3 | 3% |
| Service | 39 | 63 | 61% |
| Retail | 35 | 36 | 35% |
| Office | 3 | 1 | 1% |
| Total | 92 | 103 | 100% |

Source: Cal Poly Land Use Inventory, 2015.

4.3.3.1 Retail

Retail commercial land use is defined as shopping centers, strip malls, markets, gas stations, and any other uses where goods are primarily sold and purchased. Local retail commercial places include: local grocery stores, locally owned clothing stores, and specialty shops. The retail category accounts for 36 acres of total commercial space in Weed or 35 percent of total commercial acreage.

4.3.3.2 Service

Service commercial land use includes any business that does work for a customer, but is not involved in manufacturing of goods. Local services include: vehicle cleaning, repair or towing, laundromats, beauty parlors, nail salons, restaurants, and other services. The service category accounts for 63 acres of total commercial space in Weed or 61 percent of total commercial acreage.

4.3.3.3 Office

Office commercial land use includes business, financial, and professional services. Some local office services include: local banks, insurance offices, and other professional offices. This commercial category accounts for one acre of total commercial space in Weed and 1 percent of total commercial acreage.

4.3.3.4 Mixed Commercial/Residential

Commercial residential land use includes parcels that contain both residential and commercial land uses. This is commonly known as mixed-use development, where apartment units or other manners of residence are built within a commercial setting. In the City of Weed, mixed-use development can be observed in the downtown area. Currently, commercial residential land use takes up 3 acres or 3 percent of all commercial acreage in the City.

4.3.4 Industrial Land Use

Industrial uses occupy 101 acres of land in Weed. This accounts for 3 percent of total acreage. Map 4.4 shows the spatial distribution of industrial uses. The majority of industrial uses are concentrated along the east side of I-5. Industrial uses in Weed are characterized as warehouses, storage, or manufacturing facilities, which include a water treatment plant and a brewery. It is noteworthy that the large lumber mill for which the City is known is located outside City limits, but within its sphere.

4.3.5 Circulation Land Use

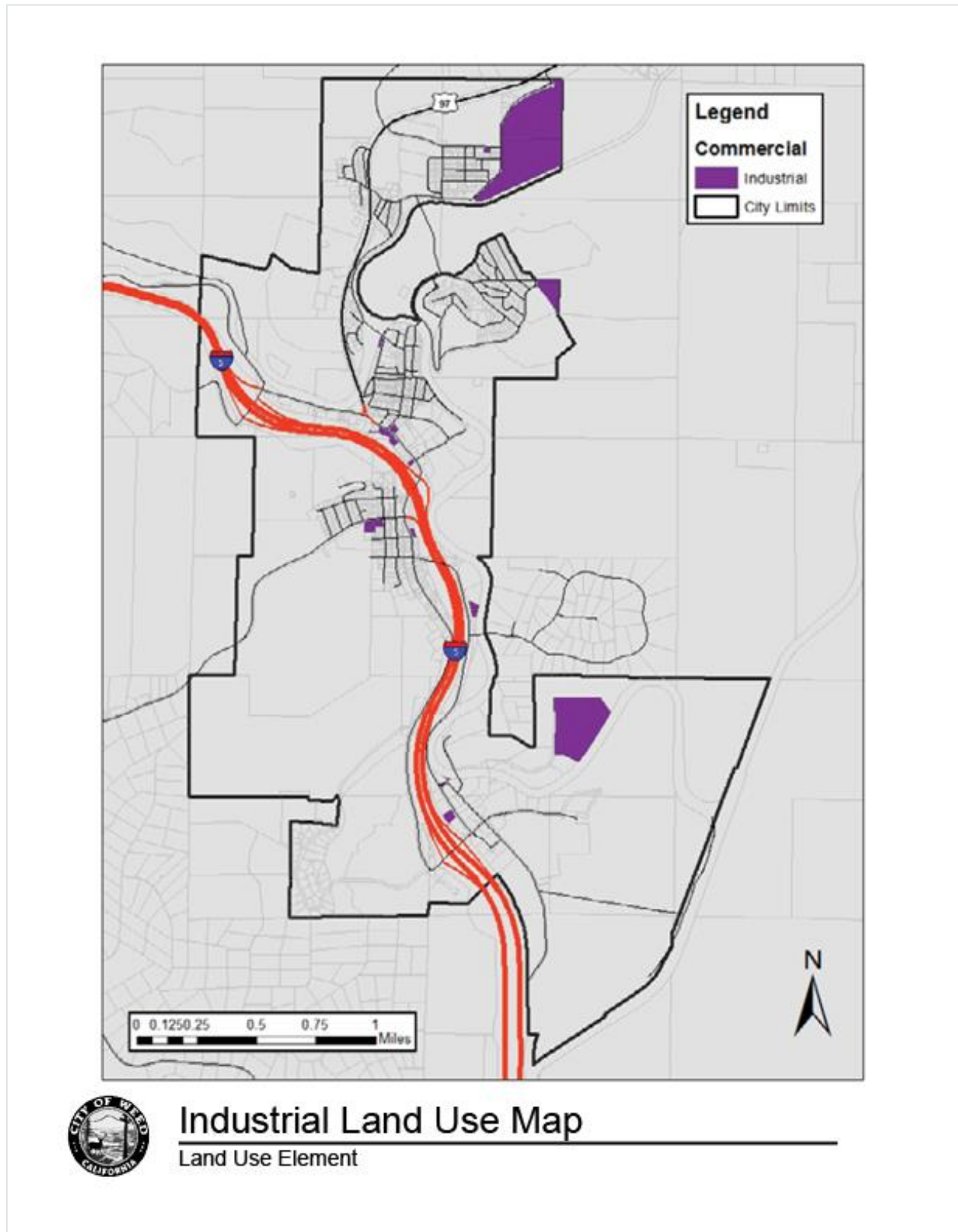
Two major freeways (I-5 and US 97) intersect within City limits. In addition, the rail line traverses the eastern portion of the City. Map 4.5 shows the spatial distribution of circulation land use. Circulation-related uses occupy 550 acres of land within the City. Right of way accounts for 62 percent of circulation land use. Right of way parcels are those occupied by railroad tracks or private roadways. Public roads account for 38 percent of all circulation land use in the City. Table 4.4 shows the breakdown of the existing circulation land uses in Weed.

Table 4.4 Circulation Land Use by Parcel and Acreage

| Circulation Land Use | Parcels | Acres | Percent of Acreage |
|----------------------|---------|-------|--------------------|
| ROW | 57 | 339 | 62% |
| Roads | 55 | 211 | 38% |
| Total | 112 | 550 | 100% |

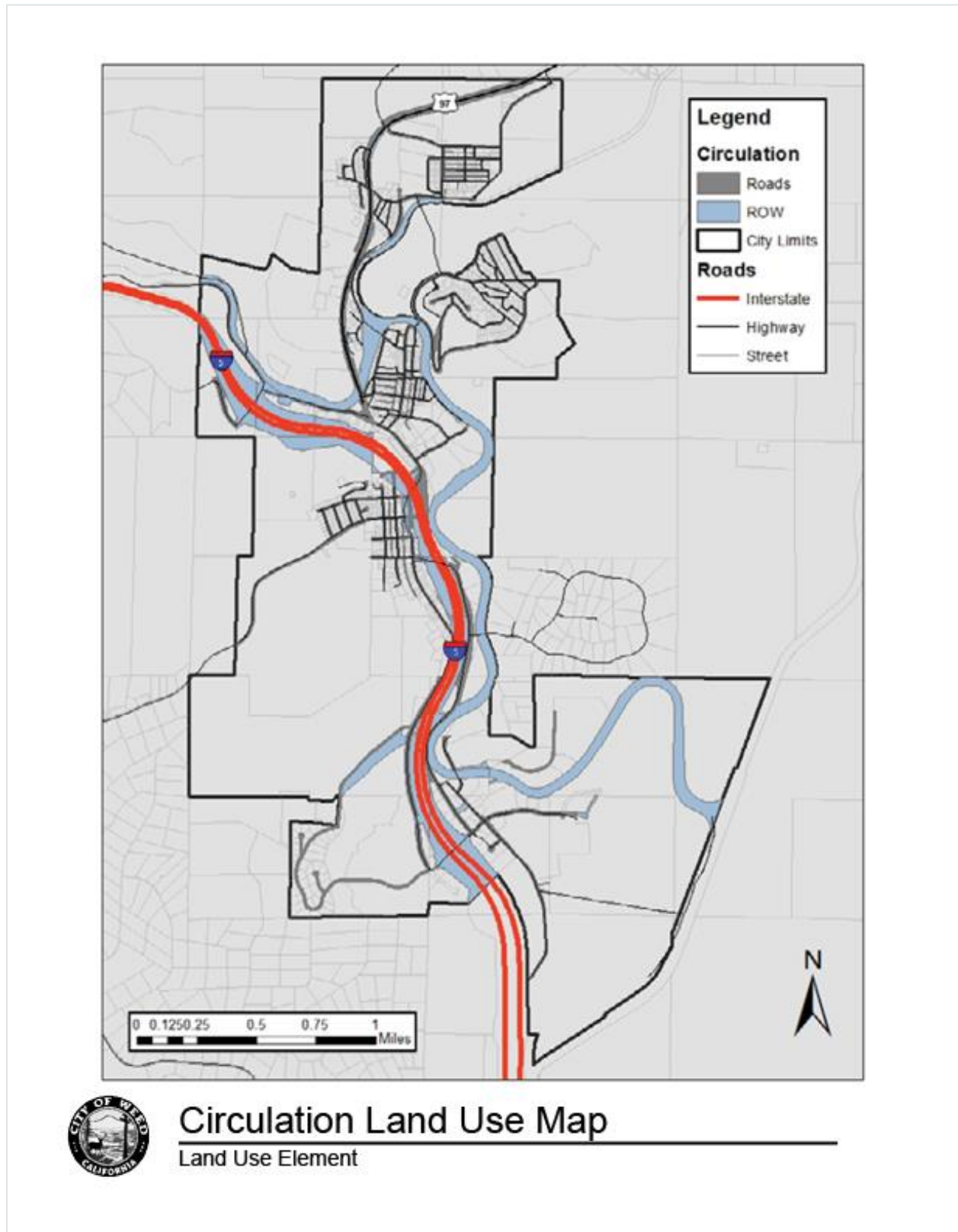
Source: Cal Poly Land Use Inventory, 2015.

Map 4.4 Industrial Land Use Map



Source: Cal Poly Land Use Inventory, 2015

Map 4.5 Circulation Land Use Map



Source: Cal Poly Land Use Inventory, 2015

4.3.6 Open Space

Parks and open space occupy 435 acres of land in Weed, making up 14 percent of the City's total acreage. Map 4.6 shows the spatial distribution of open space lands in the City. Table 4.5 shows the breakdown of open space land in Weed. Parks acreage consists of three parks, which are Charlie Byrd Park, Bel Air Park, and Sons of Lobis Field. Although Carrick Park is a part of the Weed Recreation and Parks District it is not located within City Limits and therefore is not incorporated into the park acreage. The remainder of the acreage is classified as open space land.

Table 4.5 Open Space Land Use Breakdown by Parcel and Acreage

| Open Space Land Use | Parcels | Acres | Percent of Acreage |
|---------------------|---------|-------|--------------------|
| Parks | 3 | 30.4 | 7.0% |
| Open Space | 11 | 404.8 | 93.0% |
| Total | 14 | 435.2 | 100.0% |

Source: Cal Poly Land Use Inventory, 2015.

4.3.7 Public Facilities

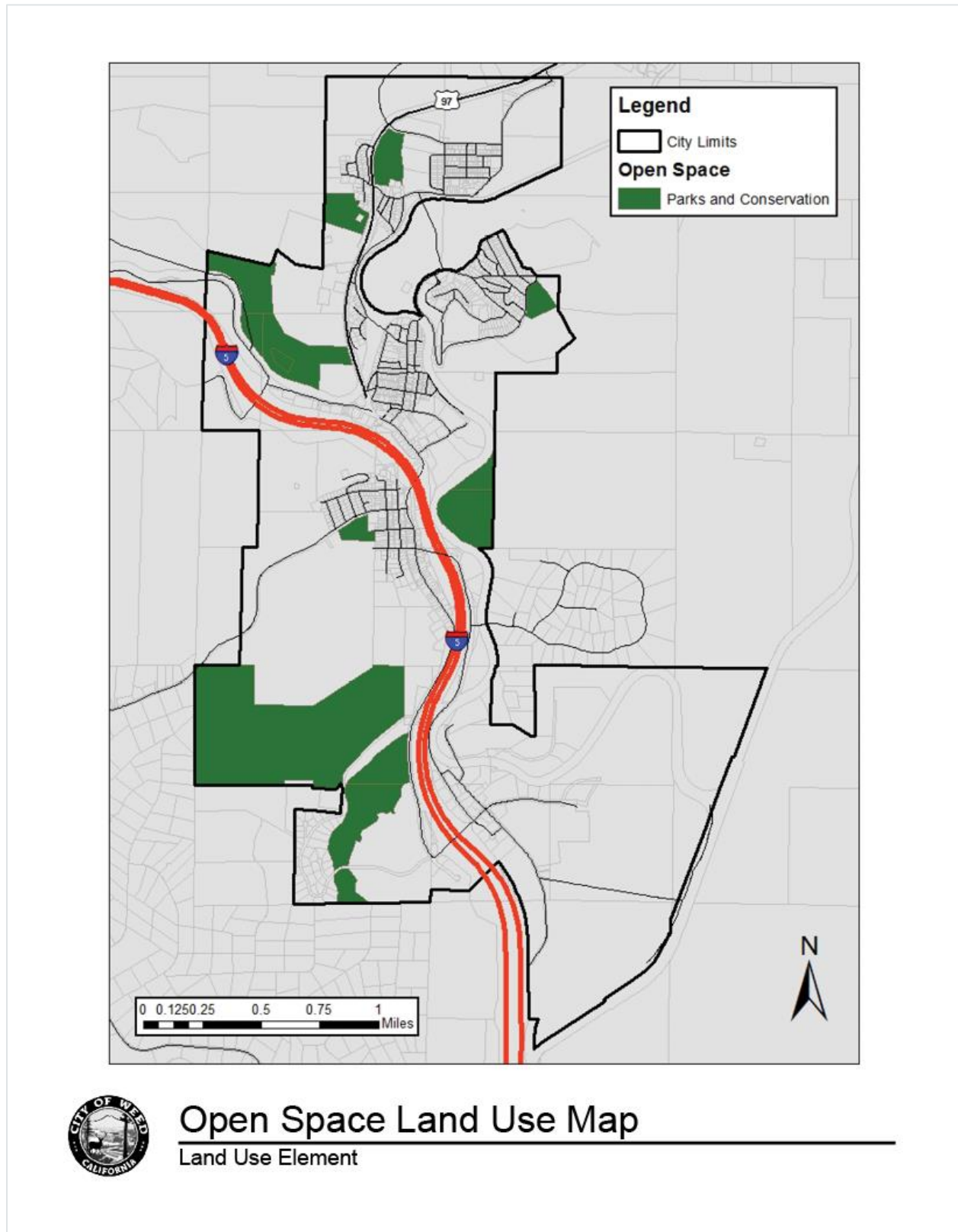
Public Facilities in Weed occupy 334 acres, which equates to 11 percent of the City's total acreage. Table 4.6 shows the breakdown of acreage in public facility use in Weed. Map 4.7 shows the locations of public facilities across the City.

Table 4.6 Public Facilities Land Use by Parcel and Acreage

| Public Facilities Land Use | Parcels | Acres | Percent of Acreage |
|----------------------------------|---------|-------|--------------------|
| Vacant | 5 | 1.2 | 0.4% |
| School | 7 | 289.3 | 86.6% |
| ROW | 4 | 1.2 | 0.4% |
| Community Center | 2 | 1.2 | 0.4% |
| Church | 5 | 1.2 | 0.4% |
| Civic/Government | 8 | 7.0 | 2.1% |
| Fire | 1 | 15.3 | 4.6% |
| Streams/Drainage/Channels | 10 | 2.3 | 0.7% |
| Quasi Open Space | 4 | 15.3 | 4.6% |
| Total | 47 | 334 | 100% |

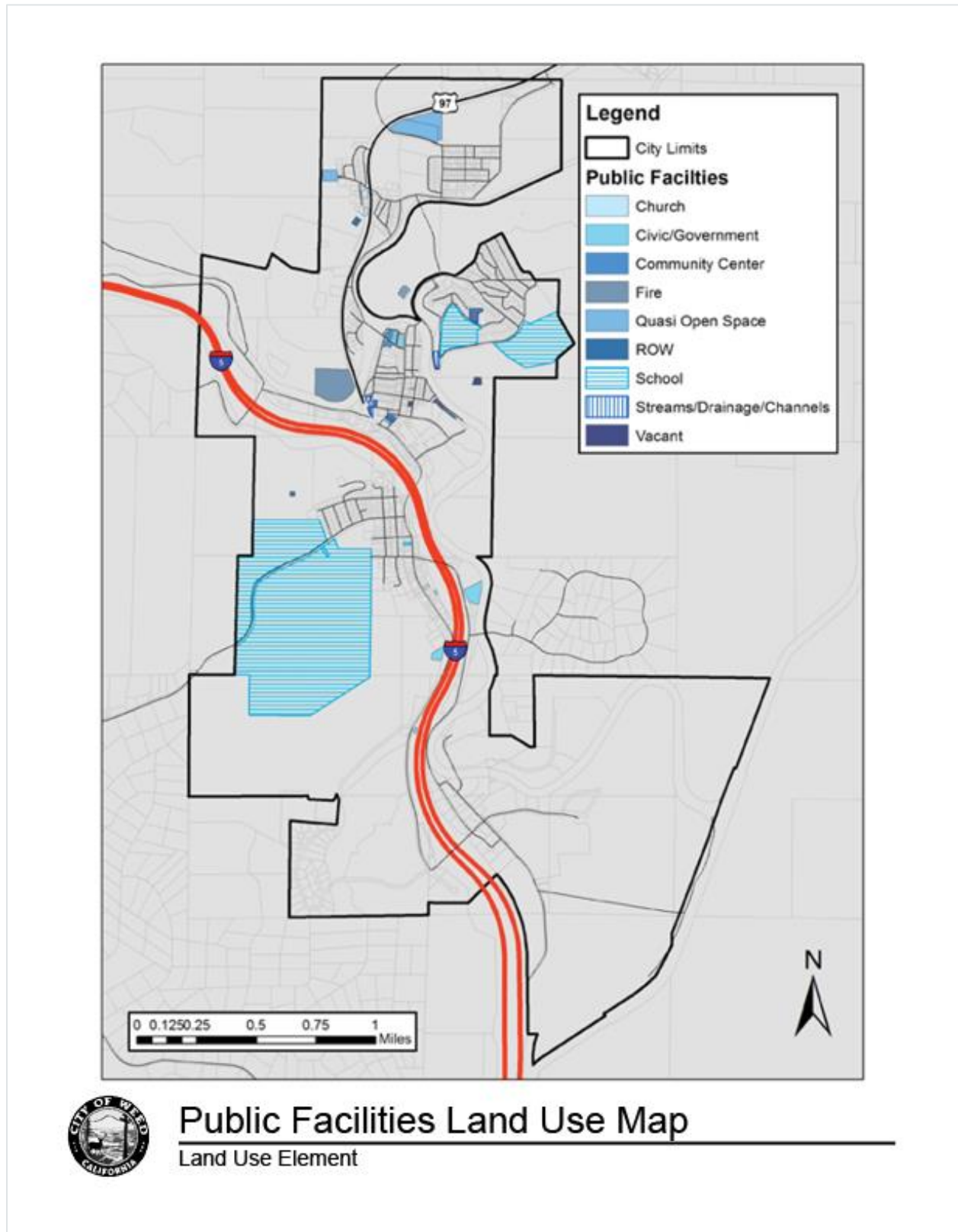
Source: Cal Poly Land Use Inventory, 2015.

Map 4.6 Open Space Land Use Map



Source: Cal Poly Land Use Inventory, 2015

Map 4.7 Public Facilities Land Use Map

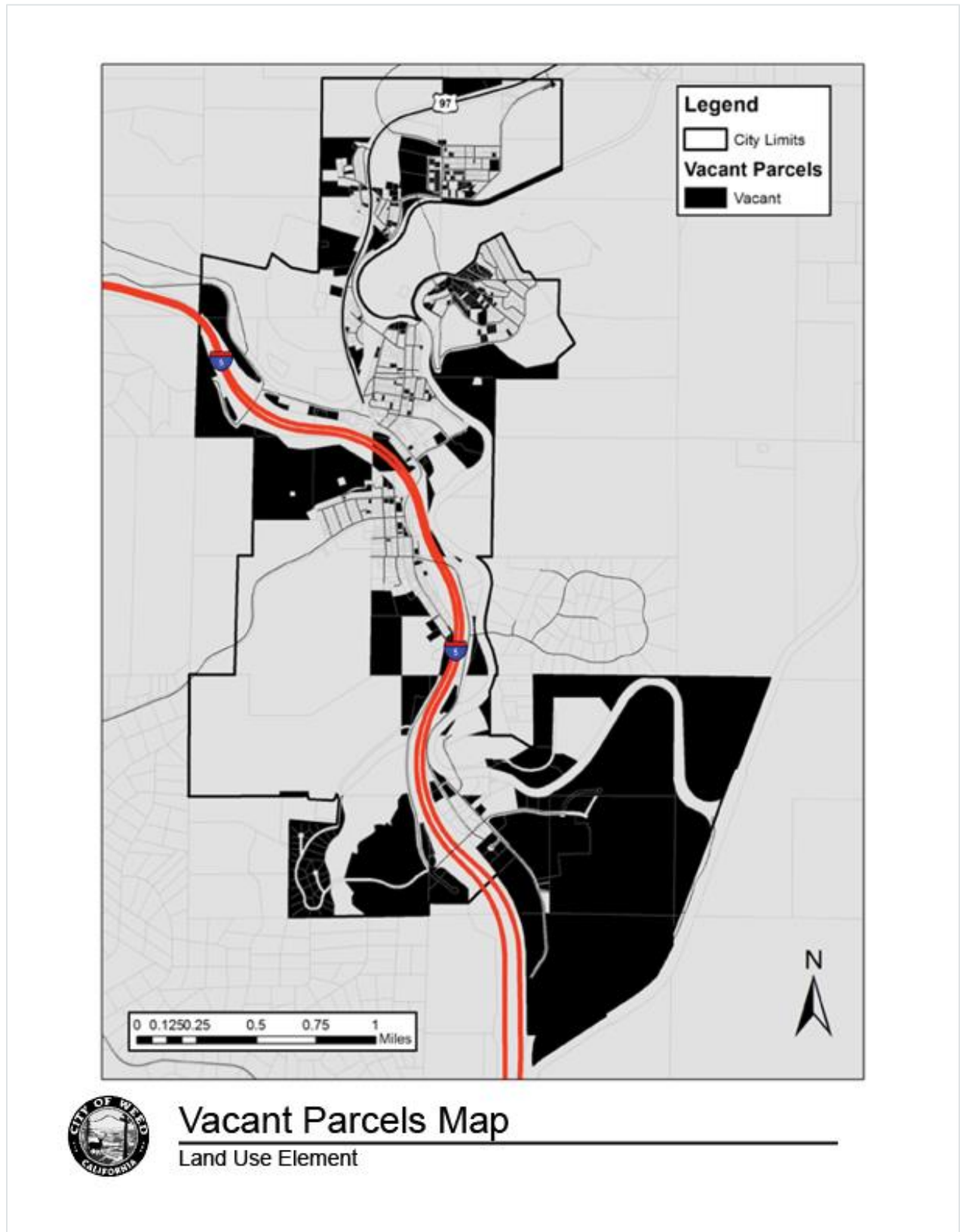


Source: Cal Poly Land Use Inventory, 2015

4.3.8 Vacant Land

There are approximately 1,183 acres of vacant land within the city limits. The 358 parcels account for 39 percent of Weed's total acreage. Vacant lands are intended for urban development, but are not yet in designated uses. The dispersion of vacant parcels in the City is depicted in Map 4.8.

Map 4.8 Vacant Land Use Map



Source: Cal Poly Land Use Inventory, 2015

4.4 Issues and Opportunities

4.4.1 Strengths and Opportunities

The land use inventory that was conducted from October 8, 2015 to October 11, 2015 demonstrated that the city has room for development. The inventory revealed that 38 percent of Weed's total acreage was vacant. Public comment throughout the first community meeting stressed the notion that Weed is in an ideal geographic location to attract businesses and tourism. The City is located along I-5 and U.S. 97, which see large volumes of travelers each day. It is also located half way between major metropolitan areas to the north and south offering opportunity to service the needs of long-distance travelers.

4.4.2 Issues and Constraints

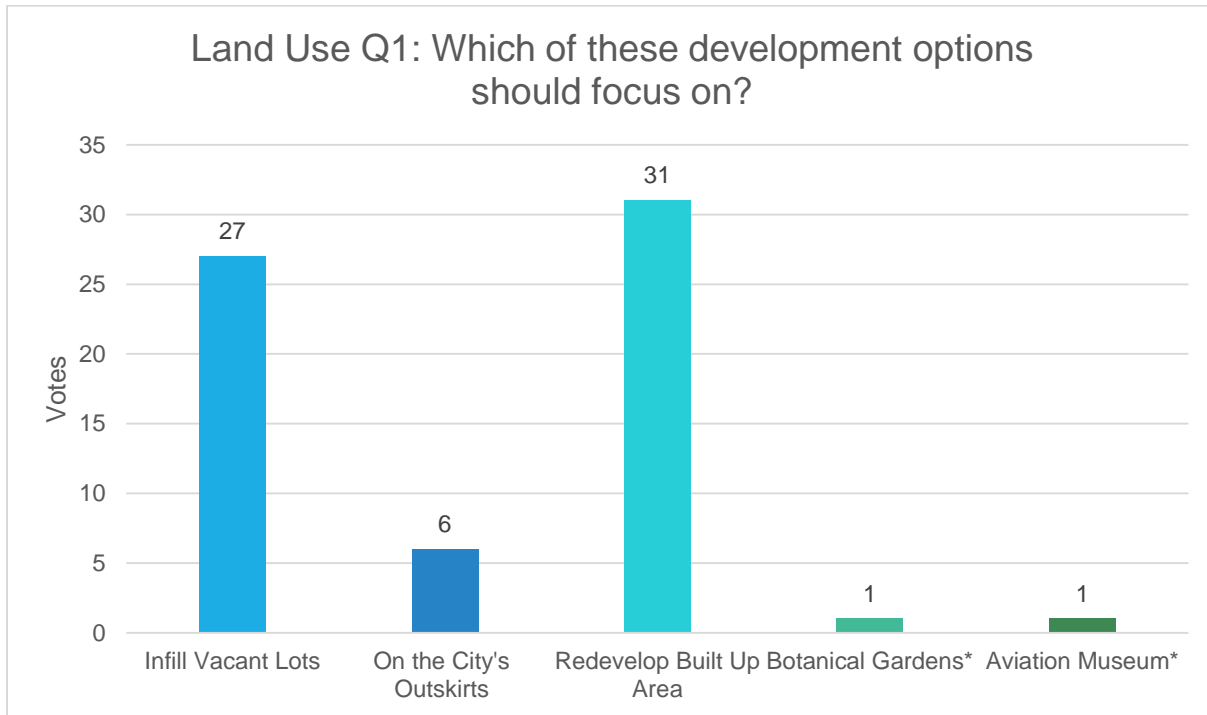
Public feedback received on October 10, 2015 showed that residents considered sprawl to be a barrier in the path of Weed's overall growth. Residents stated that the large distances between neighborhoods and commercial services created segregated sections within the City. Participants at the public meeting also identified the absence of a clear vision for future growth as another barrier; this General Plan process is addressing that barrier. The Land Use Inventory revealed that commercial parcels only account for 3% percent of the City's total acreage. Residents stated that more development that is commercial should occur within the city to increase access to goods and services. Residents however also stipulated that they enjoyed the small town atmosphere and that future development should occur while maintaining that atmosphere.

4.5 Emerging Directions

On November 7, 2015, the City held its second public meeting for the General Plan Update to assist in guiding the emerging directions for Weed. Public outreach was conducted at other public venues throughout the community on November 7 and 8th, 2015. Participants were asked three separate land use questions (each with multiple answer options) and were asked to vote based on preference for various options. Results for the preference questions revealed that future development in the city should focus on the redevelopment of already built-up areas, development should be concentrated in Central Weed, and neighborhoods should be diversified to bridge large gaps between them.

4.5.1 Community Preferences

Figure 4.5 Development Options for Weed, Total Votes 66



**Answers not originally in the questionnaire and added by participants*

Figure 4.6 Type of City Expansion, Total Votes 55

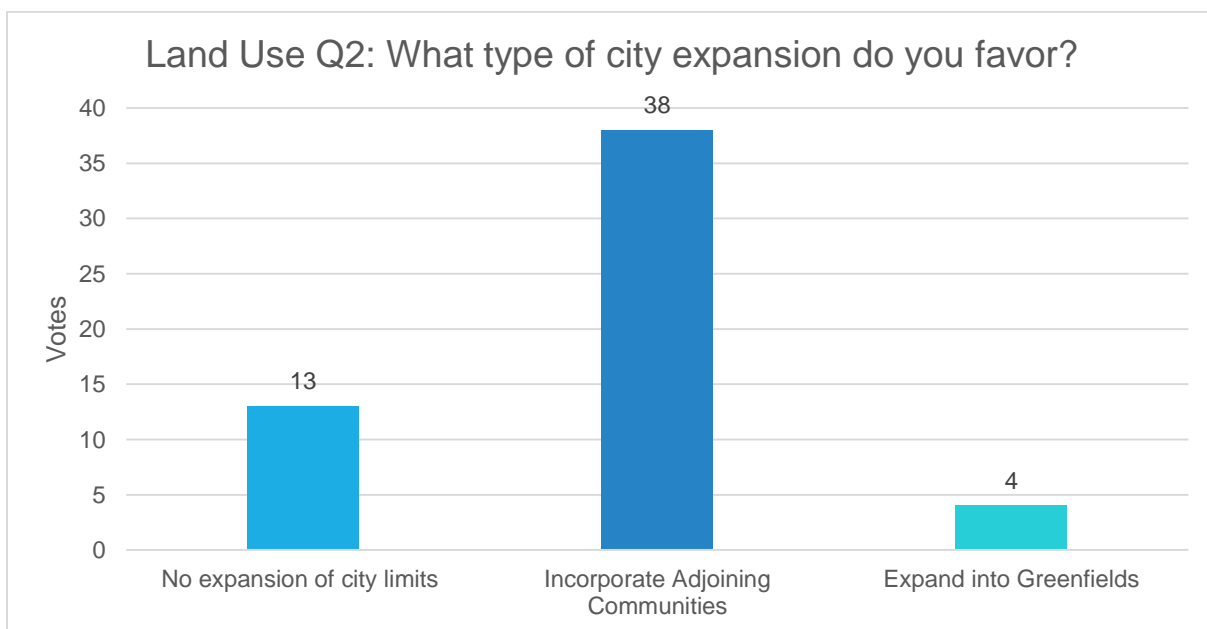
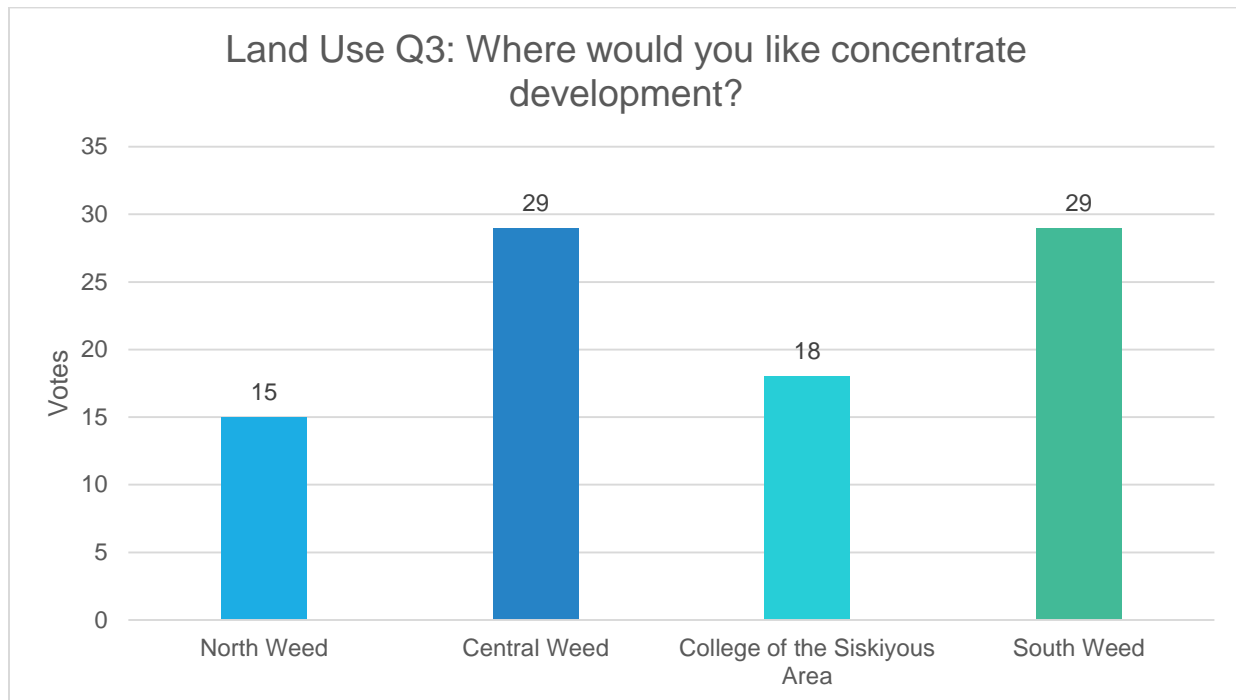


Figure 4.7 Preferred Location for development, Total Votes 85



4.6 References

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5 CIRCULATION

5.1 Introduction

Circulation is a mandatory element of the general plan under the California State Government Code §65302(b). Circulation refers to transportation systems that facilitate the safe and efficient movement of people and goods throughout a city and its surrounding areas. The California Office of Planning and Research (OPR) requires that the circulation element maintain consistency with the land use element, as well as state and regional transportation plans. This chapter discusses the existing conditions of transportation systems within the City of Weed including roadways, aviation, railway facilities, truck routes, parking, public transportation, non-motorized transportation, transportation systems and demand management, pavement management, and traffic safety.

The purpose of this background information is to provide a foundation on which effective goals, objectives, policies, and programs can be formulated in the general plan. The following section outlines the local, state, and federal regulations that are applicable to circulation within the City of Weed, and provides thorough information on existing conditions as well as community feedback gathered during the public outreach process.

5.2 Regulatory Setting

5.2.1 Federal Regulations

Roadways

Moving Ahead for Progress in the 21st Century Act (MAP-21) and Surface Transportation Program (STP), 2012

The Moving Ahead for Progress in the 21st Century Act funds surface transportation programs. MAP-21 requires that metropolitan and statewide agencies describe the performance measures and targets used in assessing system performance and progress in achieving the performance targets for multi-modal transportation. MAP-21's highway program transformation establishes performance goals aimed at improving safety, infrastructure conditions, congestion reduction, system reliability, freight and economic vitality, environmental sustainability, and reduced project delays. Siskiyou County, the county Weed resides in, adheres to the standards set by MAP-21.

Highway Functional Classification Concepts, Criteria and Procedures (2013)

The Federal Highway Administration's *Criteria and Procedures* describes the procedures and processes for assigning functional classifications to roadways and adjusting urban area boundaries. Functional classification is important, as it sets expectations for roadway design including speed, capacity, and the relationship between existing and future land use. This provides standards that Weed can use to identify the functional class of its roads.

Railway Facilities

Federal Railroad Administration (FRA)

All rail systems within the U.S. are governed and administered through the Federal Railroad Administration (FRA). Administered metrics and standards for intercity passenger rail services are outlined under Section 207 of the Passenger Rail Investment and Improvement Act of 2008 (PRIIA). The FRA is primarily responsible for the safety components of rail transport including the movement of hazardous materials, motive power and equipment, operating practices, signal and train control, and rail tracks. The FRA is also responsible for administering railroad assistance programs and conducting research and development in terms of railroad safety. Rail operations in and around Weed are governed by FRA standards.

Public Transit Services

Americans with Disability Act (ADA): Standards for Accessible Design (2010)

The 2010 ADA Standards for Accessible Design, prepared by the Department of Justice, establishes minimum requirements for all newly designed, constructed or altered state and local government facilities, public accommodations, and commercial facilities to be readily accessible to and usable by individuals with disabilities.

Aviation

Federal Aviation Administration (FAA)

The Federal Aviation Administration (FAA) was created out of the Federal Aviation Act of 1958. The FAA regulates all of the nation's airspace, operates the Air Traffic Control System, develops and enforces certification standards for all aircraft, pilots, flight crews, and mechanics, administers an ongoing aviation safety program, develops standards for airport and heliport construction, and administers programs that control aircraft noise and environmental impacts of aviation. Weed airport is the closest airport to the City of Weed and is subject to all rules and regulations as set forth by the FAA.

Truck Routes

Surface Transportation Assistance Act, 1982

The Surface Transportation Assistance Act (STAA) provides a network of highways that enables access for larger vehicles to the interstate highway system and certain federal-aid primary routes. Trucks that are within the width and length limits specified in the Act are referred to as "STAA trucks". Interstate 5 (I-5) and US 97 are truck routes that traverse the City of Weed.

Non-motorized Transportation Facilities

Highway Capacity Manual (2010)

The 2010 Highway Capacity Manual (HCM) published by the Transportation Research Board (TRB) includes methodology for evaluating bicycle and pedestrian level of service (LOS). LOS is a performance metric used to assess the quality of bicycle and pedestrian infrastructure and is a useful tool in identifying gaps in the alternative transportation network. The TRB recently updated the criteria for non-motorized level of service to better reflect the perspective of bicyclists and pedestrians. Chapter 16 comprises methodology for evaluating urban street facilities from a multimodal approach, which is critical as active transportation, become more integrated into transportation networks. Chapter 23 provides detailed guidelines for estimating capacity and LOS for bicycle and pedestrian facilities. The HCM approach is used to estimate LOS for existing bicycle and pedestrian infrastructure in the City of Weed.

Americans with Disability Act (ADA): Standards for Accessible Design (2010)

Refer to description under Public Transportation.

U.S. Department of Transportation (DOT): Policy Statement on Bicycle and Pedestrian Accommodation

The Federal Highway Administration (FHWA) under the U.S. Department of Transportation adopted a policy statement in 2015 that requires transportation agencies to “incorporate safe and convenient walking and bicycling facilities into transportation projects” (FHWA, 2015). The policy is based on Title 23 - Highways, Title 49 - Transportation, and Title 23 - The Public Health and Welfare, which describe how bicycle and pedestrian facilities should be incorporated throughout the planning process. The document encourages transportation agencies to integrate bicycle and pedestrian facilities into transportation projects due to their benefits for community and environmental health (FHWA, 2015).

Transportation Coordination with Land Use

United States Code Chapter 53 Title 49

The Federal code requires that regional transportation planning organizations be responsible for the coordination of local planning, land use, and economic development plans in accordance with state, regional, and local transportation plans and programs. Sections 5303, 5304, 5306, and 5338 of the code are intended to ensure that transportation plans are comprehensive and consider the relationship between land use and all transportation modes. The code maintains that funding applicants for transportation projects must provide sufficient information to justify project necessity, provide information on land use patterns and policies that promote public transportation, and provide local financial commitment. Projects must also include plans for future land use and re-zoning, and economic development in areas with public transportation.

Transportation Demand Management

Code of Federal Regulations (CFR) Title 23 Highways

Section §970.214 of the CFR contains regulatory guidance for congestion management. The document maintains that state and regional transportation agencies should develop criteria that determine when congestion management is necessary. It also requires that regulatory agencies identify and document measures of congestion, identify causes of congestion, include cost-benefit analysis for determining alternative solutions, determine methods to evaluate the performance of multimodal transportation systems, and consider strategies for operational improvements, public transportation, and intelligent transportation systems (CFR, §970.214).

Pavement Management

U.S. Department of Transportation Federal Highway Administration (FHWA)

The U.S. FHWA has provided a practical guide for quality management of pavement condition and data collection to establish quality management throughout the U.S. Having quality pavement data is essential for a pavement management system to operate effectively. Accurate pavement data can help trigger various actions including maintenance, rehabilitation, reconstruction, and evaluation of program effectiveness.

Funding Sources

Highway and Transportation Funding Act

The Highway and Transportation Funding Act extends the FTA's transit assistance programs through July 31, 2015. A critical program that has been extended by this act is the Moving Ahead for Progress in the 21st Century Act (MAP-21), which ensures that more funds are available for local communities to enhance transportation infrastructure. See MAP-21 under Roadways.

Passenger Rail Investment and Improvement Act (PRIIA)

PRIIA places responsibility on behalf of Amtrak, The U.S. Department of Transportation, The Federal Railroad Administration, state agencies, and other stakeholders to improve transportation services, operations, and facilities. PRIIA has a primary emphasis on intercity passenger rail and the development of high-speed rail, and administers federal grants and loans pertaining to transportation projects.

5.2.2 State Regulations

Roadways

The Complete Streets Act, 2008

The California Complete Streets Act of 2008 requires cities and counties to include complete streets policies as part of their general plans. The Act delineates specific requirements for the needs of travelers of all ages and abilities, for all modes of transportation, and for programming, design, construction, operations, and maintenance activities on all state highways. It complements an existing policy, which directs Caltrans to address the safety and mobility needs

of bicyclists, pedestrians, and transit users in all projects. Any change to the circulation element in the general plan of a California local government must include complete streets provisions.

State of California Update to the General Plan Guidelines: Complete Streets and the Circulation Element (2010)

The updated General Plan Guidelines for Complete Streets and the Circulation Element provides guidance to cities and counties in the preparation of local general plans. Particularly, the update incorporates the California Complete Streets Act of 2008, which delineates key factors in creating a successful multimodal transportation network within a city or county. The OPR Guidelines mandate the analysis and coordination of plans and changes related to the present and proposed roadway infrastructure with that of Caltrans districts, specifically, District 2 for Siskiyou County. The OPR Guidelines emphasize the need for an assessment of the adequacy of street and highway conditions and systems, improvements, highway and street capacities, traffic volumes, level of service, transportation management, and future targets within the local general plan.

Railway Facilities

California State Rail Plan (CSRP)

The California State Rail Plan (CSRP) established in 2013 a statewide vision as well as objectives and priorities to enhance passenger and freight rail service. The CSRP details a long-range investment program for California's passenger and freight infrastructure and supports the State's goal to develop an integrated, multimodal transportation network.

Public Transit Services

Transportation Development Act, 1971 (TDA)

The Transportation Development Act (TDA) provides funding for public transportation within California for public transit operators, local jurisdictions, transit operations, and capital projects. The Local Transportation Fund branch (LTF) and the State Transit Assistance fund (STA) are the major funding sources established under the TDA which support existing public transportation needs. Funds are distributed based on population, taxable sales, and transit performance. The LTF division provides oversight on the public hearing process of unmet transit needs and ensures local planning agencies complete required performance audits.

Aviation

The California Aeronautics Act, 1953

The California Aeronautics Acts mandates that each county with a public use airport adopt an Airport Land Use Compatibility Plan (ALUCP). The Act also requires standards for aircraft-generated noise for designated "noise problem airports" to avoid incompatibility with noise sensitive land uses in neighboring areas. The Act also enables local agencies to operate and maintain airports and to charge for the use of facilities.

California Department of Transportation, Division of Aeronautics (DOA)

The Caltrans DOA inspects over 300 public-use and special-use airports in the State. The Division is contracted by the FAA to conduct Airport Master Record inspections at public-use airports to satisfy airport permit compliance as well as airport safety.

Non-motorized Transportation Facilities

Complete Streets Act, 2008

Refer to description under Roadways at the beginning of this subsection.

Transportation Coordination with Land Use

California Office of Planning and Research (OPR) (2003 and 2015)

OPR requires that the circulation element of the general plan be consistent with the land use element, as well as state and regional transportation plans.

California Global Warming Solutions Act AB-32, 2006

Assembly Bill 32 is a state legislation that aims to achieve a sharp reduction in greenhouse gas emissions to 1990 levels by 2020. AB 32 influences regional planning by requiring counties to consider smart growth development strategies in regional transportation plans in order to reduce vehicle trips. The Circulation Element for the City of Weed must be consistent with The Siskiyou County Regional Transportation Plan, which is subject to AB-32.

Transportation Demand Management

California Environmental Quality Act (CEQA), 1970

CEQA provides a foundation for air quality planning and regulation that is consistent with federal regulations. The 2040 General Plan must identify and evaluate air quality problems, causes, trends and actions to be taken to attain and maintain California's ambient air quality standards. CEQA is relevant to transportation demand management by addressing vehicle emissions, which are a major contributing source to poor air quality. TDM measures aimed at reducing single-occupancy vehicles are frequently used to address air quality concerns.

Pavement Management

Caltrans Office of Pavement Management and Performance

The Office of Pavement Management and Performance monitors the performance of all State highways in the State of California. Pavement condition and optimizing repair strategies for pavement rehabilitation and maintenance are measured by Caltrans. Surface characteristics including roughness, cracking, and faulting are collected using vehicles provided by the Office. A Pavement Condition Index (PCI) is a numerical index between 0 and 100 used to indicate the general condition of pavement and is the standard used when evaluating pavement conditions.

Funding Sources

California State Legislature

The California State Legislature establishes policies and financial sources through state statutes such as the Revenue and Taxation Code, the Streets and Highways Code, and the Government Code. The Governor and the Legislature appropriate funds for the transportation network through the annual budget. In addition, the Legislature has the authority to designate transportation projects statutorily.

California Transportation Commission (CTC)

The California Transportation Commission (CTC) recommends policies and funding priorities to the State legislature, provides project oversight for the State, adopts statewide transportation programs, and has discretion to approve projects nominated for funding by Caltrans and regional transportation agencies.

Bicycle Transportation Account (BTA)

The Bicycle Transportation Account (BTA) is a program that provides annual funding for both city and county projects that enhance safety and convenience for bicycle commuters. To apply for funding, local agencies must adopt a Bicycle Transportation Plan, which must first be approved by the regional transportation planning agency.

Transportation Development Act, 1971

See Transportation Development Act under Public Transit Services.

5.2.3 Local and Regional Regulations

Roadways

City of Weed Municipal Code; Title 10 - Vehicles and Traffic

Title 10 of the Weed Municipal Code codifies speed limits, traffic control devices, one-way street designations, and other topics pertaining to the local roadway network.

Caltrans District 2 Transportation Concept Reports (TCR)

The District 2 Transportation Concept Report (TCR) was created in order to better manage and plan for the State's transportation network. Transportation Concept Reports are 20-year long-range planning documents for each State highway route that identifies existing route conditions and future needs. Each TCR includes a route summary, segment summaries, existing and forecasted travel data, route maps, and a list of planned, programmed, and needed projects for the Highway over the next 20 years. I-5 and US 97, which are highways under Caltrans jurisdiction, have Transportation Concept Reports with planned, programmed, and needed projects that may affect the future of Weed.

Siskiyou County Regional Transportation Plan (RTP) (2010)

The County of Siskiyou Local Transportation Commission (LTC) is the regional transportation planning agency for Siskiyou County. The LTC developed and adopted the Regional Transportation Plan (RTP) in June 2010, which serves as a long-range planning document that establishes goals, policies, and actions to guide development of the multimodal transportation systems in Siskiyou County. The RTP complies with state and federal transportation planning requirements for short-term and long-range transportation planning. Siskiyou County's comprehensive RTP examines the roadway network and aims to improve the existing transportation system through the year 2030.

Railway Facilities

Siskiyou County Regional Transportation Plan (RTP) (2010)

The Siskiyou County RTP addresses railway transportation through Weed with the objective of providing a transit connection to existing rail service as funding permits.

Public Transit Services

Siskiyou County Regional Transportation Plan (RTP) (2010)

The Siskiyou County RTP addresses public transit in Weed by establishing the goal to "maintain affordable, safe, and effective public and private transportation for County residents and especially disabled residents and others with specialized transportation needs" (Siskiyou County, 2010).

Aviation

Siskiyou County Airport Land Use Commission (ALUC)

Under the State Aeronautics Act, Public Utilities Code Section 21670, counties with public-use airports are required to conduct airport land use compatibility planning. Airports are an important public asset, but incompatible development near airports can create public health issues and adverse noise impacts. The Siskiyou County ALUC therefore must ensure that airports are developed with compatible uses and that information is readily available to affected property owners.

Siskiyou County Regional Transportation Plan (RTP) (2010)

The Siskiyou County RTP addresses aviation in Weed by establishing the goal to protect residents from noise impacts as well as hazards generated from existing airports and from any new airport developments that may occur in the future. To realize this goal, the county created the objective that any new development of airport facilities be consistent with current plans as well as be compliant with the standards of the Airport Over Flight zone, Noise Impact Area zone, and Airport Height Limitation zone.

Siskiyou County Municipal Code; Title 2 Chapter 1-Airports

The Airport section, Title 2 Chapter 1 of the Municipal Code, provides a detailed breakdown considering the fees associated with the usage of the airports within the county. Fees include those related to landing, overnight, parking, and fuel flowage. The Code also includes penalties for violating requirements for permits and fees. The Airports and Aircraft section, Title 3 Chapter 6 of the Municipal Code, outlines a framework for the safe operation of airports within the County. Use of runways, use of taxiways, noise, vehicular traffic on runways, traffic pattern altitudes, storage of inflammables, fuel sales, and refueling are all detailed to promote safe and efficient operation. The Airport Environs Combining Zoning Ordinance section, Title 10 Chapter 1 of the Municipal Code, serves two purposes. The first is to protect the airport itself from encroachment by land uses, which may be incompatible with airport operations and thus impair the growth of the airport. The second purpose is to minimize the public's exposure to excessive/inordinate levels of noise generated by airport operations. The chapter regulates land use development within the area of county airports.

Truck Routes

City of Weed Municipal Code; Chapter 10.48 - Truck Routes

Chapter 10.48 of the Weed Municipal Code outlines rules and regulations that address the movement of trucks throughout the City. The established truck routes for vehicles exceeding a maximum gross weight of ten tons are as follows:

- Black Butte Drive, from Shastina Drive to Vista Drive;
- Kellogg Drive from Black Butte Drive to Mary's Drive;
- Mary's Drive from Kellogg Drive to its northern terminus;
- Vista Drive from South Weed I-5 interchange to its easterly terminus; and
- Main Street to Lake Street, East Lake Street to Boles Street to South Weed Boulevard.

For a map of these truck routes please see Map 5.6 in the section 5.3.7 Truck Routes.

Non-motorized Transportation Facilities

Siskiyou County Regional Transportation Plan (RTP), 2010

The Siskiyou County RTP contains county-wide information pertaining to bicycle and pedestrian facilities, but does not specifically address conditions in the City of Weed. Goal 19 of the Siskiyou County RTP is to "improve livability in the County through land use and transportation decisions that encourage walking, transit, and bicycling" (Siskiyou County RTP, 2010). This goal applies to the City of Weed.

Transportation Coordination with Land Use

Siskiyou County Regional Transportation Plan (RTP), 2010

Refer to description under Local Non-Motorized Transportation Facilities section.

Siskiyou County Airport Land Use Commission (ALUC)

Refer to description under Aviation section.

Transportation Demand Management

There is no formal Transportation Demand Management Plan in Siskiyou County or the City of Weed.

Pavement Management

Siskiyou County Regional Transportation Plan (RTP), 2010

The Siskiyou County RTP has two goals that pertain to pavement management: Goal 8 and Goal 12. Goal 8 is to “maintain existing local roads in good condition.” (Siskiyou County, 2011). Goal 12 is to, “promote the continued and expanded use of air, rail, and trucks for the transport of suitable products and materials while minimizing negative impacts on the local road system.” (Siskiyou County, 2011). There are objectives and policies that further outline how the County will reach its goals.

5.3 Existing Conditions

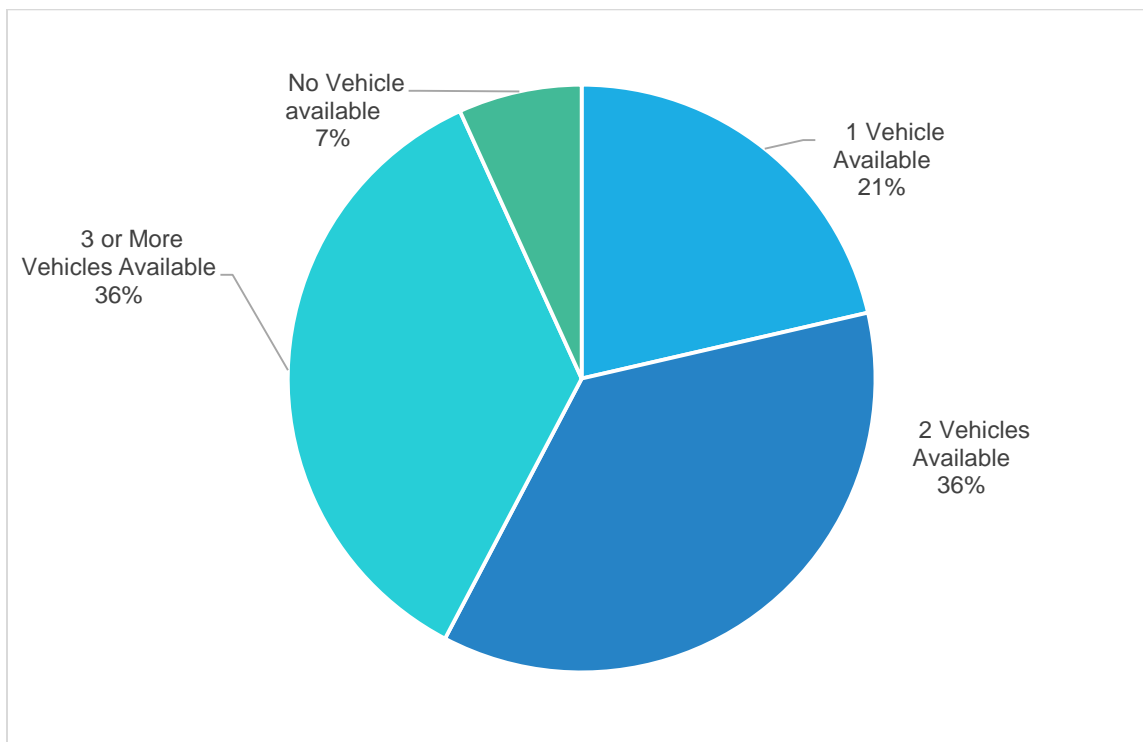
5.3.1 Community Characteristics

This section provides a summary of travel behaviors found within the City of Weed. Behavior is analyzed in terms of vehicle availability, modal split, and commuting characteristics of residents.

5.3.1.1 Vehicle Availability

Figure 5.1 shows the vehicle availability per household in the City of Weed. Residents with access to at least one vehicle make up 93 percent of the total population, leaving approximately 7 percent without access to a personal vehicle. Personal vehicles are observed to be the primary form of transportation in the Weed.

Figure 5.1 Number of Vehicles Available per Household, 2013



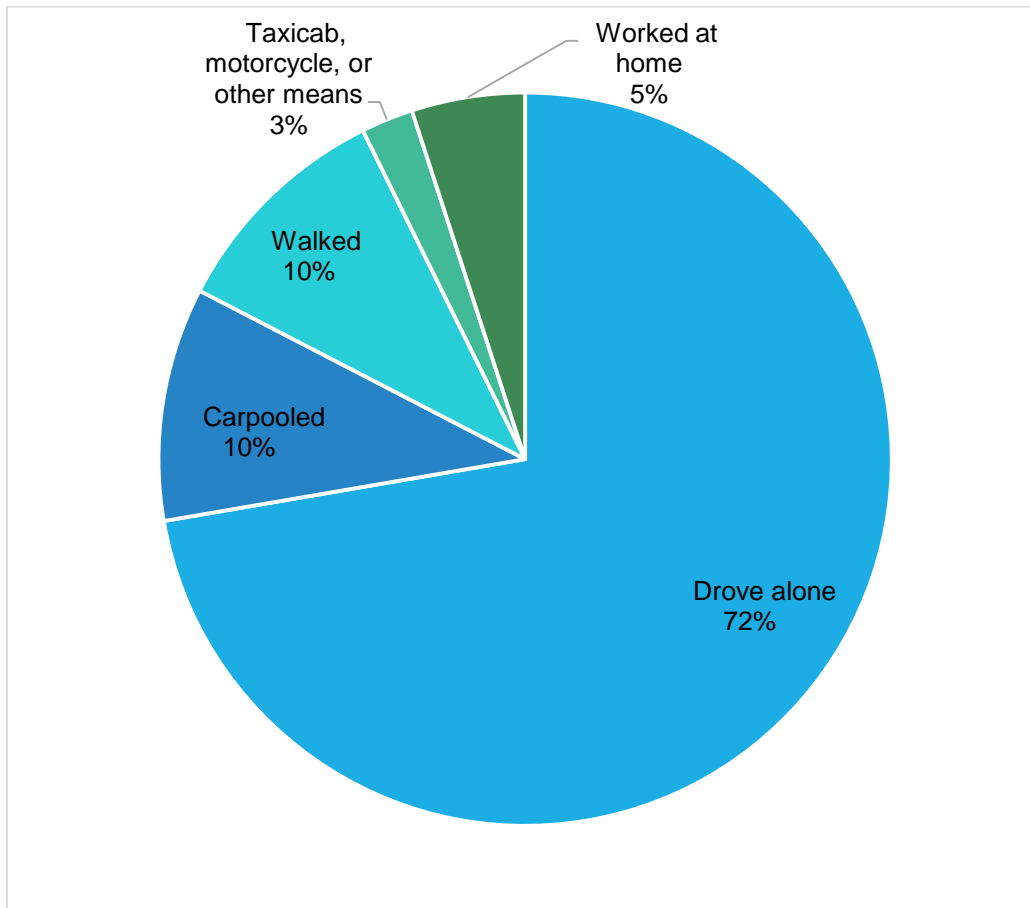
Source: U.S. Census, Table S0801 Commuting Characteristics by Sex, 2009--2013 American Community Survey 3-Year Estimates

5.3.1.2 Modal Split

Figure 5.2 identifies the mode of transportation used by city residents to get to work. The majority of residents, 72 percent, drive alone to work, while 10 percent carpool, 10 percent walk, 5 percent work from home, and 3 percent use a taxicab, motorcycle or other means.

Means of Transportation to Work, 2013

Figure 5.2 Number of Vehicles Available per Household, 2013



Source: U.S. Census, Table S0801 Commuting Characteristics by Sex, 2009--2013 American Community Survey 3-Year Estimates

Table 5.1 shows Weed's commute modal split in comparison to Siskiyou County, California, and the United States. The City of Weed has a significantly larger percentage of commuters that walk to work, as well as a slightly larger percentage of workers commuting by taxicab, motorcycle, or other means. The percentage of commuters that drive alone, carpool, or work at home is relatively similar to the County, the State, and the Country. A notable difference in Weed's commuter mode split is that the percentage of the population that uses a bicycle or public transit to get to work is zero.

Table 5.1 Means of Transportation to Work for the City, County, State and Country, 2013

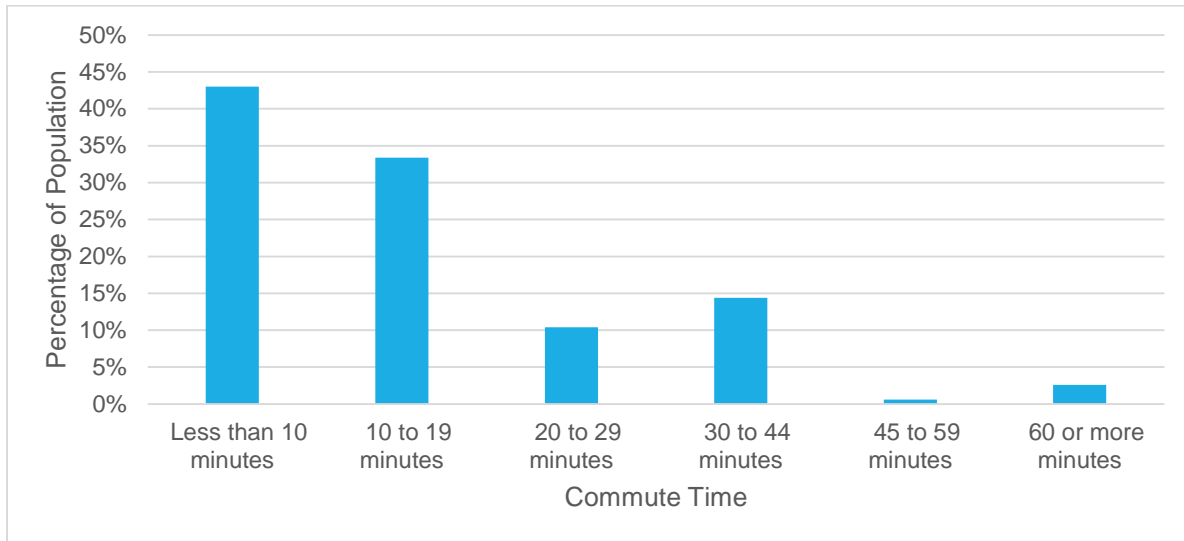
| Mode | Weed | Siskiyou County | California | United States |
|--|-------|-----------------|------------|---------------|
| Drive Alone | 72.3% | 71.3% | 73.2% | 76.3% |
| Carpooled | 10.3% | 12.0% | 11.3% | 9.8% |
| Public Transportation (excluding Taxicab) | 0.0% | 0.7% | 5.2% | 5.0% |
| Walked | 10.1% | 5.2% | 2.7% | 2.8% |
| Bicycle | 0.0% | 0.3% | 1.1% | 0.6% |
| Taxicab, motorcycle, or other means | 2.3% | 1.4% | 1.3% | 1.2% |
| Worked at home | 5.0% | 9.2% | 5.2% | 4.3% |

Source: U.S. Census, Table S0801 Commuting Characteristics by Sex, 2009--2013 American Community Survey 3-Year Estimates

5.3.1.3 Commute

Residents in the City of Weed have a mean travel time to work of 14.4 minutes. Figure 5.3 shows the distribution of commute times to work for City residents. The largest group of residents (43%) travel less than 10 minutes to work followed by a considerable percentage of residents (33%) who travel between 10 minutes and 19 minutes to work.

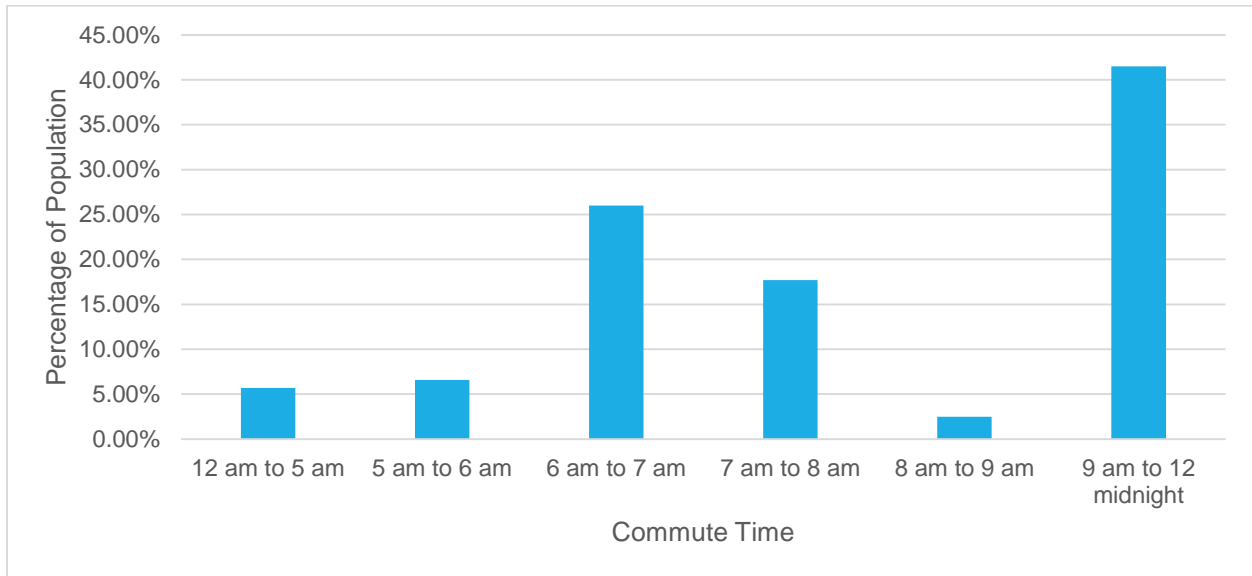
Figure 5.3 Time Leaving for Work, 2013



Source: U.S. Census, Table S0801 Commuting Characteristics by Sex, 2009--2013 American Community Survey 3-Year Estimates

Figure 5.4 identifies the proportion of residents that leave for work during various periods in the day. Approximately 45 percent of workers aged 16 years and over leave for work before 9 am while approximately 40 percent leave for work after the morning commute period until about midnight. This reflects a high proportion of shift workers, such as those who work in the lumber mill, nursing homes or hospitals.

Figure 5.4 Time Leaving Home for Work, 2013



Source: U.S. Census, Table S0801 Commuting Characteristics by Sex, 2009--2013 American Community Survey 3-Year Estimates

5.3.2 Roadways

This section provides a comprehensive overview of the roadway network, infrastructure, and circulation conditions throughout the City of Weed. It describes the existing streets, highways, and traffic operating conditions. The fundamental objective of a roadway system is to provide access and mobility for residents, employees, and visitors. The description of Weed's transportation infrastructure also covers related challenges that the City faces due to regional and citywide growth and development.

Two major highways intersect in the City of Weed: Interstate 5 (I-5) and United States Highway 97 (US 97). The City's transportation network includes freeways, arterials, and local roads. The roadways provide major access for freight trucks and passenger vehicles to surrounding cities, local destinations, schools, places of recreation, and residential areas.

5.3.2.1 *Functional Roadway Classifications*

The Federal Highway Administration mandates the use of the federal classification system and encourages local communities like Weed to use the classification systems to define its roadways. Categorizing streets through functional classification informs the design of the facilities. The roads of Weed are shown in Map 5.1. Common classifications are:

- **Freeways.** Freeways are operated and maintained by the California Department of Transportation (Caltrans). These facilities are designed as high-volume, high-speed facilities for inter-city and regional traffic. Two major highways intersect the City of Weed: I-5 and US 97, which connect Weed to regions throughout California.
- **State Highways.** State highways are high-speed facilities that are maintained by Caltrans and serve mainly inter-regional travel. There are currently no state highways located in Weed.
- **Expressways.** Expressways are high-speed facilities with no direct access to adjacent properties and intersections, and are limited to only freeways, arterials, and rural collector roads. These facilities are operated and maintained by the local agency.
- **Arterials.** These facilities are the principal network for through-traffic within a community and between communities. Arterials have between two and six traffic lanes and provide connections between residential and shopping areas, places of employment, recreational areas, and other places of assembly.
- **Collectors.** Collectors "collect" traffic from local roads and connect traffic to arterial roadways. Collector routes are typically shorter than arterial routes, but longer than local roads. These often provide traffic circulation within residential neighborhoods as well as commercial, industrial, or civic districts.
- **Local.** Local roads provide mostly land access and are maintained by local jurisdiction. These facilities are two-lane streets that provide local access and service. They include residential, commercial, industrial, and rural roads.

5.3.2.2 Roadway Designations

Along with functional classifications, there are also State and Federal roadway designations that define specific distinctions for certain roadways. Designations provide a broader functionality of a given highway facility and define whether a facility is eligible for certain Federal and State highway funding programs. State and Federal roadway designations are applicable to I-5 and US 97 in Weed through:

- **California Freeway Expressway System:** The California Freeway Expressway System is a comprehensive statewide system of access-controlled freeways and expressways that are important to the future development of the State of California (State Highway Code Sections 250-252, 257). Both I-5 and US 97 are California Expressway Systems.
- **Interregional Road System (IRRS):** The Interregional Road System provides access to all economic centers in the State. Some roadways are designated as “High Emphasis Routes” because of their critical importance to state and inter-regional travel. Interregional Roads are eligible for State discretionary funding when located outside the boundaries of urbanized areas (with population of over 50,000 persons) or when they connect urban areas. Both I-5 and US 97 are eligible for funding.
- **Regionally Significant:** This designation serves regional transportation needs including a minimum of all principal arterial highways and fixed guide way transit facilities. I-5 and US 97 are regionally significant connectors in the City of Weed.
- **High Emphasis Route (State Designation):** High Emphasis Routes are state designated. They are a subset of the IRRS Routes that include non-urbanized segments that connect urban areas. The IRRS Routes are established by Streets and Highway Code Sections 164.10-164.20. US 97 is a High Emphasis Route.
- **Focus Route (State Designation):** As a subset of the High Emphasis Route, Focus Routes are in non-urbanized areas that are the highest priority to complete a statewide system. The Focus Routes include the original 13 High Emphasis Routes detailed in the 1989 Blueprint Legislation.
- **California Scenic Highway (State Designation):** California Scenic Highways are segments of the State highway system, which together with the adjacent scenic corridors, require special scenic conservation treatment. This is established by State Highway Code Section 260. US 97 and I-5, from SR 89 near Mt Shasta to US 97 near Weed, are eligible to be designated as California Scenic Highways.
- **Surface Transportation Assistance Act (STAA):** This act requires the allowance of large trucks on the National Network. These “Terminal Access” routes are State highways that can accommodate STAA trucks. US 97 is a Terminal Access Route.

5.3.2.3 Regional Roadway Network

Siskiyou County is located in inland Northern California. I-5 bisects the City of Weed and carries interregional traffic and local traffic. I-5 and US 97 are major connectors between the State of California and Oregon. Weed is located halfway between two major metropolitan areas, San Francisco and Portland. According to Siskiyou County’s Regional Transportation Plan, a major goal is to, “provide and maintain a State highway system,” (Siskiyou County, 2011).

5.3.2.4 Interstate 5

Interstate 5 is the primary north-south transcontinental route for the West Coast. Interstate 5 spans approximately 1,381 miles and stretches from San Ysidro, California at the US-Mexico Border to the Blaine, Washington at the US-Canada Border. In California, I-5 stretches for 797 miles and is the main transportation facility in the State. Only 68.9 miles of I-5 are in the County of Siskiyou. I-5 in the Shasta Valley (Dunsmuir to Yreka) has a high percentage of truck traffic, a steep summit at Black Butte, harsh winter conditions, high winds, and variation in topography. I-5 is a major interregional connection for the City of Weed.

5.3.2.5 United States Route 97

United States Route 97 is a major north-south transportation corridor from I-5 in Weed to the eastern side of Oregon, and up to the Canadian Border. US 97 is a total of 2,053 miles long, and becomes British Columbia Highway 97, Yukon Highway 1 and Alaska Route 2 beyond the U.S. border. Of the 2,053 miles of US 97, only 663 miles are in the United States and 54.1 miles are in Siskiyou County. In Weed, US 97 is a main business route for local residents and visitors. US 97 provides access to many recreational locations such as Mount Shasta, Lake Shastina, Butte Valley Wildlife Area, Meiss Lake, Lava Beds National Monument, and the Lower Klamath National Wildlife Refuge.

5.3.2.6 Highway Performance

As the major regional connector for the City of Weed, Interstate 5 experiences high volumes of passenger vehicle traffic and truck traffic. Caltrans has projected a 1.5 to 2.0 percent annual increase of traffic from 2005 to 2030. Despite the projected increases, the level of service of I-5 segments in Weed does not decrease below LOS C in the furthest projected year. The largest barrier to highway performance is a result of the high percentage of truck traffic, which can limit maneuverability creating rolling queues. Additionally, poor winter weather conditions can cause closures or delays. There are no capacity increasing projects in the Interstate 5 segment located in Weed within the next 10 to 15 year planning horizon. However, measure to improve traffic operations using Intelligent Transportation Systems (ITS) has been discussed.

According to Caltrans, traffic growth rates along US 97 in California are expected to be 1.0 to 1.5 percent annually. The Level of Service as of 2003 was D, which was lower than Caltrans standard. The level of service is expected to decrease to Level of Service E with no improvements over the next twenty years, with intersection improvements it would likely maintain Level of Service D. Similar to Interstate 5, US Route 97 experiences high truck volumes, which contribute to the lower level of services. US 97 or South Weed Boulevard is an arterial street, which provides local connectivity. Because of this, it has low average travel speed, many access points, a left turn delay, high pedestrian activity and high traffic volumes in general.

5.3.2.7 Level of Service

Level of Service (LOS) measures the flow of traffic based on the geometrics of a roadway, its intersections, and its capacity. The performance of US 97 and I-5 can be measured using LOS. According to Caltrans, the LOS describes the operating conditions a typical driver experiences

on a typical day. The LOS is defined in categories ranging from A to F. “A” represents the best traffic flow and “F” represents congestion as shown in Table 5.2.

Table 5.2 General Definitions of Level of Service (LOS)

| Level of Service | General Operating Conditions |
|------------------|---|
| A | Free flow with low volumes and high speeds. |
| B | Reasonably free flow, but speeds beginning to be restricted by traffic. |
| C | In stable flow zone, but most drivers are restricted in the freedom to select their own speeds. |
| D | Approaching unstable flow; drivers have little freedom to select their own speeds. |
| E | Unstable flow; may be short stoppages |
| F | Unacceptable congestion; stop-and-go; forced flow. |

5.3.2.8 Local Roadway Network

5.3.2.8.1 Arterials

The main arterials that run through the City of Weed are North and South Weed Boulevard. North Weed Boulevard extends from US 97 southward through the City. North Weed Boulevard primarily serves as a commercial service corridor for highway traffic, but is also the gateway to Main Street and the residential neighborhoods of North Weed. North Weed Boulevard becomes South Weed Boulevard after it passes under I-5. South Weed Boulevard provides access to the College of the Siskiyous, Mount Shasta Brewery, the Greyhound station, and other important destinations in South Weed. Shastina Boulevard is also an arterial that serves South Weed on the east side of I-5.

5.3.2.8.2 Collectors

The major collector roads in Weed serve residential, commercial, and industrial areas by collecting traffic from minor collector roads in each neighborhood. The major collector roads in Weed are as follows:

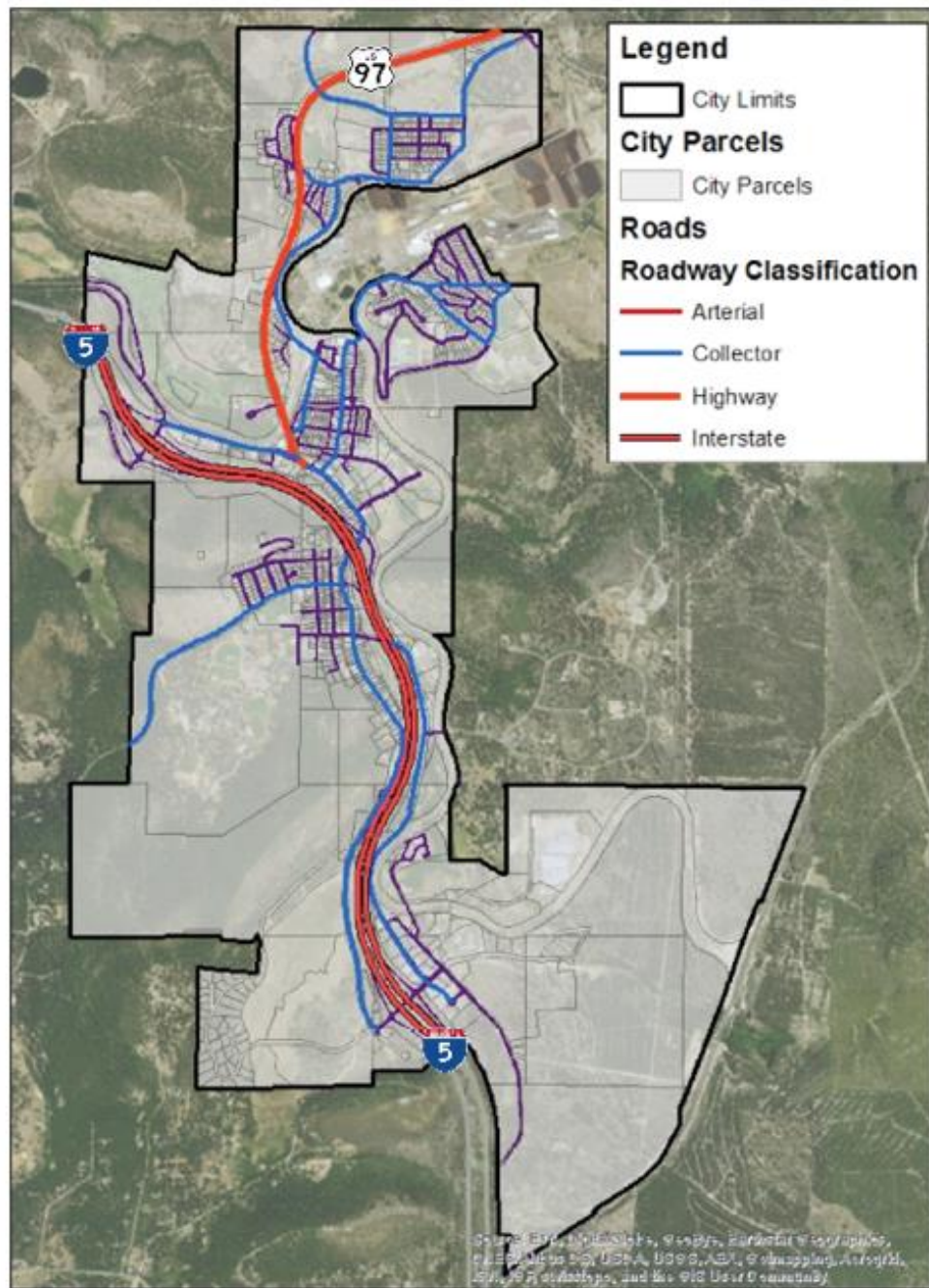
- Alamo Avenue
- Angel Valley Road
- Broadway Avenue
- California Street
- College Avenue
- East Lincoln Avenue
- North Davis Avenue
- Railroad Avenue
- Union Street

5.3.2.8.3 *Local Roads*

The minor collector and local roads in Weed primarily serve residential neighborhoods and provide access to the major collectors, arterials, and highways that run through the City. The minor collector and local roads in Weed are as follows:

- Main Street
- Boles Street
- Hillside Drive
- Morris Street
- Park Street
- Shasta Avenue

Map 5.1 Roadway Functional Classification Map



Roadway Functional Classification Map

Circulation Element

Source: City of Weed, 2015

5.3.2.9 Capacity Evaluation

The majority of Weed's roadway network is laid out in a Curvilinear and Loop Pattern, which is due to the unique topography of the area defined by the City's location at the base of Mount Shasta. Most of the roads in Weed are 30 to 40 feet wide with two travel lanes, two parking lanes, and no sidewalks. According to AASHTO's Green Book Standards, lanes should be 12 feet in width and parking lanes should be 8 feet in width, which is equivalent to 40 feet from curb to curb.

5.3.2.10 Local Roadway Performance & Level of Service

According to the 2010 Regional Transportation Plan, LOS "C" is the desired roadway condition in urban areas. There is no established Level of Service by the City of Weed in the municipal code or in the previous Circulation Element of the General Plan. US 97 and I-5 are both under the jurisdiction of Caltrans, which maintains a service standard at the transition between LOS "C" and "D". With the exception of US 97 and I-5, there is no recent traffic data for the City of Weed to do an evaluation of Level of Service analysis.

The most recent Level of Service Analysis was prepared for the 2010 Regional Transportation Plan for US Route 97. The level of service for the segment between the Junction of 265 and the start of the route in Weed was A for the Average Daily Traffic and B for the Peak Daily Traffic.

5.3.3 Public Transit Services

This section defines the public transit services and facilities that are located within or provided to the City of Weed. The public transit services are characterized by the following:

- The TDA requires an Unmet Transit Needs Process to assess the current conditions of public transportation within the County.
- The Unmet Transit Needs Process is an annual review.
- The Siskiyou County Local Transportation Commission (SCLTC) is the regional transportation agency responsible for transportation planning and overseeing the Unmet Needs Process.
- Money for operations and capital is primarily derived from the Transportation Development Fund and Local Transportation Funds, which make up 50.4 percent of all revenue.
- Passenger fares accounted for 10.9 percent of the operating budget for Fiscal Year 2013-2014.
- Public comments are received and analyzed throughout the year, as well as during the annual public hearings to determine unmet needs.
- Unmet transit needs are those needs that are not being met and are identified in the Commission's annual analysis of transit needs in Siskiyou County.
- "Reasonable to meet" is defined as those transit services that can be met by public and/or special transportation services that:
 - Can be proven operationally feasible;
 - Can demonstrate community acceptance;

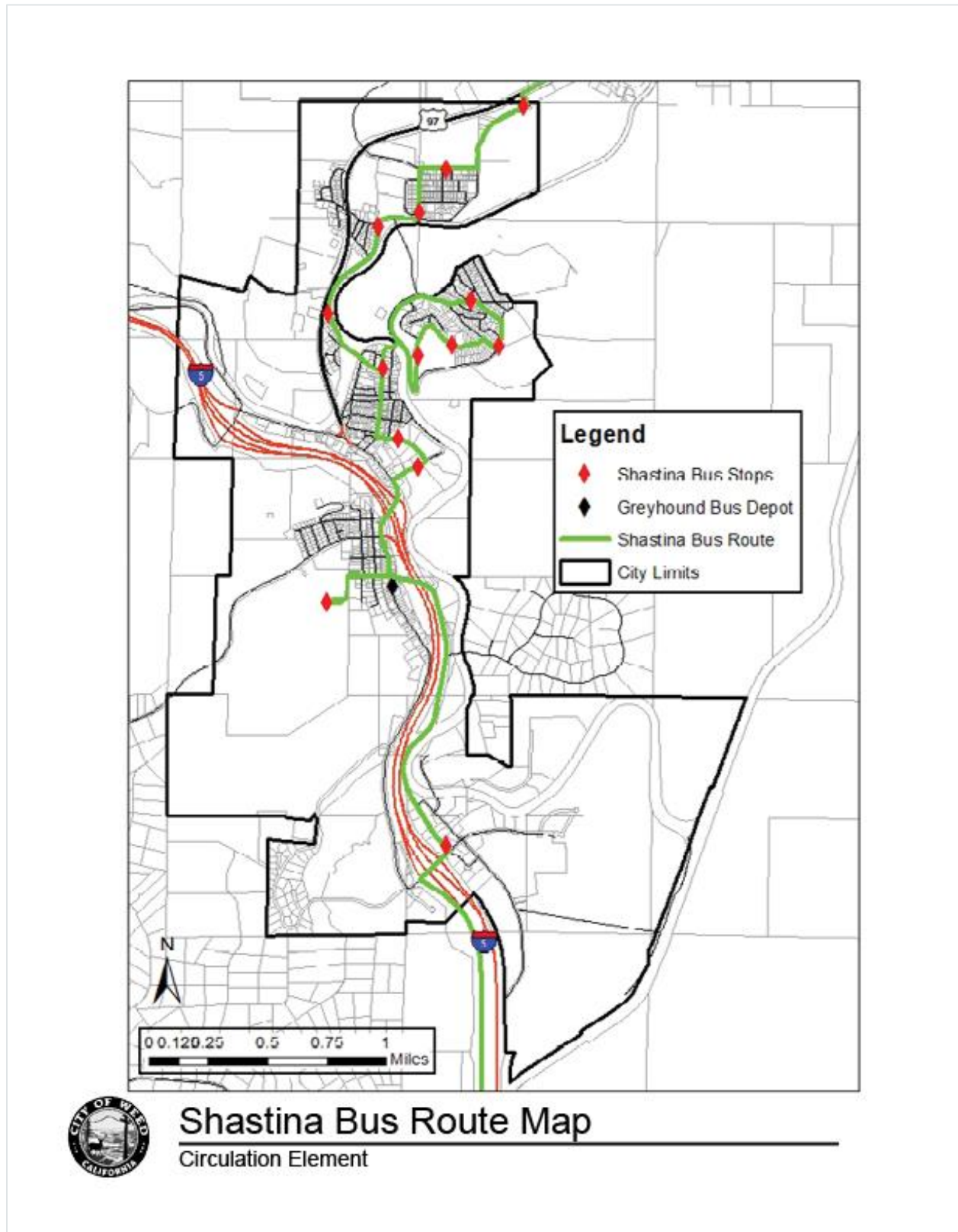
- Would serve significant number of the population;
- Can be proven to be economically feasible; and
- Can demonstrate cost effectiveness by having a ratio of fare revenue to operational cost of at least 25 percent (15 percent for the first year)

The City of Weed is served by Siskiyou Transit and General Express (STAGE). STAGE administers a passenger bus service between and in rural communities of Siskiyou County. There are 6 fixed transit routes in the County. For the City of Weed, the transit system offers service between Yreka and Dunsmuir, transit routes are shown in figures 5.2 and 5.3. The latest public hearing took place on June 16, 2015, where the SCLTC found that there currently are unmet transit needs that are reasonable to meet which are:

- Request for Route 2B (Southbound Commuter Bus) to stop in front of County Behavioral Health Services in Yreka.
- Service along HWY 97 near Papa's Pumpkin Palace.
- Service to Carrick addition on return trip from Lake Shastina to Weed.

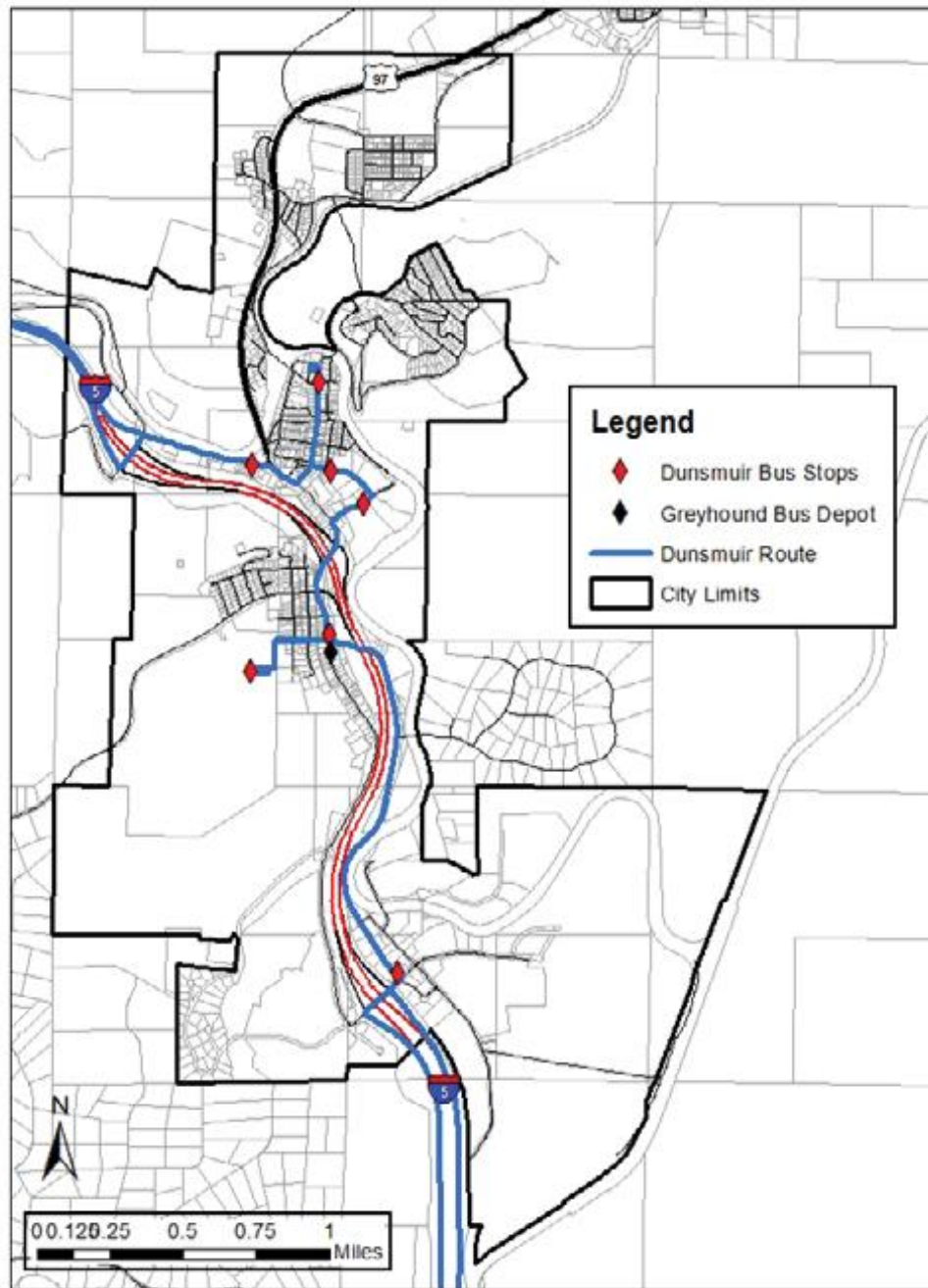
Thus, the Resolution #15-07 was adopted which states that there are unmet transit needs that are reasonable to meet.

Map 5.2 Shastina Bus Route



Source: STAGE, 2015

Map 5.3 Dunsmuir Bus Route Map



Dunsmuir Bus Route Map

Circulation Element

Source: STAGE, 2015

5.3.4 Railway Facilities

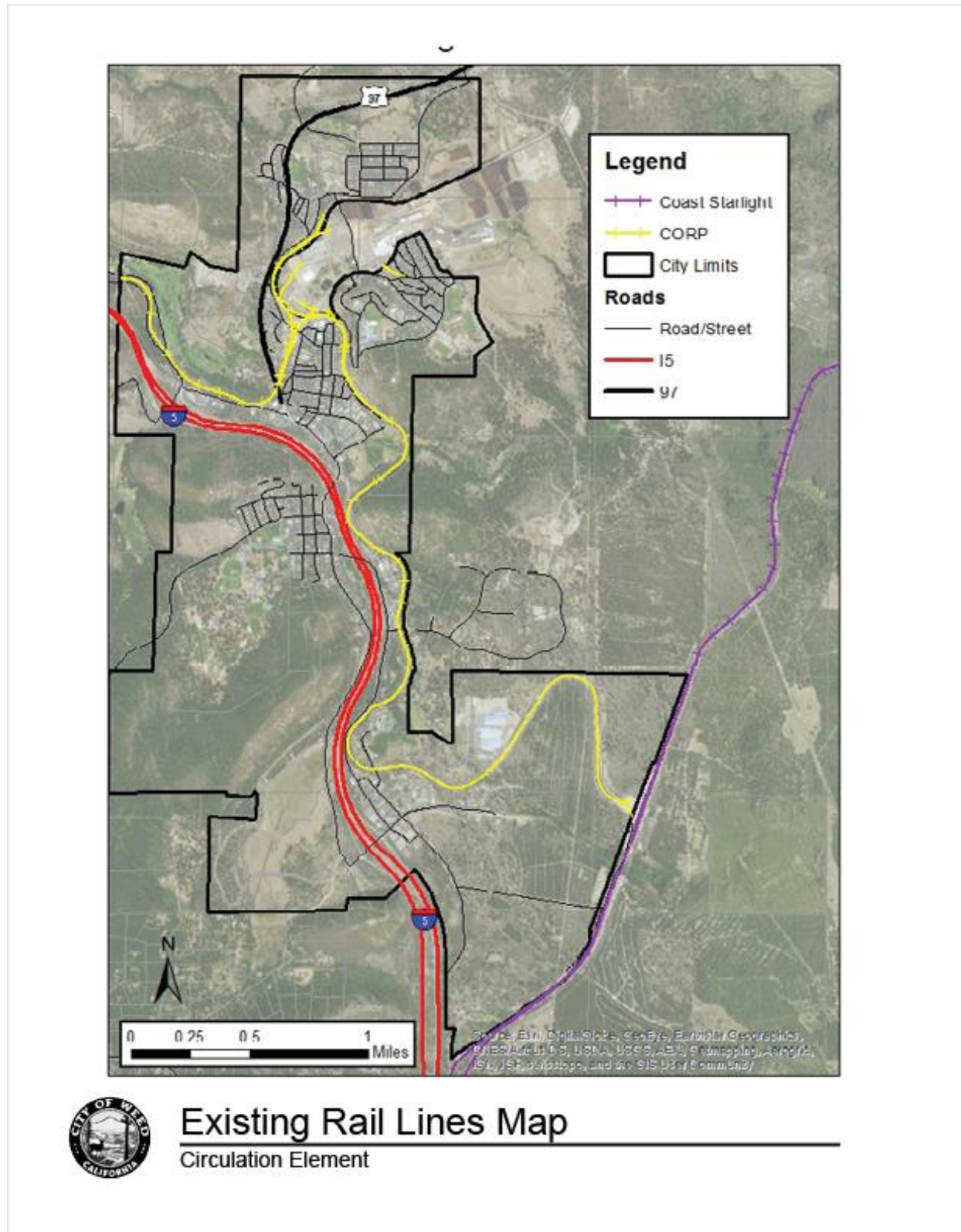
This section defines the existing railway facilities that pass through the City of Weed. Railway facilities and services are evaluated according to the following:

- All Metrics and Standards are to be measured and applied on a quarterly basis, except where otherwise noted
- Financial Standards include:
 - Percent of short term avoidable operating cost covered by passenger related revenue both with and without state subsidy included in the revenue.
 - Percent of fully allocated operating cost covered by passenger related revenue both with and without state subsidy.
- Passenger miles per train mile
- On Time Performance (OTP)
- Change in "Effective Speed"
- OTP - percentage of train times at all of a train's stations that take place within 15 minutes of the time in the public schedule
- Levels of Train Delays
- Other service quality
- Surveys - percent of passengers "very satisfied" with overall service
- Public Benefits
- Connectivity measure - percent of passengers connecting to and from other routes

Currently, Weed does not have existing rail service within the city limits. Although Amtrak's Coast Starlight Train runs through the City, Amtrak does not operate a station within Weed. The City of Dunsmuir, which is approximately 15 miles to the south, has the nearest Amtrak train station. This station provides daily service to multiple cities to the north and south of Weed, including Seattle, Tacoma, Olympia, Centralia, Kelso, Vancouver, Portland, Salem, Albany Eugene, Chemult, Klamath Falls, Redding, Chico, Sacramento, Davis, Martinez, Emeryville, Oakland, San Jose, Salinas, Paso Robles, San Luis Obispo, Santa Barbara, Oxnard, Simi Valley, and Los Angeles.

Central Oregon and Pacific Railroad (CORP) also runs through Weed. CORP primarily hauls lumber, logs, and plywood. In 2008, CORP announced plans to reopen the Siskiyou line, which would operate between Eugene, Oregon and Weed, California. Operation is expected to begin in November 2015, and the average train is expected to consist of 12 to 14 cars per day. Map 5.4 shows the existing rail lines in Weed.

Map 5.4 Existing Rail Lines



5.3.5 Aviation

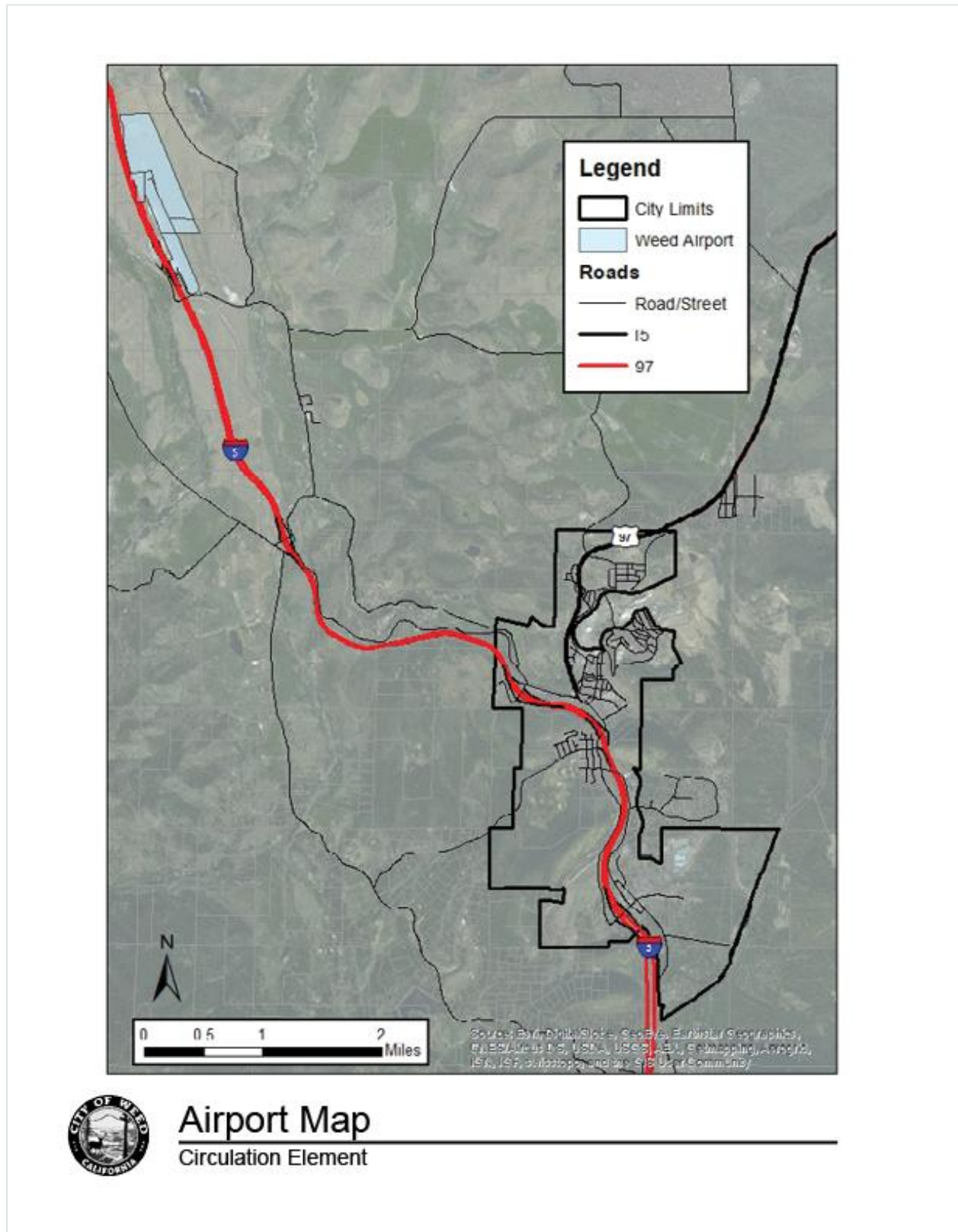
This section defines the existing aviation facilities that are located in or adjacent to the City of Weed. The Federal Aviation Administrations has mandated standards by which the Weed Airport must be evaluated. The standards are as follows:

- Minimum runway length - 5,000 ft.
- Runway pavement condition
- Minimum runway width - 75 ft.
- Minimum runway weight - 12,500 lbs.
- Most precise instrument approach procedure (GPS)
- Available fuel grades - 100 LL
- Visual Approach Slope Indicator (VASI) or Precision Approach Path Indicator (PAPI)

The City of Weed does not have an airport within City limits. The closest airport to the City is the Weed Airport, which is located approximately 4 miles northwest of the City. Map 5.5 shows the local of the Weed Airport in proximity to the City. Weed Airport is a public use airport that is operated by Siskiyou County. The airport serves general aviation purposes and acts as a base of operations on Mount Shasta. Typically, corporate visitors and geological researchers use this facility. Weed Airport has a runway length of 5,000 ft. and meets the minimum requirement for runway length. However, with 60 ft. of width it fails to meet the minimum requirement of 75 ft. The airport has a pavement strength of 12,500 lbs. and meets the required weight capacity. The airport has a PAPI system in place, which operates from sunset to sunrise.

The nearest regional airport is the Redding Municipal Airport, which is 77 miles south of Weed. The Redding Airport has two asphalt runways, serves general aviation purposes, and is host to one passenger airline. The closest airport to the north is the Rogue Valley International-Medford Airport, which is 82 miles north of Weed. Rogue Valley has one asphalt runway and four airlines that offer passenger service.

Map 5.5 Airport Location Map



Source: City of Weed, 2015

5.3.6 Parking

This section defines the existing parking designations in the City of Weed. Table 18.48.040 of the City Municipal Code outlines the parking requirements and regulations per land use. Please refer to Section 5.6.2. for an Appendix on the parking requirements in Weed.

5.3.7 Truck Routes

This section defines the designated truck routes that pass through the City of Weed. The City Municipal Code Chapter 10.48 Truck Routes has listed these routes for trucks with a maximum gross weight of ten tons. Currently the City of Weed has designated the following streets as truck routes: Black Butte, Kellogg Drive, Mary's Drive, Vista Drive, Main Street, East Lake Street, Boles Street, and South Weed Boulevard. Map 5.6 shows the designated truck routes through Weed.

I-5 and US 97 are also designated truck routes, but are outside the jurisdiction of the City of Weed. According to Caltrans, 24 percent of all traffic along I-5 in 2014 consisted of trucks, with about 6 to 7 percent of trucks having more than two axles. Along US 97, it was reported that 10 to 18 percent of all traffic consisted of trucks, with about 4 to 6 percent of the truck traffic having more than two axles.

5.3.8 Non-Motorized Transportation Facilities

This section defines the existing bicycle and pedestrian conditions in the City of Weed. The City does not have a Bicycle and Pedestrian Master Plan, but the County of Siskiyou Regional Transportation Plan provides information on existing facilities, goals and objectives, and funding sources.

5.3.8.1 *Bicycle Facilities*

This section describes the existing conditions of bicycle infrastructure, facilities, and ridership within the City of Weed. There are no federal, state, or local regulations or standards pertaining to bicycle travel in Weed. The following section describes the classifications of bicycle infrastructure as set forth by Caltrans and bicycle ridership in Weed according to the U.S. Census.

Bicycle Classifications:

The Caltrans Highway Design Manual, Chapter 100 classifies the following bicycle facilities:

- Class I Bikeway (Bike Path): Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with crossflow by motorists minimized.
- Class II Bikeway (Bike Lane): Provides a striped lane for one-way bike travel on a street or highway.
- Class III Bikeway (Bike Route): Provides for shared use with pedestrian or motor vehicle traffic.

Existing Bikeway Conditions

There are no official bike paths, bike lanes, or bike routes in existence within the City of Weed. U.S. Census data from the 2013 American Community Survey shows that zero percent of the population commuted by bicycle, whereas Siskiyou County had a 0.3 percent bicycle commuter mode share (ACS, 2013). During the field visit on October 10th, 2015 a small amount of bicycle traffic was observed along Main Street. Regionally, there is a limited network of bicycle infrastructure throughout Siskiyou County, with existing routes, paths, and on-street facilities in communities surrounding Weed. Existing bicycle infrastructure surrounding Weed is primarily used for recreational purposes.

Unlike many highways in California, bicycles are permitted to ride along the shoulder of I-5 in areas surrounding Weed. Although the road shoulder provides sufficient space for cyclists, the high vehicle speeds, heavy truck traffic, and roadway debris contribute to a high risk bicycle environment. Within the City of Weed, the lack of bicycle infrastructure also poses many safety concerns. Fast traffic, poor visibility, and lack of separated facilities may discourage people from riding. However, the small-town nature of Weed gives the City great potential to become a City with high levels of bicycle ridership.

End-of-trip bicycle facilities refer to accessible bike parking such as simple, conveniently-located bicycle racks, bike lockers, or bike cages, and may include storage lockers for personal items, showers, and toilets. Bicycle amenities are an important aspect of encouraging bicycling as a mode of transportation. During the land use inventory, bicycle parking was observed in front of the Weed Mercantile Mall and the College of the Siskiyous.

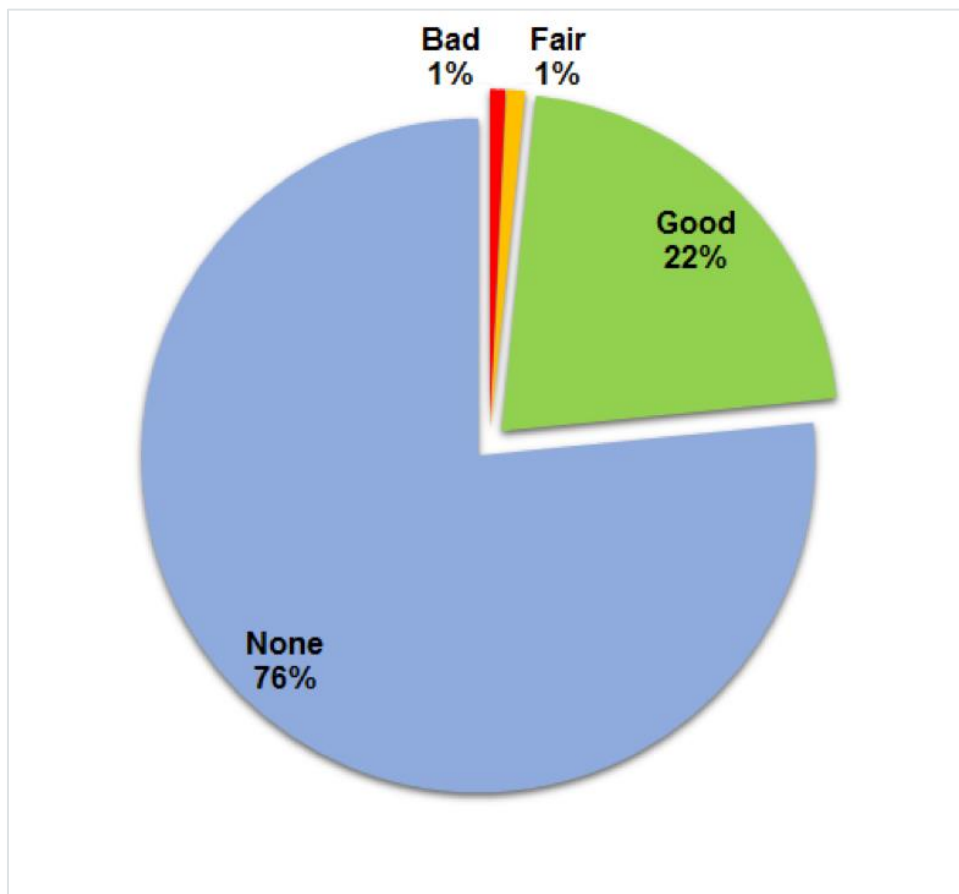
5.3.8.2 Pedestrian Facilities:

This section describes the existing conditions of pedestrian infrastructure in the City of Weed. Pedestrian travel is an important component of urban transportation, as it often is the only means of transportation for low-income residents and people with disabilities. Furthermore, walking is a popular recreational activity that contributes to quality of life, and public and environmental health.

Existing Pedestrian Conditions

Walking accounts for 10 percent of the commuter mode share in the City, which is significantly higher than Siskiyou County, California, and the U.S. Data on sidewalk conditions that was collected during the land use inventory revealed that 22 percent of parcels in Weed have sidewalks that are in good condition. Figure 5.5 shows the breakdown of sidewalk conditions in Weed. Map 5.7 shows the sidewalk conditions throughout the City. South Weed has a much more thorough network of connected sidewalks than North and Central Weed. Main Street also has 7 foot sidewalks on each side of the street that serve as an important piece of infrastructure for pedestrians in downtown Weed. Very few existing sidewalks are in bad condition; however, the map indicates that many residential areas in the City are lacking sidewalks altogether.

Figure 5.5 Sidewalk Conditions in the City of Weed, 2015



Source: Cal Poly Land Use Inventory, 2015

5.3.9 Transportation Coordination with Land Use

This section defines the coordination efforts between transportation and land use planning in the City of Weed. Coordination between transportation and land use planning is an essential element of the planning process, as it addresses predicted traffic impacts generated by certain land uses. Determining the transportation impacts of new land uses and developments gives the City an opportunity to mitigate or prevent transportation issues from occurring.

Some of the major trip generating land uses in Weed include:

- College of the Siskiyous
- Roseburg Forest Products Co.
- Weed Elementary School and Weed High School
- Crystal Geyser
- South Weed Commercial Services
- Residential Areas

These land uses are served by Weed's local roadway network, and are primarily accessible by automobile. Proximity of trip generating land uses to residential areas may allow for bicycle or pedestrian access; however, non-motorized transportation infrastructure in many areas is insufficient to provide safe and accessible connections. Many trip generating land uses in Weed are accessible by public transportation.

5.3.10 Transportation Demand Management

Transportation Demand Management (TDM) measures are strategies designed to reduce the demand for automobile as a main mode of travel and to improve the efficiency of the City's transportation system. TDM measures typically include ridesharing programs, trip reduction programs, resources for telecommuting, programs to staggered work hours to reduce peak demand, and improved access to alternative transportation modes. There is no TDM plan for the City of Weed or Siskiyou County due to the spread out nature of land uses and the relatively small population.

5.3.11 Pavement Management

The City of Weed is responsible for the management and maintenance of paved roadways within city limits. The standard to be used when evaluating pavement conditions is a Pavement Condition Index (PCI), which is a numerical index between 0 and 100 used to indicate the general condition of pavement. Roads with a PCI of 100 are newly constructed and a PCI of 0 is considered failed. There is currently no pavement condition inventory for the City of Weed, but evaluating pavement conditions was identified as an objective in the 2010 Regional Transportation Plan to enable the use of Pavement Condition as a method for determining priority road projects.

5.3.12 Traffic Safety

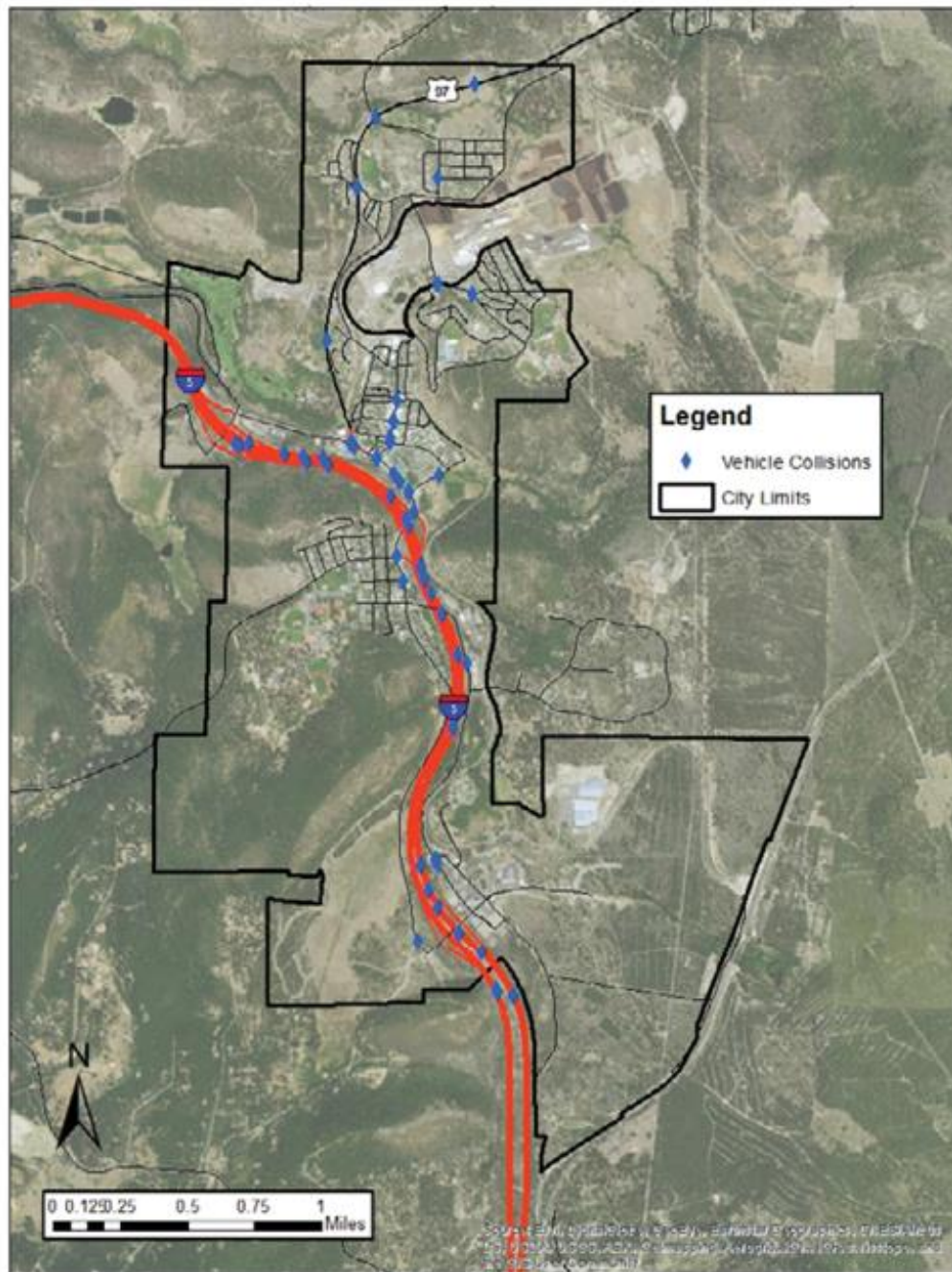
This section covers traffic safety in the City of Weed by assessing traffic safety conditions, including traffic fatalities and injury rates.

5.3.12.1 Collision Trends

This section covers the reported collision statistics for the City of Weed. The data presented in this section was gathered from the Transportation Injury Mapping System (TIMS) of the Statewide Integrated Traffic Records System (SWITRS) Query database for the City over a 10-year period from January 1, 2004 to December 31, 2013. The 10-year period up to the year 2013 represents the most current yearly collision data available through the TIMS database. It is important to remember that this data represents only reported collisions. Generally, any collision that occurred within the public right of way and involved a fatality, personal injury, or property damage was reported. While reported collisions do not represent all collisions, they provide the City with a good source of preliminary information.

There were a 80 documented collisions in the City over the 10-year study. It was observed that approximately 58.8 percent of collisions, or 47 total collisions, occurred along a State Highway. Map 5.8 shows a heat map of collision locations in cluster formation to identify the actual number of collisions associated with each location throughout the City. The collision location maps identify I-5, US 97, and Main Street as the roadways with the highest concentrations of collisions over the 10-year period.

Map 5.8 Vehicle Collision Location Map, 2004 - 2013



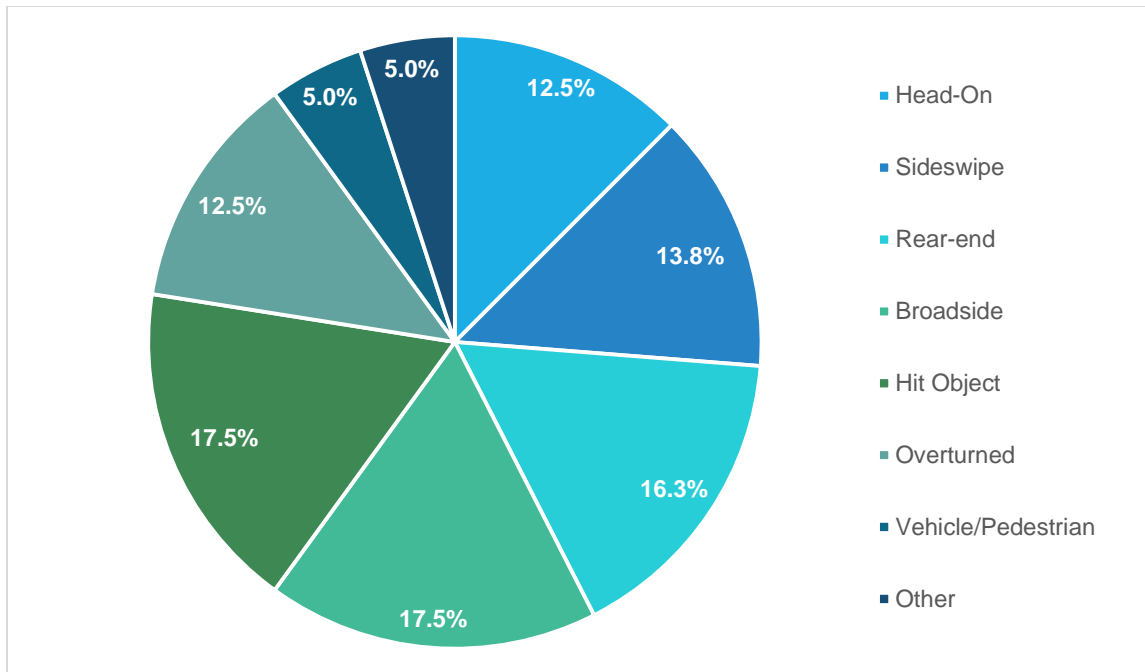
Vehicle Collisions Map 2004-2013

Circulation Element

Source: Transportation Injury System (TIS) SWITRS Query City of Weed (2004-2013)

Figure 5.6 shows the type of accidents that have occurred in Weed over the 10-year study period. There is a relatively even distribution of types of collisions listed in the TIMS system. The most frequently occurring type of collision is Broadside (also known as T-Bone Collision) or Hit Object.

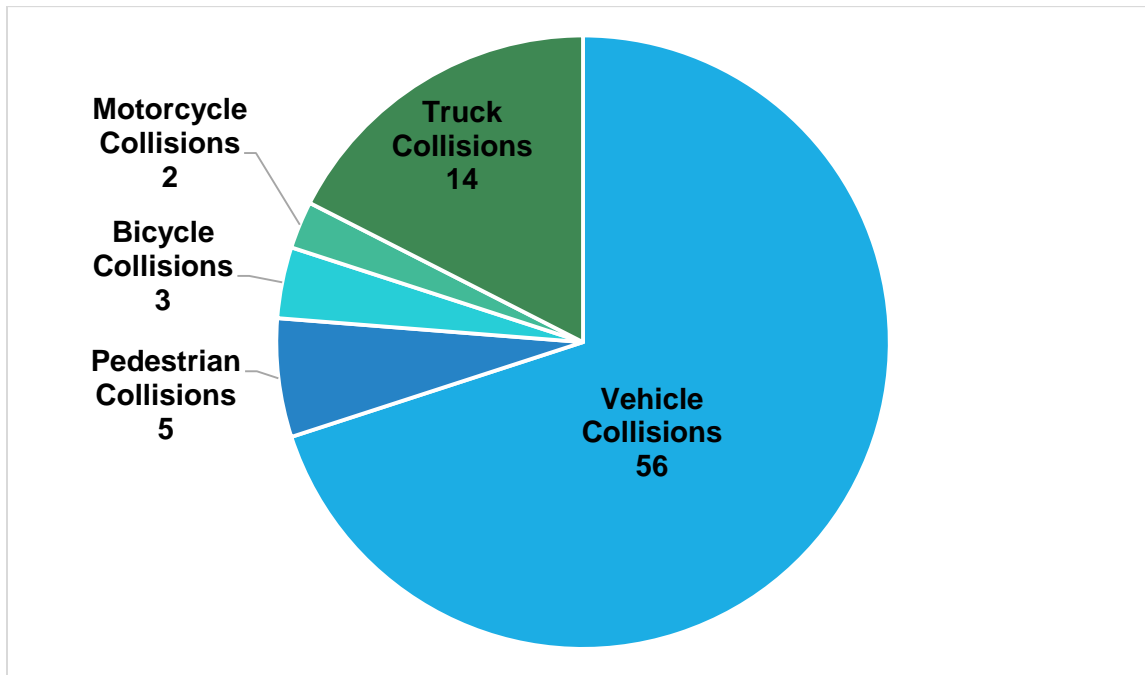
Figure 5.6 Number of Collisions by Type, 2004-2013



Source: Transportation Injury System (TIMS) SWITRS Query City of Weed (2004-2013)

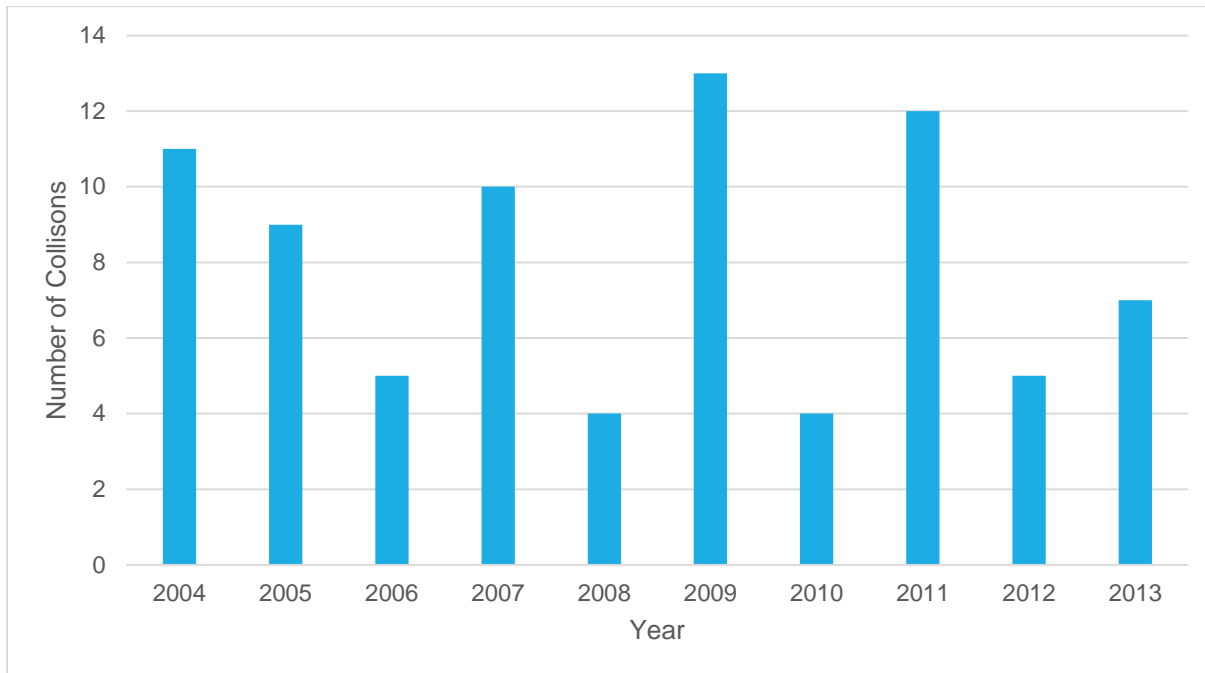
Figure 5.7 shows the number of collisions by vehicle involvement. As shown over the ten year periods there were 80 collisions involving vehicles. Broken out by type there were 56 involving automobiles only, 5 involved pedestrians, 3 involved bicycles, 14 involved trucks, and 2 involved motorcycles.

Figure 5.7 City of Weed Collisions by Vehicle Involvement, 2004-2013



Source: Transportation Injury System (TIMS) SWITRS Query City of Weed (2004-2013)

Figure 5.8 shows the reported collisions occurring in Weed from 2004 -2013. As mentioned previously there were 80 collisions over a ten-year period meaning that there was an average of 8 reported collisions per year. There was, however, quite a bit of variability in number of collisions each year; the number of reported collisions ranged from 4 to 13 collisions per year.

Figure 5.8 Collisions occurring in Weed, 2004-2013

Source: Transportation Injury System (TIMS) SWITRS Query City of Weed (2004-2013)

5.4 Issues and Opportunities

On October 10, 2015, the city held its first public meeting for the General Plan Update to discuss strengths, barriers, and wishes for the future. The following sections describe the strengths, opportunities, threats, and constraints of circulation in Weed based on public input and existing conditions.

5.4.1 Strengths and Opportunities

Public feedback from the first public meeting, which occurred on October 10, 2015, showed that residents considered Weed's geographic location and regional connectivity to be a critical strength and development opportunity. Weed's location at the junction of Interstate 5 and U.S. Highway 97 is a major contributor to the flow of travelers between Oregon and Southern California through the City. This connectivity is also a strength because it provides sufficient access to neighboring areas that have services and amenities that may not be available in Weed. The strong regional connectivity also provides an opportunity for economic growth by capturing revenue from highway commercial services. Opportunities to improve circulation in Weed relate to the strong interest in non-motorized transportation that was evident during two public meetings. The relatively large percentage of residents who walk to work demonstrates that there is a need to invest in improved and expanded sidewalk infrastructure, and the small-

town nature of the City makes walking and biking potentially feasible transportation options given an investment in quality infrastructure.

5.4.2 Issues and Constraints

The first community meeting also provided feedback that identified local connectivity as a barrier to good circulation in Weed. Currently the city is separated into two distinct sections, North Weed and South Weed. These two sections of the city are connected through Interstate 5; however, the only local roads that provides a connection between these two areas are Shastina Drive, South Weed Boulevard, and North Weed Boulevard. Limited local connectivity is also attributed to the fact that there is limited alternative transportation infrastructure in the City. Specifically, sidewalks and bicycle facilities are lacking, which is an issue if Weed is to reach modal split objectives set forth by the State and County. South Weed currently has a high concentration of sidewalks, which are in good condition, while Northern Weed and Central Weed are lacking sidewalks within the residential areas. Current bicycle facilities within Weed are severely limited and are not conducive to the promotion of bicycling as a primary mode of transportation. Facilities for alternative modes of transportation are not developed enough to offer residents safe alternatives to automobiles. Furthermore, community members have identified that many areas of the City suffer from poor pavement conditions, which impacts travel for all modes of transportation.

Aside from local connectivity and alternative transportation, other constraints regarding circulation in Weed are the lack of funding, and narrow roadways that prohibit separation of transportation facilities. Historically, only a small portion of local transportation funds is dedicated to alternative transportation, which is a barrier to adopting better alternative transportation infrastructure, services, and programs. Additionally, Weed's narrow roadways will be a constraint to the integration of complete streets principles into the City's transportation network. Although the City may want to expand bicycle and pedestrian facilities, there may not be sufficient space to accommodate all modes, which will require prioritization based on modal objectives along specific corridors.

5.5 Emerging Directions

On November 7, 2015, the City held its second public meeting for the General Plan Update to assist in guiding the emerging directions for Weed. Public outreach efforts were also directed at community members who were not able to attend the meeting by distributing surveys in public places. Participants were asked three separate questions regarding circulation, (each with multiple answer options) and were asked to vote based on preference for various options. Results from the preference questions revealed that residents consider Central Weed as the area where sidewalk repair and/or addition is most needed, that biking was the preferred method of non-motorized transportation with walking being the second, and that future infrastructure investment should be primarily focused on road pavement repair.

Based on community input and existing conditions, the emerging directions for circulation in Weed are to improve local connectivity for all modes of transportation, to prioritize investment in alternative transportation, to expand the sidewalk network, and to prioritize investment in

pavement repair. The City has a strong local roadway network, which is primarily geared towards automobiles. An emerging direction for the City is to incorporate principles of complete streets into the roadway network to increase accessibility for alternative modes of transportation. Adopting an Alternative Transportation Master Plan will help develop goals and policies for improved infrastructure, education, and enforcement and identify additional funding sources.

The City should also collaborate with the regional transportation commission to establish transportation demand management measures. Although Weed does not suffer from heavy traffic congestion, ridesharing programs, staggered work hours, and carpooling programs can help reduce single-occupancy vehicle use and improve local air quality. Collaborating with Siskiyou County to obtain a comprehensive inventory of pavement conditions in the City will help prioritize areas requiring maintenance. Lastly, the City should focus on locating new funding sources to improve and expand transportation infrastructure for all modes.

5.5.1 Community Preferences

Figure 5.9 Preferred location of sidewalks and sidewalk repair, Total Votes 76

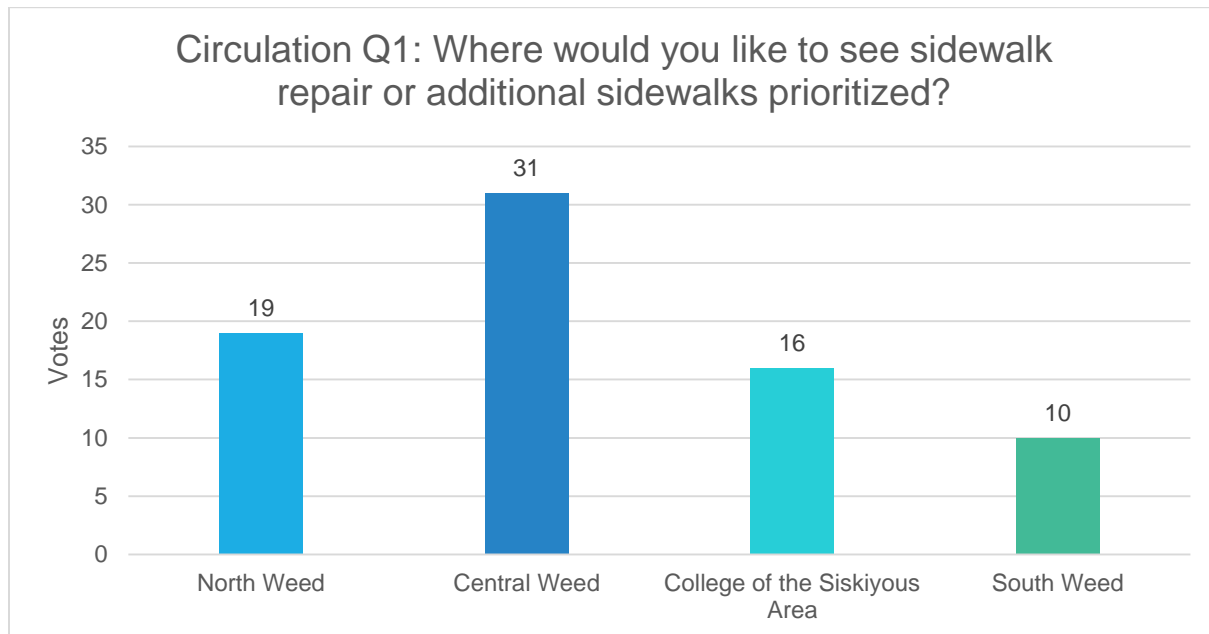


Figure 5.10 Preferred form of alternative transportation, Total Votes 73

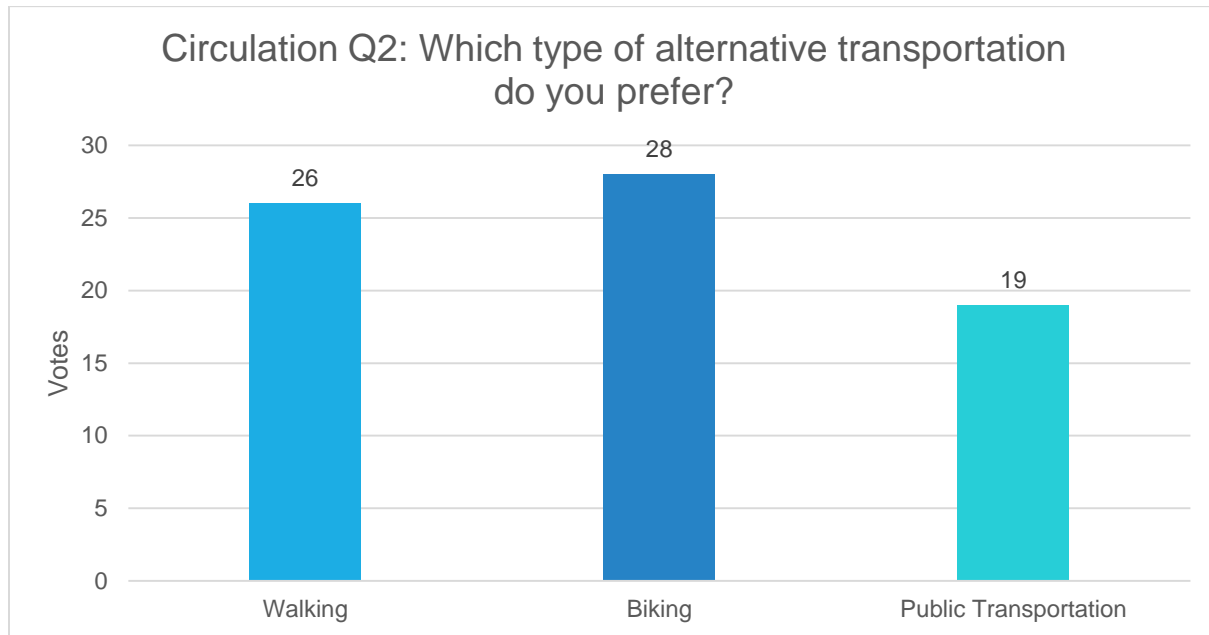
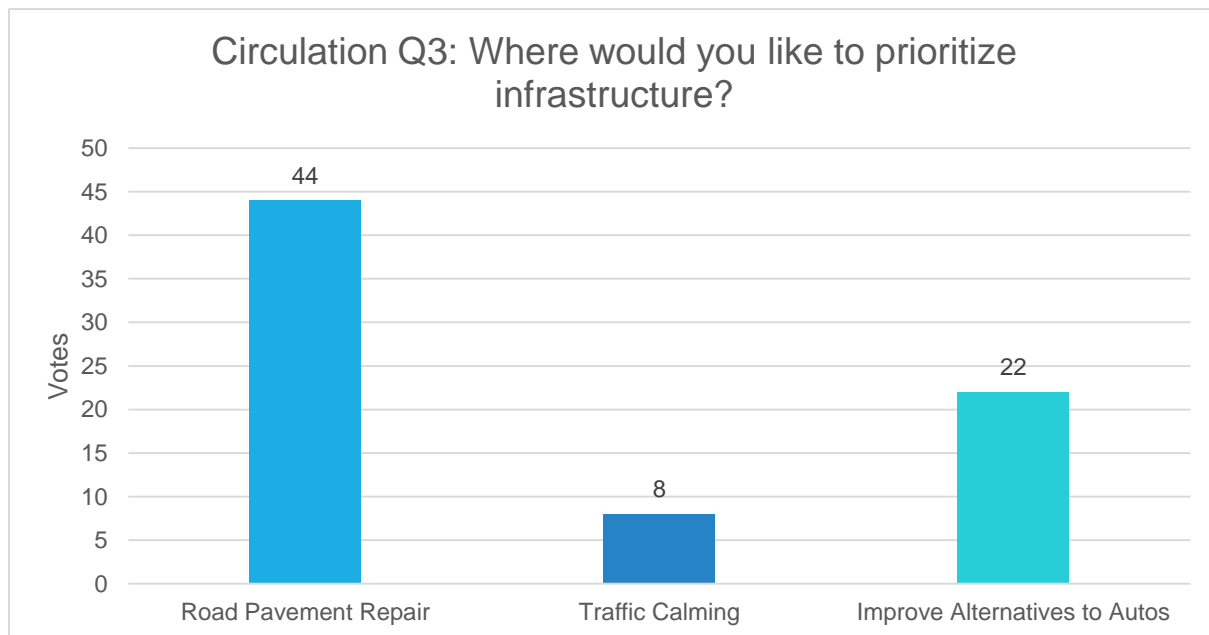


Figure 5.11 Type of infrastructure, Total Votes 74



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5.7 Appendix

5.7.1 Parking Requirements

| Permitted Use | Parking Requirement |
|--|--|
| Dwelling, single-family | Two parking spaces in a garage for each dwelling unit |
| Dwellings, multiple, family and group; and mobile home parks | Two parking spaces for each dwelling unit, plus one guest space for each five units; one and one-half parking spaces for each senior housing unit |
| Rooming house | One parking space for each tenant plus one guest space for each five tenants |
| Bowling alleys | Five parking spaces for each alley. Additional parking spaces for balance of building calculated according to use |
| Cafes, cafeteria, restaurants, bars, cocktail lounges, nightclubs, and other similar places dispersing food or refreshments | One parking space for each five fixed seats or one parking space for every thirty-five square feet of seating area where there are no fixed seats, plus one parking space for each employee on the largest shift |
| Furniture sales and repair, major household appliance sales and repair, professional business or administrative offices | One parking space for each two hundred square feet of floor area or one parking space for each two employees, whichever is greater |
| Hotels and motels | One parking space for each living or sleeping unit, plus one parking space for each five units |
| Mortuary and funeral home | One parking space for each five fixed seats of all areas used simultaneously for assembly purposes or for each thirty-five square feet of floor space used for such assembly purposes. Also one parking space for each vehicle used in connection with the use. Plus additional as required by use permit. |
| Open air commercial uses such as nurseries and used car lots | One parking space for each one thousand square feet of lot area devoted to sales and display, or one parking space for each two employees, whichever is greater |
| Industrial uses - automobile and machinery sales, public utility facilities, including electrical substations, telephone exchanges, maintenance and storage facilities | One parking space for each five hundred square feet of floor area or one parking space for each two employees on the largest shift, whichever is greater. Also one for each vehicle used in connection with the use |
| Retail establishments otherwise not enumerated in this section, such as drugstores, department stores, repair shops, animal hospitals, business schools, dance studios | One parking space for each two hundred square feet of building floor area, except area devoted exclusively to warehousing or storage, or one parking space for each two employees, whichever is greater |
| Theaters, churches, clubs, lodges, fraternal organizations, social halls, assembly halls, dancehalls | One parking space for each five fixed seats or one for every thirty-five square feet of seating area where there are no fixed seats. Also, one parking space for each two hundred and fifty square feet of floor area not used for seating |
| Hospitals, sanitariums and rest homes | One and one-half parking spaces for each patient bed, plus one for each two employees |
| Service stations | One parking space for each employee on largest shift plus one parking space for each work bay. |

6 HOUSING

6.1 Introduction

Housing is a mandatory element of the general plan under the California State Government Code §65580. California State law acknowledges that “the availability of housing is a matter of vital statewide importance and the attainment of decent housing and suitable living environment for all Californians is a priority of the highest order.” The purpose of the Housing Element is to guide long-term, comprehensive planning for housing needs in the City of Weed by providing a variety of housing types for residents of all income levels. The California Office of Planning and Research (OPR) requires that the housing element maintains consistency with the circulation and land use elements and that the element be updated every 5 years.

This chapter describes the existing conditions of housing in the City of Weed. Existing conditions include type, quality, and affordability of housing relative to household size. Following the analysis regulatory requirements and existing housing conditions, this chapter includes emerging directions for housing in the City of Weed.

6.2 Regulatory Setting

6.2.1 Federal Regulations

Department of Housing and Urban Development (HUD)

The U.S. Department of Housing and Urban Development (HUD) was established to “create strong, sustainable, inclusive communities and quality affordable homes for all.” (U.S. Department of Housing and Urban Development, portal.hud.gov). The agency oversees national policies and programs that enforce fair housing laws and address peoples’ housing needs. The following subsections detail federal standards established by HUD about housing.

Affordability

Local jurisdictions may find it challenging to provide the same quality of housing at a cost that is affordable to people of varying income levels. If the affordable housing supply is limited, some low income residents may be forced to reduce their spending on food, transportation, and healthcare. HUD determined that the cost of housing should be proportional to income and that residents who spend more than 30 percent of their income on housing are considered cost burdened. Residents who spend more than 50 percent of their income on housing are considered extremely cost burdened. To determine if the housing supply in the City of Weed is affordable to local residents, the Weed Housing Element must include an analysis of affordability.

Overcrowding

Households who cannot afford large enough housing units to accommodate their family sizes may experience overcrowding. HUD defines an overcrowded housing unit as a unit that has more than one person per room. Severe overcrowding is defined as more than 1.5 persons per room. Limited affordable housing within the City of Weed may result in overcrowding for families. Therefore, the Weed housing element must analyze the number of persons per room to identify if overcrowding is an issue within the City.

Fair Housing

Fair Housing Act, 1968

Title VIII of the Civil Rights Act of 1968, known as the Fair Housing Act, prohibits discrimination of persons with regard to sale, rental, or financing of residential dwellings. This includes discrimination based on race, color, national origin, religion, gender, familial status, and disability. Based on the demographic analysis of the City of Weed provided earlier in this report, the Housing Element should ensure that adequate housing is provided for persons of all types to comply with the Fair Housing Act.

6.2.2 State Regulations

State of California Government Code

Article 10.6 of the State of California Government Code (GC) Section 65580 through 65590 mandates the Housing Element as one of the seven required General Plan elements. The purpose of this mandate is to ensure that local governments adequately plan to meet the existing and projected housing needs of a community. The Housing Element is the policy guidance that addresses long-term, comprehensive, housing needs for every income level and a variety of housing types within the City.

According to State GC 65583(a), housing elements are required to provide an assessment and inventory of the following:

- An analysis of population and employment trends and quantification of existing and projected housing needs for all income levels.
- An analysis and documentation of household characteristics, including level of payment compared to ability to pay, and housing characteristics including overcrowding and housing stock condition.
- An inventory of land suitable for residential development, including vacant sites and potential redevelopment sites, and an analysis of the relationship between zoning and public facilities to these sites.
- The identification of zones where emergency shelters are permitted without a conditional use permit or other discretionary permit.
- An analysis of potential and actual non-governmental constraints upon the maintenance, improvement, or development of housing for all income levels, including the availability of financing, the price of land, and the cost of construction.

- An analysis of any special housing needs, such as those of the elderly and persons with disabilities (including developmental disabilities).
- An analysis of opportunities for energy conservation with respect to residential development.
- An analysis of existing assisted housing developments that are eligible to change from low-income housing uses during the next 10 years due to termination of subsidy contracts, mortgage, prepayment, or expiration of restrictions on use.

These inventories have been produced and discussed in relation to the City of Weed in this chapter.

Regional Housing Need Allocation (RHNA)

Pursuant to GC 65584 applicable to the Regional Housing Need Allocation (RHNA) process, the State Department of Housing and Community Development (HCD) is required to determine the RHNA by income category for Council of Governments (COGs). The RHNA is based on the Department of Finance population projections and regional population forecasts used to prepare regional transportation plans. RHNA determines the number of additional housing units each city shall plan to accommodate based on its expected share of new regional households throughout a five-year period. The HCD requires zoning with a minimum density of 30 units per acre for sites to qualify for very low or low-income standing in RHNA allocations. COGs are required to allocate to each locality a share of housing need totaling the RHNA for each income category. Housing element law requires local governments to accommodate the projected housing needs reflected by RHNA allocations. The law recognizes that the most critical decisions regarding housing development occur at the local level within the context of the periodically updated general plan. The Housing Element component of the General Plan requires local governments to balance the need for growth, including the need for additional housing, against other competing interests. This supports the State's interest in encouraging open markets and providing opportunities for the private sector to address the State's housing demand, while leaving the ultimate decision about how and where to plan for growth at local and regional levels. The RHNA numbers for the City of Weed are provided by the Siskiyou County 2014-2019 Regional Housing Needs Plan.

Other State Requirements

Sustainable Communities and Climate Protection Act, 2008 (SB 375)

State law requires housing elements to be updated every five years to accommodate the entire RHNA share by income category. In 2008, Senate Bill 375 extended the update period to eight years to better synchronize the development of the Regional Transportation Plan with the RHNA and housing element update process. If a local government fails to update its housing element within eight years, it is placed into a four-year deadline by the HCD. Once a local government successfully certifies two housing elements in the four-year cycle, it is eligible to return to an eight-year cycle.

California State Senate Bill 2, 2007

State Senate Bill 2 (SB 2) clarifies and strengthens housing element law to ensure zoning that encourages and facilitates emergency shelters and limits the denial of emergency shelters and transitional and supportive housing under the Housing Accountability Act. This amendment applies to Government Codes 65582, 65583, and 65589.5. This law took effect January 1, 2008 and applies to all housing elements due after June 30, 2008.

The HCD also provides policy on housing conditions. The HCD establishes housing conditions criteria in Chapter 16 of the Community Development Block Grant (CDBG) Management Manual. This criterion is used to assess housing conditions and establishes standards for sound, deteriorated, and dilapidated housing.

6.2.3 Local and Regional Regulations

There are no local regulations for housing over and above State and Federal mandates. There are, however, two agencies whose work has bearing on the quality of housing, especially for people of low income.

Great Northern Services

The Great Northern Services (GNS) is a community based nonprofit that is dedicated to support, strengthen, and empower families and communities at a local level to improve the quality of life in the Siskiyou County. GNS offers programs that support equal access in all forms such as healthy homes free of environmental hazards, personal and family health care services, and safe community development of infrastructure across the community.

Karuk Tribe Housing Authority

The Karuk Tribe Housing Authority (KTHA) aims to alleviate the shortage of livable housing units for Native American people of low and moderate income. KTHA helps promote and sustain the culture, education, language, health, welfare, self-sufficiency, and economic independence of its residents.

6.3 Existing Conditions

This section provides an analysis of the existing housing conditions in the City of Weed. The analysis includes the current housing supply, year of construction, quality of housing, housing types, and household size.

6.3.1 Quantity of Housing

There are 1,159 housing units in Weed. The majority of housing consists of single-family detached units, accounting for 56.1 percent of the City's residential housing units. The second largest share of housing are apartments, which comprise 19.2 percent of the City's housing stock. Multi-family triplex and duplex account for 15.5 percent of total housing units. The remaining 9.2 percent of the housing units are single-family attached housing, mobile homes, and duplexes. Table 6.1 provides a summary of the number and percent of housing units within the City by structure type.

Table 6.1 Number of Housing Units by Structure Type

| Structure Type | Number | Percent |
|--------------------------------|-------------|---------------|
| Single Family Detached | 650* | 56.1% |
| Single Family Attached | 35 | 3.0% |
| Apartment | 222 | 19.2% |
| Mobile Home | 64 | 5.5% |
| Multi Family (Duplex) | 6 | 0.7% |
| Multi Family (Triplex or Quad) | 160 | 15.5% |
| Total | 1159 | 100.0% |

**Accounts for homes lost and rebuilt in the 2014 Boles fire*

Source: U.S. Census Bureau, Table DP-4, 2009-2013 5-Year American Community Survey

6.3.2 Age of Housing Stock

Approximately two thirds of Weed's existing housing units were built before 1980. A significant amount of new construction occurred between 2000 and 2009, when 201 new housing units were built. Table 6.2 shows the distribution of housing structures by date built in Weed.

Table 6.2 Distribution of Housing Units in Weed by Year Built

| Year Structure Built | Number | Percent |
|-----------------------|--------------|---------------|
| Built 2000 to 2009 | 201 | 16.8% |
| Built 1990 to 1999 | 67 | 5.6% |
| Built 1980 to 1989 | 144 | 12.0% |
| Built 1970 to 1979 | 252 | 21.1% |
| Built 1960 to 1969 | 109 | 9.1% |
| Built 1950 to 1959 | 61 | 5.1% |
| Built 1940 to 1949 | 183 | 15.3% |
| Built 1939 or earlier | 180 | 15.0% |
| Total | 1,197 | 100.0% |

Source: U.S. Census Bureau, Table DP-4, 2009-2013 5-Year American Community Survey

6.3.3 Housing Condition

According to the land use inventory conducted in October 2015, 77.2 percent of the housing stock in Weed is considered in good condition, and 11.9 percent is in fair condition. Only 2 percent of the housing stock is considered to be in poor condition, and only two units were found to be in bad condition. Table 6.3 shows the distribution of the conditions of the housing stock in the City of Weed.

Table 6.3 Distribution of Housing Conditions in 2015

| Structure Condition | Number | Percent |
|----------------------------|------------|---------------|
| Good | 641 | 77.2% |
| Fair | 99 | 11.9% |
| Poor | 17 | 2.0% |
| Bad | 2 | 0.3% |
| N/A or No Information | 71 | 8.6% |
| Total Housing Units | 830 | 100.0% |

Source: Cal Poly Land Use Inventory, 2015

6.3.4 Vacancy Rate

As shown in Tables 6.4 and 6.5, the 2010 U.S. Census indicates that 11.2 percent of Weed's housing units were vacant. This rate was substantially lower than the vacancy rate in Siskiyou County (18.4 percent), but more than the State of California (8.1 percent). It is common practice to assume that a healthy housing market has a vacancy rate of approximately 5 percent.

Table 6.4 Occupancy Status of Housing Units in Weed

| | 2000 | | 2010 | | Percent Change |
|--|--------------|---------------|--------------|---------------|----------------|
| | Number | Share | Number | Share | |
| Occupied housing units | 1,184 | 91.6% | 1,131 | 88.8% | -4.5% |
| Vacant housing units | 109 | 8.4% | 142 | 11.2% | 30.3% |
| <i>For seasonal, recreational, or occasional use</i> | 17 | 1.3% | 17 | 1.3% | 0.0% |
| <i>All other vacant</i> | 92 | 7.1% | 125 | 9.8% | 35.9% |
| Total Housing Units | 1,293 | 100.0% | 1,273 | 100.0% | -1.5% |

Source: U.S. Census Bureau, Table DP-1, 2000 and 2010 Census

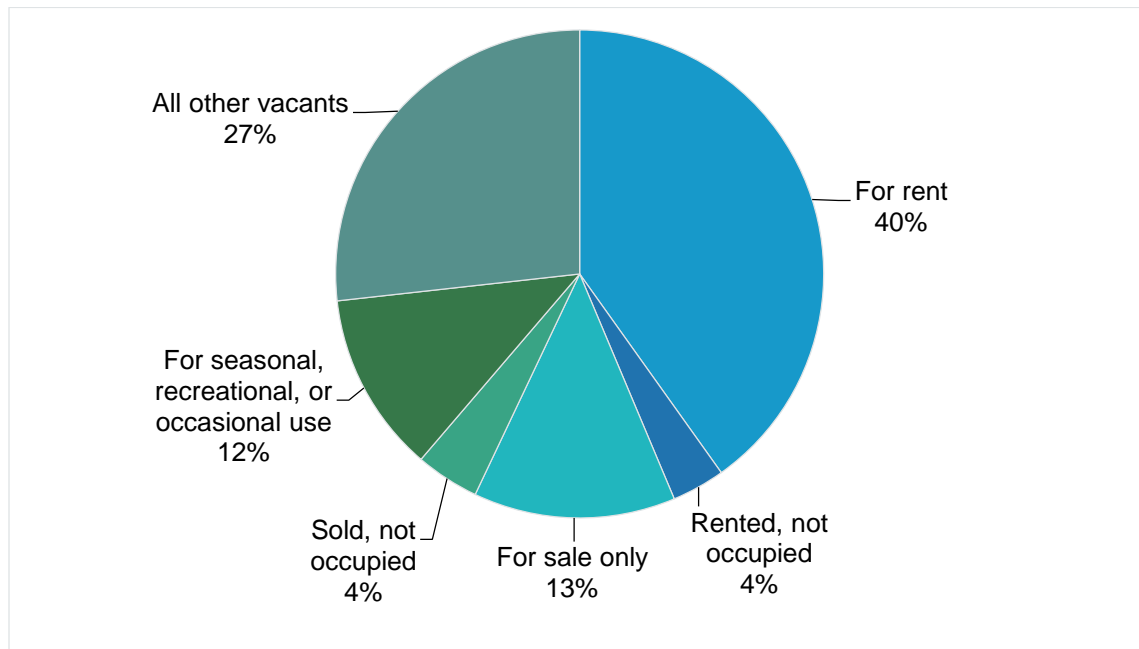
Table 6.5 Occupancy Status of Housing Units in Siskiyou County

| | 2000 | | 2010 | | Percent Change |
|--|---------------|---------------|---------------|---------------|----------------|
| | Number | Share | Number | Share | |
| Occupied housing units | 18,556 | 84.5% | 19,505 | 81.6% | 5.1% |
| Vacant housing units | 3,391 | 15.5% | 4,405 | 18.4% | 29.9% |
| <i>For seasonal, recreational, or occasional use</i> | 1,471 | 6.7% | 2,213 | 9.3% | 50.4% |
| <i>All other vacant</i> | 1,920 | 8.7% | 2,192 | 9.2% | 14.2% |
| Total Housing Units | 21,947 | 100.0% | 23,910 | 100.0% | 8.9% |

Source: U.S. Census Bureau, Table DP-1, 2000 and 2010 Census

As illustrated in Figure 6.1, there was more than two times as much vacancy among rental as owner units in 2010. 40 percent of the vacancies in Weed were attributed to housing units that were for rent, and 13 percent to housing units that were for sale. In addition, 12 percent of the vacancies were classified as units that were occupied seasonally, recreationally, or occasionally.

Figure 6.1 Composition of Vacant Housing Units in Weed, 2010



Source: U.S. Census Bureau, Table DP-1, 2010 Census

6.3.5 Regional Housing Needs Allocation

According to State Housing Law, jurisdictional Housing Elements must include the Regional Housing Needs Allocation (RHNA). Out of the 530 additional housing units needed in Siskiyou County, Weed must allocate 38 housing units for the City's share of RHNA. Table 6.6 shows a breakdown of estimated new units required for each income level in Weed.

Table 6.6 Weed's Regional Housing Needs Allocation in Siskiyou County for 2013 to 2023

| Income Category | Number of Units | Percent |
|-----------------|-----------------|-------------|
| Extremely Low | - | - |
| Very Low | 10 | 26% |
| Low | 6 | 16% |
| Moderate | 6 | 16% |
| Above Moderate | 16 | 42% |
| Total | 38 | 100% |

Source: California Department of Housing and Community Development

HCD calculates RHNA requirements for each City using information provided by the California Department of Finance. Weed's projected RHNA for the 2013 to 2023 planning period call for 16 above moderate and 6 moderate income housing units, accounting for over half (58 percent) of the entire housing needs allocation. Low and very low housing needs to make up 42 percent of the projected needs estimated.

6.3.6 Household Characteristics

6.3.6.1 Housing Tenure

Housing tenure is classified as either owner or renter-occupied. According to U.S. Census data shown in Table 6.7, the number of owner-occupied units in Weed decreased between 2000 and 2010, while the number of renter-occupied units increased over the same period. As a result, more than half of the housing stock in Weed is now occupied by renters.

Table 6.7 Housing Tenure in Weed, 2000 and 2010

| | 2000 | | 2010 | | Percent Change |
|-------------------------------|--------------|---------------|--------------|---------------|----------------|
| | Number | Share | Number | Share | |
| Owner-occupied housing units | 650 | 54.9% | 543 | 48.0% | -16.5% |
| <i>Average household size</i> | 2.33 | NA | 2.35 | NA | 0.9% |
| Renter-occupied housing units | 534 | 45.1% | 588 | 52.0% | 10.1% |
| <i>Average household size</i> | 2.51 | NA | 2.63 | NA | 4.8% |
| Total Housing Units | 1,184 | 100.0% | 1,131 | 100.0% | -4.5% |

Source: U.S. Census Bureau, Table DP-1, 2000 and 2010 Census

According to U.S. Census data shown in Table 6.8, Siskiyou County experienced a different trend over the same decade. Indeed, both owner- and renter-occupied housing units increased between 2000 and 2010; yet the number of renter-occupied housing units increased at a faster rate compared to owner-occupied units. As a result, the share of owner-occupied units dropped slightly to 64.4 percent of the total housing stock in 2010. Slightly more than one third of housing units were occupied by renters in 2010.

Table 6.8 Housing Tenure in Siskiyou County, 2000 and 2010

| | 2000 | | 2010 | | Percent Change |
|-------------------------------|---------------|---------------|---------------|---------------|----------------|
| | Number | Share | Number | Share | |
| Owner-occupied housing units | 12,472 | 67.2% | 12,629 | 64.7% | 1.3% |
| <i>Average household size</i> | 2.32 | NA | 2.23 | NA | -3.9% |
| Renter-occupied housing units | 6,084 | 32.8% | 6,876 | 35.3% | 13.0% |
| <i>Average household size</i> | 2.41 | NA | 2.36 | NA | -2.1% |
| Total Housing Units | 18,556 | 100.0% | 19,505 | 100.0% | 5.1% |

Source: U.S. Census Bureau, Table DP-1, 2000 and 2010 Census

Comparatively, as seen in Table 6.9 the number of both owner- and renter-occupied housing units increased by similar proportions in the State of California between 2000 and 2010. In 2010, 56 percent of the housing units were occupied by owners and 44 percent by renters. The share of rental units in Siskiyou County was noticeably smaller than the State, but the share in Weed was noticeably higher than the State.

Table 6.9 Housing Tenure in Siskiyou County, 2000 and 2010

| | 2000 | | 2010 | | Percent Change |
|-------------------------------|-------------------|---------------|-------------------|---------------|----------------|
| | Number | Share | Number | Share | |
| Owner-occupied housing units | 6,546,334 | 56.9% | 7,035,371 | 55.9% | 7.5% |
| <i>Average household size</i> | 2.93 | NA | 2.95 | NA | 0.7% |
| Renter-occupied housing units | 4,956,536 | 43.1% | 5,542,127 | 44.1% | 11.8% |
| <i>Average household size</i> | 2.79 | NA | 2.83 | NA | 1.4% |
| Total Housing Units | 11,502,870 | 100.0% | 12,577,498 | 100.0% | 9.3% |

Source: U.S. Census Bureau, Table DP-1, 2000 and 2010 Census

6.3.6.2 Household Size

Table 6.10 shows three out of five occupied housing units in Weed consisted of 1-person and 2-person households in 2010. This trend can also be seen in Siskiyou County for populations living alone or with only one other person. Statewide, half of the population lives in a 1-person or 2-person household.

In 2010, the average number of persons per household was 2.35 for owner-occupied households and 2.63 for renter-occupied households in Weed as previously shown in Table 6.7. The higher average for renter households than owner households was consistent with Siskiyou County but not the State. The averages for Weed were higher than Siskiyou County (Table 6.8), but lower than the State of California (Table 6.9).

Table 6.10 Distribution of Household Size in Weed, 2010

| Household Size | Number | Share |
|----------------------------|--------------|---------------|
| 1-person household | 311 | 27.5% |
| 2-person household | 384 | 34.0% |
| 3-person household | 193 | 17.1% |
| 4-person household | 129 | 11.4% |
| 5-person household | 73 | 6.5% |
| 6-person household | 20 | 1.8% |
| 7-or-more-person household | 21 | 1.9% |
| Total households | 1,131 | 100.0% |

Source: U.S. Census Bureau, Table QT-P11, 2010 Census

6.3.6.3 Overcrowding

Overcrowding is defined by HUD as more than one person per room, not including kitchens and bathrooms. Overcrowding is considered severe when more than 1.5 persons occupy a room on average. The Housing Element addresses overcrowding due to associated health and safety concerns. According to the 2013 American Community Survey (ACS), and as shown in Table 6.11, overcrowding is rare in the City of Weed, with only 6 housing units (or 0.5 percent) that have more than one person per room. There was no severe overcrowding in Weed.

Similarly, overcrowding is unusual in Siskiyou County, yet slightly more prevalent, with 3 percent of the County's housing units overcrowded. Occupied housing units in the County with severe overcrowding (that is more than 1.5 persons per room) accounted for lower than 1 percent.

Table 6.11: Overcrowding in the City of Weed and the County of Siskiyou, 2013

| Occupants per room | City of Weed | | Siskiyou County | |
|-------------------------------|--------------|---------------|-----------------|---------------|
| | Estimate | Percent | Estimate | Percent |
| 1.00 or less | 1,100 | 99.5% | 18,724 | 96.4% |
| 1.01 to 1.50 | 6 | 0.5% | 581 | 3.0% |
| 1.51 or more | 0 | 0.0% | 112 | 0.6% |
| Occupied housing units | 1,106 | 100.0% | 19,417 | 100.0% |

Source: U.S. Census Bureau, ACS 5-Year Estimate, Table DP04, 2013

6.3.6.4 Households and Families

Trends in household size are shown in Table 6.12. Between 2000 and 2010, the total number of households decreased by 4.5% (or 53 households) due to similar rates of decline in family and nonfamily households. In 2010, 60% of residents lived with one or several members of their family and 40% lived either alone or with one or more persons not related, such as roommates or senior living in a retirement home.

Table 6.12: Household types in the City of Weed, 2000 and 2010

| | 2000 | 2010 | Percent Change |
|---|--------------|--------------|----------------|
| Family households (families) | 747 | 716 | -4.1% |
| With own children under 18 years | 369 | 343 | -7.0% |
| Married-couple family | 504 | 447 | -11.3% |
| <i>With own children under 18 years</i> | 214 | 178 | -16.8% |
| Female householder, no husband present | 186 | 188 | 1.1% |
| <i>With own children under 18 years</i> | 124 | 119 | -4.0% |
| Non-family households | 437 | 415 | -5.0% |
| Householder living alone | 342 | 311 | -9.1% |
| <i>Householder 65 years and over</i> | 166 | 125 | -24.7% |
| Total households | 1,184 | 1,131 | -4.5% |

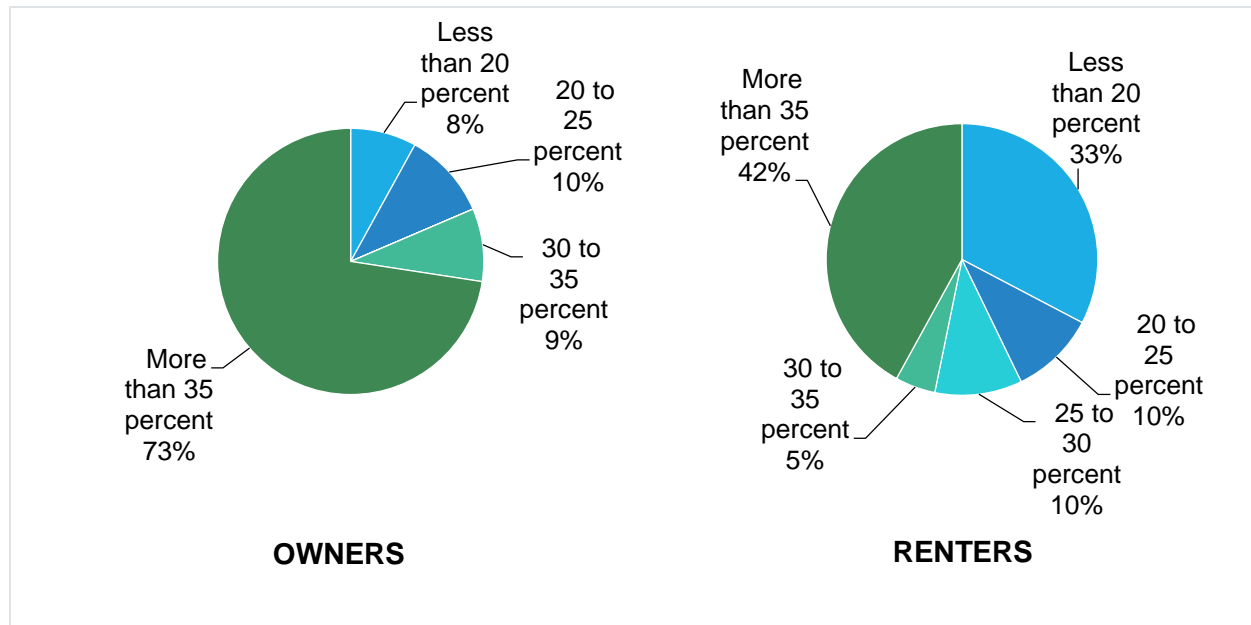
Source: U.S. Census Bureau, Table DP-1, 2000 and 2010 Census

The Table 6.12 depicts a decrease of every type of household between 2000 and 2010, except for a slight increase in female householders without a husband. The number of person over 65 years old and living alone greatly decreased (-24.7%) over the period, as well as the number of married-couples with own children under the age of 18 (-16.8%).

6.3.6.5 Affordability

Figure 6.2 shows the distribution of Weed residents by level of cost burden and by tenure. HUD defines cost burden as monthly housing costs (including utilities) exceeding 30 percent of household monthly income. In 2010, 47 percent of the owners in Weed spent 30 percent or more of their monthly income on housing costs (including mortgage). Nearly two times the share (82 percent) of renters in Weed spent 30 percent or more of their monthly income on housing costs.

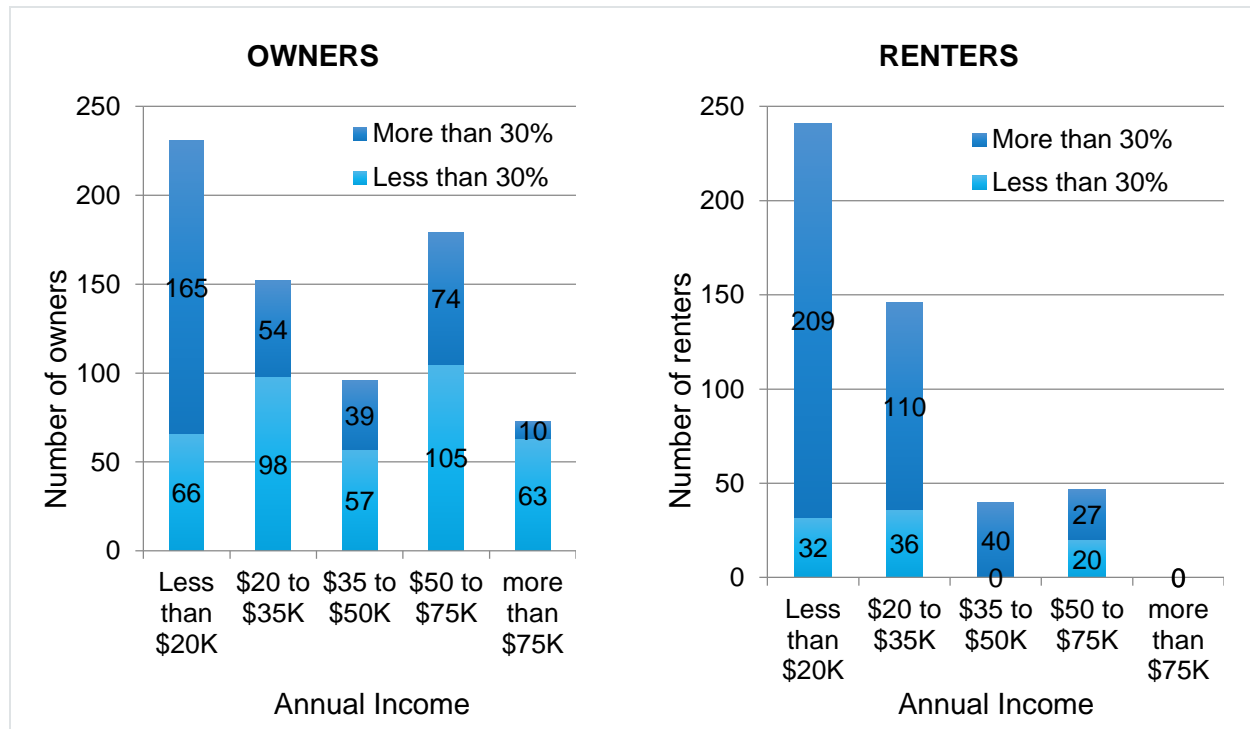
Figure 6.2 Percent of Income Spent on Housing



Source: U.S. Census Bureau, 2010 ACS 5-year estimates

In 2010, median annual income for renters was \$17,367. This means that half of the renters in Weed earned less than \$17,367 and half earned more than \$17,367. Figure 6.3 shows that a vast majority of renters spent at least 30 percent of their incomes on housing. For instance, out of 241 renters earning less than \$20,000 per year, 209 spent more than 30% of their incomes on housing costs. The Figure 6.3 shows that most renters, independent of their income levels, were under cost-burdened situations.

Figure 6.3 Percent of Income Spent on Housing by Income Category



Source: U.S. Census Bureau, 2010 ACS 5-year estimates

By comparison, median annual income for owners was \$34,006 in 2010 or nearly two times the median for renters. Out of 383 owners earning less than \$35,000 annually, 219 (a simple majority) spent more than 30 percent of their incomes on housing costs (including mortgage, utilities, and other housing costs). Owners were less impacted than renters were by cost burden, yet all revenue categories were impacted by high housing costs. Table 6.13 shows the comparative numbers by income and tenure. As Table 6.14 shows, the households earning less than 80% of the median family income in the area were highly impacted by cost burden.

Table 6.13 Housing Cost by Tenure Type and Income Level

| | Less than \$20,000: | \$20,000 to \$34,999 | \$35,000 to \$49,999 | \$50,000 to \$74,999 | \$75,000 or more | Total |
|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|---------------------|--------------|
| Owners | 231 | 152 | 96 | 179 | 73 | 731 |
| Less than 30% | 66 | 98 | 57 | 105 | 63 | 389 |
| More than 30% | 165 | 54 | 39 | 74 | 10 | 342 |
| Renters | 241 | 146 | 40 | 47 | 0 | 474 |
| Less than 30% | 32 | 36 | 0 | 20 | 0 | 88 |
| More than 30% | 209 | 110 | 40 | 27 | 0 | 386 |
| Total Households | 472 | 298 | 136 | 226 | 73 | 1,205 |
| Less than 30% | 98 | 134 | 57 | 125 | 63 | 477 |
| More than 30% | 374 | 164 | 79 | 101 | 10 | 728 |

Source: U.S. Census Bureau, Table B25106, based on 2010 ACS 5-year estimates

Table 6.14 Levels of Cost Burden by Tenure Type and Income Level, 2010

| | Less than 30% of median family income | 30 to 50% of median family income | 50 to 80% of median family income | 80 to 100% of median family income | More than 100% of median family income | Total |
|-------------------------|---|--|--|---|--|--------------|
| Total Renters | 110 | 180 | 180 | 20 | 85 | 575 |
| Cost burden > 30% | 45 | 145 | 145 | 0 | 45 | 380 |
| Cost burden > 50% | 45 | 75 | 75 | 0 | 0 | 195 |
| Total Owners | 35 | 175 | 180 | 110 | 225 | 725 |
| Cost burden > 30% | 35 | 115 | 55 | 49 | 70 | 324 |
| Cost burden > 50% | 35 | 90 | 15 | 4 | 0 | 144 |
| Total Households | 145 | 355 | 355 | 130 | 310 | 1,300 |
| Cost burden > 30% | 85 | 265 | 200 | 49 | 120 | 719 |
| Cost burden > 50% | 85 | 165 | 90 | 4 | 0 | 344 |

Source: CHAS 2006-2010

6.3.7 Housing Needs and Resources

One of the primary purposes of the Housing Element is to establish current housing needs for all income levels based on the adequacy of available land supply.

6.3.7.1 Land Availability

In October 2015, a land use survey was conducted to identify suitable parcels for future residential development. This was undertaken in accordance with State law, requiring the community to provide an adequate number of sites for housing production to meet the City's regional share of housing needs. The results of the survey found 348 vacant lots. Of the 348 vacant lots, 150 had existing plumbing and sewer services and were not constrained by slopes, poor soils, floodplains, conservation easements, lack of access or any land use controls. 117 of the vacant residential parcels were already zoned for single and medium densities, making them eligible to become new sites for affordable housing. RHNA requires the City to provide an additional 16 units for low and very low income households. Under the City's current zoning code, the 51 parcels zoned for medium and high density housing can accommodate 8-10 units of affordable housing per acre, which meets the current RHNA allocation needs for the City.

6.3.7.2 Housing Programs

6.3.7.2.1 Local and Regional Programs

The Housing Authority of Siskiyou County and Great Northern Corporation provide a variety of programs to support County residents in obtaining healthy housing and in becoming financially self-sufficient. Programs offered include Housing Rehabilitation, Housing Preservation Grants, the Home Weatherization Program and Energy Assistance. There are also two homeless services in the City of Weed and 11 others throughout the County of Siskiyou.

6.3.7.3 Housing Funding and Administrative Resources

The City of Weed can obtain funding from various sources including local providers, private non-profit agencies, state, and federal programs. The City may apply for funding through a variety of resource groups, identified on the following subsections.

6.3.7.3.1 Local and Regional

Habitat for Humanity

Habitat for Humanity (HFH) is a non-profit, faith based organization dedicated to building affordable housing and rehabilitating homes for lower income families. HFH homes are built with the help of volunteers and partner families. The HFH program works on an equity basis and the homes are sold to qualified families at no profit with an affordable, no- interest loan. Mortgages paid by low-income families help finance subsequent home building. Lands are procured by HFH or donated by government agencies or individuals.

6.3.7.3.2 State and Federal

Community Development Block Grant Funds

CDBG funds belong to a statewide program and are administered by the State Department of Housing and Community Development. These funds are available to the City and are offered through a variety of competitive and non-competitive programs. These programs provide funding for eligible activities that include, but are not limited to, acquisition and/or disposition of real estate or property, public facilities and improvements, relocation, rehabilitation and construction of housing, homeownership assistance, and clearance activities. Funding varies from year to year and city staff may decide on pursuing these funding programs based on perceived competitive advantage of potential projects. Weed is eligible to apply for CDBG funds.

HOME Investment Partnership Funds (HOME)

HOME provides formula grants to States and localities that communities use (often in partnership with local nonprofit groups) to fund a wide range of activities including building, buying, and/or rehabilitating affordable housing for rent or homeownership, or providing direct rental assistance to low-income people. HOME is the largest Federal block grant to state and local governments designed exclusively to create affordable housing for low-income households.

HOME funds are awarded annually as formula grants to participating jurisdictions. The program's flexibility allows state and local governments to use HOME funds for grants, direct loans, loan guarantees or other forms of credit enhancements, and rental assistance or security deposits. Weed is eligible to apply for HOME funds.

Mortgage Credit Certificate Program (MCC)

The Mortgage Credit Certificate Program (MCC) is a federally funded program administered by the State to provide first-time homebuyers a credit on their federal income taxes. MCC is an annual application for homebuyers to credit up to 20 percent of the mortgage interest paid for that year on their federal income taxes. The remaining 80 percent of the mortgage interest paid will remain as an income tax deduction. First time homebuyers in the City of Weed are eligible to apply for the MCC program.

Cal Home Program

Cal Home offers financial assistance to cities and non-profit developers to assist individual households through deferred-payment loans. The loans are direct and forgivable in order to assist development projects involving multiple ownership units, including single-family subdivisions. The purpose of Cal Home is to enable low and very-low income households to become or remain homeowners. Cal Home loans are available to Weed residents.

Application for Grants and Loans

California State voters approved Proposition 46 and Proposition 1C authorizing over \$2 billion for continued housing programs. Funding available under Propositions 46 and 1C will pay for affordable housing, neighborhood revitalization efforts, supportive housing and supportive services, downtown revitalization, and other programs to help meet the housing needs of

communities across the State. These funds are available for Weed to apply for once the City's Housing Element has been approved by the State.

6.3.8 Special Needs Housing

Certain persons may encounter greater difficulty finding appropriate and affordable housing due to their special needs. These special circumstances can be related to income, family structure, age, and/or disability. State Housing Element law identifies the following groups as "special needs households": elderly, persons with disabilities, large families, farmworkers, families with female heads of households and families and persons in need of emergency shelters. Table 6.15 shows estimates of special needs groups in Weed in 2010.

Table 6.15 Summary of Special Needs Groups in Weed, 2010

| Special Need Groups | Number |
|---------------------------|--------|
| Farm worker population | 5 |
| Senior Headed Households | 260 |
| Persons with disabilities | 310 |
| Homeless persons | NA |
| Single-person household | 269 |

¹ Farm worker population refers to person employed in the agriculture, forestry, fishing, and hunting sector
Sources: U.S. Census Estimate; Table DP-1, 2010;

6.3.8.1 Farm Labor Housing

Farm worker population refers to residents employed in the agriculture, forestry, fishing and hunting, and mining sector. It is typically divided into two categories: seasonal agricultural labor and permanent farm workers. Permanent farm workers work and reside permanently in nearby agricultural areas. These workers are typically low-income and are entitled to low-income housing assistance. When workloads increase during harvest periods, the workforce is supplemented by seasonal or migrant labor. These workers normally reside in and around the community during crop seasons.

Agricultural activity in Weed is very limited. The 2015 Cal Poly Land Use Inventory did not identify lands within the City with agriculture as the primary use. There were lands outside of the city limit and to the North dedicated to cattle ranching and/or hay and alfalfa production. However, these were small-scale family owned and operated businesses and their needs for permanent and seasonal farmworkers was rather limited. Their seasonal needs were most likely fulfilled by local residents and students.

According to the U.S. Census Bureau, there were only 5 persons employed in the City in the agriculture, forestry, fishing and hunting industry in 2010. Most if not all those persons were probably working for forestry-related employers. Thus, there is very little need for farm labor housing, including seasonal and migrant farmworkers.

6.3.8.2 Senior Housing

The Census defines senior population as anyone 65 years or older. According to U.S. Census data, the City of Weed had 260 senior-headed households in 2010, accounting for 14.8 percent of total households, as shown in Table 6.16. Senior households face unique issues because they are often unable to work, tend to rely on fixed incomes, and may have high health care costs. Furthermore, seniors may not be able to maintain their home properly because of health and mobility restrictions. Seniors may require smaller housing units that are more manageable. Table 6.16 also shows that the number of households with individuals 65 years and over and the number of senior-headed households have substantially declined since 2000. These two groups have decreased by 21.4 percent and 21.7 percent respectively while the total number of household in Weed only declined by 4.5 percent over the decade.

Table 6.16 Senior Households in Weed

| | 2000 | | 2010 | | Percent Change |
|---|--------------|---------------|--------------|---------------|----------------|
| | Number | Share | Number | Share | |
| Total Households | 1,184 | 100.0% | 1,131 | 100.0% | -4.5% |
| Households with individuals 65 years and over | 359 | 30.3% | 282 | 24.9% | -21.4% |
| Senior-Headed Households | 332 | 28.0% | 260 | 23.0% | -21.7% |
| 65 to 74 years | 139 | 11.7% | 112 | 9.9% | -19.4% |
| 75 to 84 years | 134 | 11.3% | 93 | 8.2% | -30.6% |
| 85 years and over | 59 | 5.0% | 55 | 4.9% | -6.8% |

Source: U.S. Census, Table DP-1 and QT-H2. 2010

6.3.8.3 Homeless

There is no official data available estimating the number of homeless persons in the City of Weed or in Siskiyou County. Yet, homeless populations are known to exist in Weed and in the County. The population is relatively low especially during the winter. Most homeless persons are transients and are located near the I-5 and Union Pacific Railroad corridors. Most services for homeless persons are located in Yreka. Weed has one center, the Siskiyou Training and Employment Program, which specialized in job training. In addition, there are four homeless shelters in the County, none of them located in Weed. Even though, the shelters can accommodate the county homeless population, Siskiyou County recently amended its Zoning ordinance to facilitate the development of additional shelters in the eventuality of an increase in the homeless population.

6.3.8.4 Persons with Disabilities

Similar to senior populations, persons with disabilities face challenges due to their health and economic status. Many disabled people are on fixed incomes and may not be able to maintain their homes because of mobility issues. Disabled community members need housing that is conveniently located near vital goods, services, and public transportation facilities. Some

disabled people require housing that is adapted for special physical needs such as wheelchairs, or accommodations for live-in staff may be necessary. Table 6.17 provides a summary of persons with a disability in Weed. Disabilities are categorized by the following impairments:

- Hearing difficulty: deaf or having serious difficulty hearing (DEAR).
- Vision difficulty: blind or having serious difficulty seeing, even when wearing glasses (DEYE).
- Cognitive difficulty: Because of a physical, mental, or emotional problem, having difficulty remembering, concentrating, or making decisions (DREM).
- Ambulatory difficulty: Having serious difficulty walking or climbing stairs (DPHY).
- Self-care difficulty: Having difficulty bathing or dressing (DDRS).
- Independent living difficulty: Because of a physical, mental, or emotional problem, having difficulty doing errands alone such as visiting a doctor's office or shopping (DOUT).

The U.S. Census estimates that 301 residents in Weed had a disability in 2010. This amounts to 5.3 percent of the Weed population having disability status.

Table 6.17 Disability Types in Weed, 2010

| Disability Types | Share in Weed Population |
|-------------------------------|--------------------------|
| All Disability status | 5.3% |
| Hearing difficulty | 3.5% |
| Vision difficulty | 3.5% |
| Cognitive difficulty | 4.5% |
| Ambulatory difficulty | 3.7% |
| Self-care difficulty | 4.7% |
| Independent living difficulty | 4.3% |

Source: U.S. Census, ACS 5-year estimates, 2010

As seen in the Table 6.18, among the population living in Weed and with one or more disabilities, 161 are employed and 10 are unemployed. Moreover, 130 of them are not in the labor force, but are majority retired persons.

Table 6.18 Persons with Disabilities by Employment Status, 2010

| Employment Status | Number |
|------------------------------------|--------|
| Employed | 161 |
| Unemployed | 10 |
| Not in Labor Force | 130 |
| Total Population with Disabilities | 301 |

Source: U.S. Census, ACS 5-year estimates, 2010

The Weed Police Department initiated the “You Are Not Alone” program for seniors, disabled persons, or those home-bound who live alone. Any Weed residents can ask the Police Department to call them once a day. If the subscriber does not respond to the phone call, a police officer will contact the designated emergency contact and will visit the subscribers home to check on the person’s safety.

6.3.8.5 Single-Parent Households

Single parents often support children on a more limited income than couples with children. Single parent households may also be in need of additional childcare services to accommodate hours of employment.

Table 6.19 shows the number of single parent households in Weed. Almost 1 out of 4 households in Weed are identified as a single parent household. Of the total single-parent households, 7.2 percent were headed by male householders, while 16.6 percent were headed by female householders.

Table 6.19 Single Parent Household Typed in Weed, 2010

| Household Type | Number | Percent |
|--------------------------------------|--------------|---------------|
| Total Households | 1,131 | 100.0% |
| Single parent households | 269 | 23.8% |
| Male householder, no wife present | 81 | 7.2% |
| Female household, no husband present | 188 | 16.6% |

Source: U.S. Census, Table DP-1, 2010

6.3.8.6 Housing Properties for Special Needs

As shown in Table 6.20, there are several properties in Weed specifically dedicated to households with special needs. The City of Weed has three multifamily properties for low-income households, seniors, and persons with disabilities; two low-income housing tax credit properties; and one USDA rural property. This represents 252 housing units in Weed available to the special needs population. They range in size from 1-bedroom units to 3-bedroom units.

Table 6.20 Special Needs Housing in Weed, 2015

| Type of Special Need Housing | Size of Unit | | | |
|---|------------------|------------------|------------------|--------------|
| Multifamily properties - Assisted | 1 Bedroom | 2 Bedroom | 3 Bedroom | Total |
| Siskiyou Garden | 8 | 16 | 0 | 24 |
| Boles Creek Apartments Phase II | 12 | 24 | 12 | 48 |
| Boles Creek Apartments Phase I | 16 | 34 | 0 | 50 |
| Low Income Housing Tax Credit Properties | 1 Bedroom | 2 Bedroom | 3 Bedroom | Total |
| Mountain View Apartments Home | 0 | 29 | 32 | 61 |
| Boles Creek Apartments | 16 | 33 | 0 | 49 |

| USDA Rural Housing | 1 Bedroom | 2 Bedroom | 3 Bedroom | Total |
|--------------------|-----------|-----------|-----------|-------|
| Pineview Manor | 2 | 15 | 3 | 20 |

Source: HUD, 2015

6.3.9 Housing Constraints

6.3.9.1 Governmental

6.3.9.1.1 Land Use Controls

The City of Weed regulates the type, location, density, and scale of residential developments through the Zoning Ordinance. Authorized by state law, local cities enforce zoning regulations to protect and promote the health, safety, and general welfare of residents as well as implement policies for the General Plan. Table 6.21 shows the development requirements for the various residentially zoned land uses.

Table 6.21 Land Use Controls

| | Rural Residential Agricultural (R-R) | Low Residential (Res-1) | Medium Residential (Res-2) | High Density Residential (Res-4) | High Density Residential/ Professional (Res-4) |
|-----------------------------------|--------------------------------------|-------------------------|----------------------------|----------------------------------|--|
| Max. Units per Acre(1) | 0.2 | 5 | 8 | 2 | 7 |
| Minimum Lot Size (Sq. Ft.) | 217,800 | 5,400-6,000 | 5,400-7,000 | 5,400-7,000 | 5,400-7,000 |
| Minimum Lot Width | - | 60' | 60' - 70' | 60' - 70' | 60' - 70' |
| Front Yard Setback | - | 5 - 10' | 5 - 10' | 5 - 10' | 5 - 10' |
| Side Yard Setback | - | 5' | 5' | 5' | 5' |
| Rear Yard Setback | - | 10' | 10' | 15' | 15' |
| Max. Building Height | | 35' | 35' | 35 - 45' | 35 - 45' |
| Minimum Parking/ Unit(3) | 2 | 2 | 2 | 2 | 2 |
| Max. Lot Coverage | - | 40% | 40% | 40 - 60% | 40 - 60% |

Source: City of Weed Zoning Ordinance

Notes: (1) Standards in Zoning Ordinance appear to permit higher densities based on required land area per dwelling unit; however, State law requires Zoning to be consistent with the General Plan.

(2) In addition to the indicated rear yard setback, 1,000 sq. ft. must be uncovered on the rear 1/3 of the lot for single family-dwellings, duplexes and triplexes.

6.3.9.1.2 *Parking Standards*

Parking requirements can be a constraining factor to housing production, especially affordable housing development. The parking standards in the City of Weed's residential districts require a minimum of two parking spaces per unit. The requirements are minimal and are not considered a constraint to development. In addition to the two required parking spaces per dwelling unit, one guest space is required for every five dwelling units in multifamily dwellings.

6.3.9.1.3 *Site Improvement Standards*

According to the City's Zoning Code, "improvement" refers to any street work, drainage needs and utilities to be installed or agreed to be installed by the sub-divider on land to be used for public or private streets, highways, ways, and easements, as are necessary for the general use of the lot owners in the subdivision and the surrounding area, subject to approval and acceptance of the final map.

The City's Municipal Code regulates required improvements for new development in Chapter 17.12.280 "Improvements." Oftentimes, site improvements can be a cost deterrent for developers, especially for affordable housing projects. The City can reduce the cost of improvements by obtaining state and federal financing, providing density bonuses, and deferring or reducing fees to ensure long-term affordability of these assisted housing units.

6.3.9.1.4 *Street Improvements*

In order to protect public health and safety, the basic minimum street standards required by the City of Weed are as follows:

- Local Streets:
 - Right-of-way: 54 feet
 - Pavement width: 36 feet
- Secondary Streets:
 - Right-of-way: 60 feet
 - Pavement width: 40 feet
- Major Streets:
 - Right-of-way: 84 feet
 - Pavement width: 64 feet
- Hillside Local Streets:
 - Right-of-way: 40 feet
 - Pavement width: 34 feet
- Hillside Collector Streets:
 - Right-of-way: 46 feet
 - Pavement width: 36 feet

New subdivisions require the following:

- Curb, gutter and sidewalk, or parking sidewalk where required
- Water lines and services to serve each individual lot, including a meter box

- Fire hydrants
- Sanitary sewers and laterals to serve each lot
- Storm sewers and drains
- Slope planting, silt basin or other forms of erosion control
- Ornamental street lights
- Street trees and
- Street signs

6.3.9.1.5 Development Fees

Large vacant parcels zoned for high density housing do not currently have street improvements in place, such as streets, sidewalks, and water and sewer connections. The City requires the developers to construct the improvements and/or pay these fees to lower the costs of providing infrastructure, public facilities, and services. Table 6.22 shows the schedule of fees, which are subject to change.

Table 6.22 Development Fees

| Facility | Fees Per Dwelling Unit | |
|----------------------|------------------------|--------------------|
| | Single-Family | Multifamily |
| Water Connection Fee | \$4,602 | \$930 |
| Sewer Connection fee | \$3,196 | \$3,082 |
| School Impact Fee | \$2.04 per Sq. Ft. | \$2.04 per Sq. Ft. |
| Total | \$7,798 | \$4,012 |

Source: City of Weed, 2009

Notes: Fees are for informational purposes and are subject to change.

6.3.9.1.6 Building Code and Enforcement

State building laws require the City to implement building codes and standards to meet Title 24 of the California Code of Regulations. Title 24 is an important set of regulations that improve California buildings through energy conservation, construction and maintenance, life and fire safety, green design, and accessibility. Chapter 16.04.020 of the Weed Municipal Code addresses the City of Weed building codes for new construction, as well as any alterations, repairs, relocations, or reconstruction of any building. These codes are an amended version of the State Building Codes.

6.3.9.2 Non-Governmental

6.3.9.2.1 Availability of Financing

The availability of financing for home purchase and improvements is crucial to maintaining a home. The Home Mortgage Disclosure Act (HMDA) provides public information about the action taken on loans for home purchases and improvements. Table 6.23 and Table 6.24 show the loan applications for home purchases and home improvements, respectively. Table 6.23 differentiates between conventional loans and government backed loans as well as approval, denial, or other. "Other" includes the application being withdrawn by the applicant. Loans that are categorized under the applicant income category of "not listed" did not have an income amount provided by HMDA.

Table 6.23 shows the approval and denial rates of home purchase loans by income category. In 2014, 67 loan applications were submitted by Weed residents for home purchases, of which 49 were conventional and 18 were government backed. For both conventional and government backed loans, approximately 71 percent of the loans in each category were denied. For conventional loans, the income category with the highest percentage of denied applications was the above moderate income group. For both loan types, most of the applications originated or were withdrawn by the applicant.

Table 6.23 Action on Home Purchase Loans in Weed in 2014

| Applicant Income Category | Conventional Loans | | | | Government Backed Loans | | | |
|---------------------------------|--------------------|----------|----------|-----------|-------------------------|----------|----------|-----------|
| | Total | Approved | Denied | Other | Total | Approved | Denied | Other |
| Low (80% AMI) | 4 | 3 | 1 | 0 | 2 | 2 | 0 | 0 |
| Moderate (120% AMI) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Above Moderate (> 120% AMI) | 44 | 2 | 2 | 40 | 16 | 3 | 2 | 11 |
| Not Listed | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 49 | 5 | 3 | 40 | 18 | 5 | 2 | 11 |

Source: Home Mortgage Disclosure Act, 2014.

Table 6.24 shows the approval and denial rates of home improvement loans by income category. In 2014, 8 loan applications were submitted by Weed residents for home improvements, of which 7 were conventional and one was government backed. For the conventional loans, 57.1 percent of the loans were denied. Only two of the conventional loans were made by residents in the low income category; of these, one was approved and one was denied. There was only one government backed loan application submitted, which was closed for incompleteness.

Table 6.24 Action on Home Improvement Loans in Weed in 2014

| Applicant Income Category | Conventional Loans | | | | Government Backed Loans | | | |
|-----------------------------|--------------------|----------|----------|----------|-------------------------|----------|----------|----------|
| | Total | Approved | Denied | Other | Total | Approved | Denied | Other |
| Low (80% AMI) | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |
| Moderate (120% AMI) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Above Moderate (> 120% AMI) | 5 | 0 | 3 | 1 | 1 | 0 | 0 | 1 |
| Not Listed | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 7 | 1 | 4 | 1 | 1 | 0 | 0 | 1 |

Source: Home Mortgage Disclosure Act, 2014.

6.3.9.2.2 Price and Availability of Land

According to the 2015 Cal Poly Land Use Inventory, 348 of the 1,473 parcels in the City were identified as vacant. Of these 348 parcels, 117 were zoned for residential development, have existing plumbing and sewer service, and are not constrained by slopes, poor soils, floodplains, conservation easements, lack of access, or any land use controls. Raw land is plentiful, but creates a direct impact on the cost of a new home from development impact fees, which can be regarded as constraints. Developers often seek to obtain City approvals for the largest number of lots allowable on a parcel of land. Single-family land prices ranged from \$58,980 per acre to \$233,060 per acre during a survey conducted by the City in 2010.

6.3.9.2.3 Construction Cost

A variety of factors contribute to the cost of constructing a new home including building materials, size and scale, site conditions, permit and developer fees, and amenities. The International Code Council biannually produces Building Valuation Data (BVD) for local jurisdictions to reference for permit fees. The BVD provides the estimated construction costs for various types of structures, including residential units. According to the August 2015 BVD, construction costs ranged from \$103.42 to \$154.38 per square foot for multi-family homes and \$112.65 to \$143.93 per square foot for single-family homes. Constructing a new single family home at 1,200 square feet would cost between \$135,180 and \$172,716, not including purchase of the land.

6.4 Issues and Opportunities

On October 10, 2015, the City held the first public meeting for the proposed General Plan. During this meeting, the public voiced concerns and what they believed to be strengths about the City of Weed. The comments pertaining to housing are classified and summarized in the following sections.

6.4.1 Strengths and Opportunities

Based on input received at the first public meeting, the strengths regarding the City's current housing stock include the relative reasonable housing prices. Indeed, in 2014, the U.S. Census estimated that the median monthly cost for both owners and renters was \$798 in Weed, compare to \$947 in Mount Shasta and \$893 in Dunsmuir. Yet, the residents of Weed have on average lower incomes compared to Siskiyou County population. Thus, and as explained earlier in the chapter, a substantial part of the City residents is in situation of cost burden. Nonetheless, owners and renters in Weed experience housing prices differently because owners have in average higher incomes. Housing prices a strength for owners and families wishing to move to Weed.

A second strength is the variety of neighborhoods throughout the City. Each neighborhood has different character layout and density. Even though a large part of the housing stock is single detached houses, some areas such as downtown Weed offer various housing types including apartments.

A major opportunity is the possibility for housing expansion in Weed. There is a large amount of vacant land within the city limits (39 percent), which indicates that there is space to build housing as the population grows. These available sites are either infill opportunities, or available lots located in different areas in the City. The empty sites have different size and a substantial part of them already has street access and a connection to utilities.

6.4.2 Threats and Constraints

The public input about the housing stock suggested limited affordable housing within the City as well as insufficient diversity within the housing stock. These opinions follow current housing trends where the majority of housing available to residents is single-family detached homes. In addition, a large majority of residents must spend more than 30 percent of their income towards housing costs. This suggests a housing stock without a wide range of housing prices, which would allow residents to live more comfortably within their means. Another concern voiced was the lack of housing upkeep on behalf of landlords, homeowners, and residents. This may be a reflection of the large number of rental units in the City.

6.5 Emerging Directions

Based on the existing conditions and community input received, it was apparent that the housing conditions in Weed were adequate overall. The majority of housing units (77.2 percent) were in good condition, 11.9 percent were in fair condition, and only 2.3 percent were in poor or dilapidated condition. Although the condition of the housing supply was a strength, there were limited housing options for multiple income levels. Unfortunately, only five percent of the housing stock in Weed was something other than single family detached. Many low-income residents could not afford to purchase single family detached homes as expressed in the large number of renters and discrepancy between housing prices and income levels.

On November 7, 2015, the City held its second public meeting for the proposed General Plan Update to gather input from residents to guide emerging directions for Weed. Participants were asked three separate housing questions (each with multiple answer options) and were asked to vote based on preference for various options. The following paragraph summarizes the results from the preference exercise.

Participants preferred single family detached housing as the type of housing they would like to see expanded in the City of Weed. Participants also preferred secondary dwelling units (in-law quarters or granny flats) and apartments as the type of affordable housing they would like to see. Figure 6.4 through Figure 6.7 provide the complete results from the meeting on housing preferences.

6.5.1 Community Preferences

Figure 6.4 Types of Special Housing Needs, Total Votes

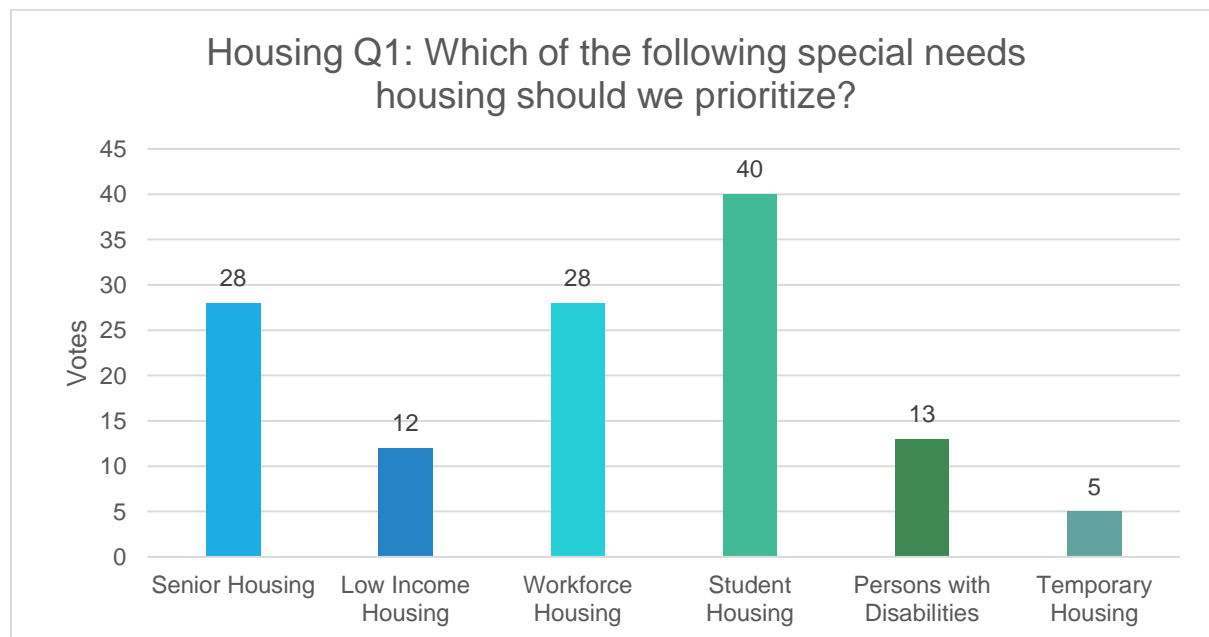
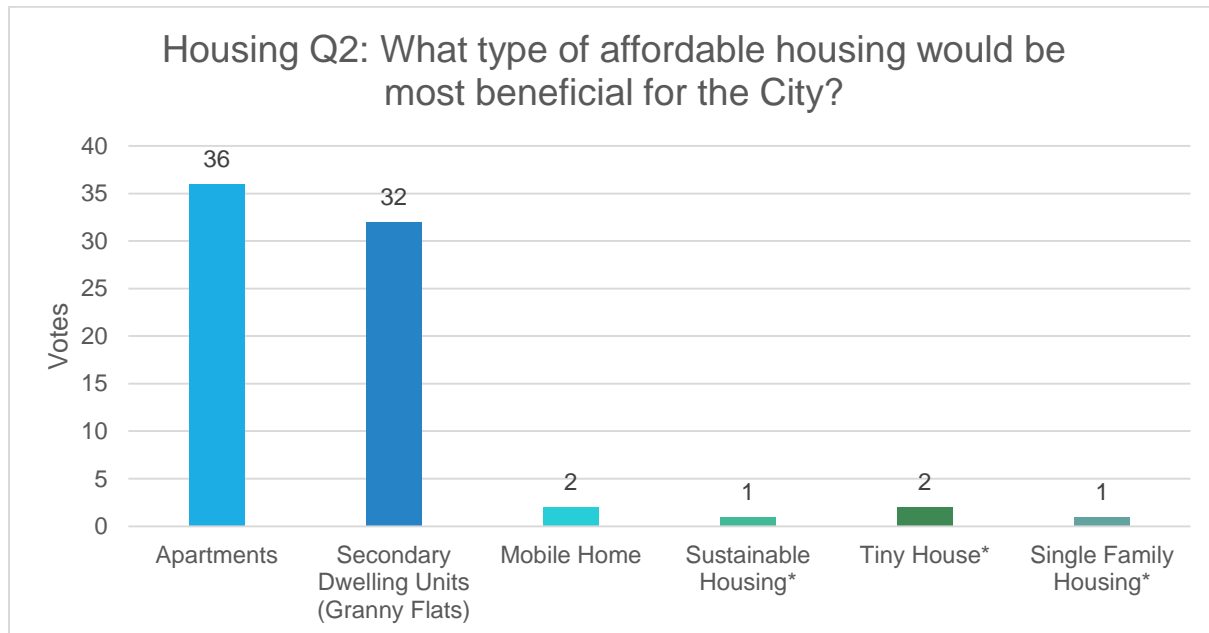
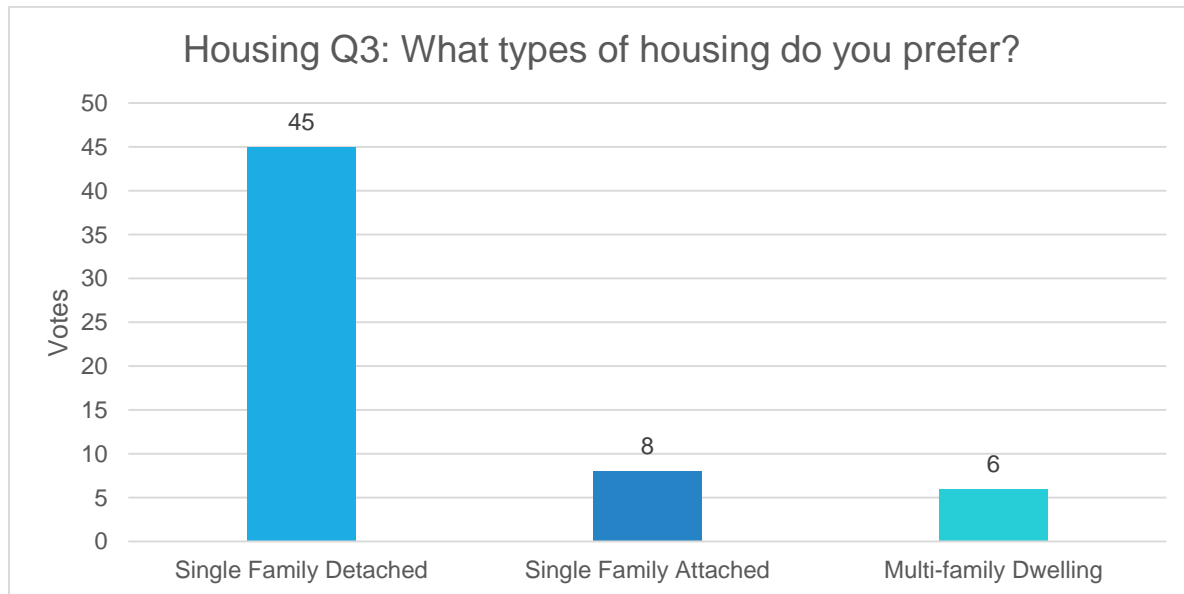


Figure 6.5: Type of Affordable Housing, Total Votes



**Answers not originally in the questionnaire and added by participants*

Figure 6.6 Type of Housing, Total Votes



6.6 References

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7 OPEN SPACE

7.1 Introduction

Open space land is any parcel, area, or waterway that is essentially unimproved and devoted to an open space use. The purpose of the Open Space Element is to guide the comprehensive and long-range preservation and conservation of open space land. The Open Space Element holds equal legal status and is consistent with all other elements of the General Plan.

Under Section 65560 of the California Government Code, open space land is broadly defined as land designated for the preservation of the following uses (California Governor's Office of Planning and Research, 2003):

- Open space for the preservation of natural resources such as lakeshores and watersheds;
- Open space for the managed production of resources such as agriculture, forestry, and groundwater recharge;
- Open space for outdoor recreation such as parks, scenic highway corridors, and areas with scenic, historic, and cultural value;
- Open space for public health and safety such as flood plains, unstable soil areas

Other than Land Use, the Open Space Element is the broadest in scope. Due to its broad nature, the Open Space Element often overlaps with several other elements. This section covers the topic of open space for outdoor recreation. Conditions and regulatory standards for natural resources as well as the managed production of resources are discussed in the conservation chapter of this report. Open space for public health and safety are discussed in the health and safety sections.

7.1.1 Definitions

7.1.1.1 Parkland Service Ratio

A parkland service ratio serves to provide a set standard for interpreting an existing park system's ability to provide parks to resident. Currently there are no standards in the City of Weed, the National Recreation and Park Association (NRPA) has recommended minimum ratios of total parkland to the population in terms of acres per 1,000 residents. A comparison of existing acreage to the recommended ratio indicates if the park system is large enough to meet the amount of park space that a community requires.

7.1.1.2 Park Classification System

A park classification system defines a hierarchy of park space that reflects several factors to ensure open space, recreation, and park needs are met for community members in all areas. Factors include: the size of the park (in acres), the level of service (in terms of acres per 1,000

residents), the accessibility of the parks, and the type of amenities and facilities provided by each. Ranging from the smallest park type to the largest, parks are typically defined by the following classifications.

7.1.1.2.1 Mini Parks

Mini parks, also known as pocket-parks, are small lots designed primarily for children or as an oasis to break up densely populated areas. They may also be green space areas that provide a buffer between residential and commercial land uses, or a small park adjacent to a school where joint use is desired. They are typically 2.5 acres or smaller and may include limited facilities such as open grass area, a children's playground, park benches, and/or a small picnic area.

7.1.1.2.2 Neighborhood Parks

Neighborhood parks are intended for non-supervised, non-organized recreation activities. They are medium in size (2.5 to 5 acres) and serve people living within approximately one-half mile of the park. Neighborhood parks are intended for use by all members of the family and are located within walking and bicycling distance of most users. The typical activities and amenities they offer to the neighborhood include children's playgrounds, family picnic areas, walking paths, greenery for passive use, outdoor basketball and volleyball courts, and multi-use open grass areas for youth sports.

7.1.1.2.3 Community Parks

Community parks typically range between a minimum of 5 to 20 acres. They are intended to accommodate automobile access and thus contain off-street parking and restroom facilities. Community parks typically serve people living within three miles of the park and can contain sports fields, tennis courts, swimming pools, community centers, children's play areas, group picnic facilities, and community event facilities.

7.1.1.2.4 Regional Parks

Regional parks are large recreation areas that are greater than 20 acres and designed to serve an entire region. By definition, a regional park cannot be developed, owned, or operated by a city or a local park district.

7.1.1.2.5 Walkways

Walkways include all engineered surfaces or structures designed as passages or paths for walking. They include sidewalks, footbridges, stiles, stairs, ramps, tunnels, and air bridges. They also provide important connections to parks and resources.

7.1.1.2.6 Special Use Areas

Special use areas are defined as facilities that provide a specific recreational use. Special use areas in the local park system are facilities like sports fields, skate parks, dog parks, community centers, aquatic centers, and rose gardens. They provide special interest or single function type amenities. Promoting the development of special use areas within a park system can meet the specific needs and desires of local residents and enhance community life.

7.2 Regulatory Setting

This section describes the federal, state, and local regulations pertaining to open space in Weed.

7.2.1 Federal Regulations

Americans with Disabilities Act (ADA), 1990

The Americans with Disabilities Act (ADA), established in 1990, maintains the national standard for pedestrian accessibility. ADA prohibits discrimination and ensures equal opportunity for persons with disabilities in employment, state and city government services, public accommodations, commercial facilities, and transportation. This includes access to open space and therein, access to publicly-maintained recreational facilities. ADA regulations apply to City of Weed and are addressed in the City's open space element. (Americans with Disabilities Act, 2010)

National Recreation and Park Association (NRPA)

The National Recreation and Park Association (NRPA) sets the standard for land dedicated to parks based on population. NRPA categorizes parkland in three different typologies: Neighborhood, Community, and Regional. The overall standard for all parks is approximately 6.25 to 10.5 acres per 1,000 people. The standard for neighborhood parks is between 1 to 2 acres of park space per 1,000 people. The standard for community parks is between 5 and 8 acres per 1,000 people. The standard for regional parks is between 5 to 10 acres per 1,000 people (National Recreation and Park Association, 2012).

7.2.2 State Regulations

Government Code: Open Space Lands; Sections 65560–65568

This portion of California planning law defines open space and requires cities and counties to prepare an open space plan as a required element of its general plan. Building permits, subdivision approvals, and zoning ordinance approvals must be consistent with the local open space plan.

Public Resources Code: Open Space Elements and Trail Considerations; Section 5076

This law requires that during the preparation of general plans, counties consider trail-oriented recreational use as well as the community's preferences in developing specific open space programs. Furthermore, cities should consider the feasibility of integrating current and future trail routes with appropriate segments of the State trail system.

Government Code, Subdivision Map Act; Section 66477 (Modified by AB 1359, 2013)

More commonly referred to as the Quimby Act, the Subdivision Map Act allows communities to require the dedication of land and/or the payment of in-lieu fees for park and recreation purposes. The required dedication and/or fees can be based on factors such as local residential density and parkland cost. Land or fees generated by the Quimby Act may only be used for developing new or rehabilitating existing park or recreational facilities. The maximum dedication and/or fee allowed under current State law is equivalent to providing three acres of parkland per 1,000 persons unless the park acreage of a municipality exceeds that standard, in which case the maximum dedication is five acres per 1,000 residents.

7.2.3 Local and Regional Regulations

City of Weed Municipal Code; Section 17.32.040 - General Standards

This section of the Weed Municipal Code requires that five acres of land per thousand residents be devoted to neighborhood and community park and recreational purposes.

City of Weed Municipal Code; Section 17.32.140 – Credit for Private Parks

This section of the Weed Municipal Code addresses credit for private parks and in lieu fees. When private open space for parks and recreational purposes is provided in a subdivision that is privately owned and maintained by its owner it can be credited against the dedication and in-lieu requirements of this chapter.

7.3 Existing Conditions

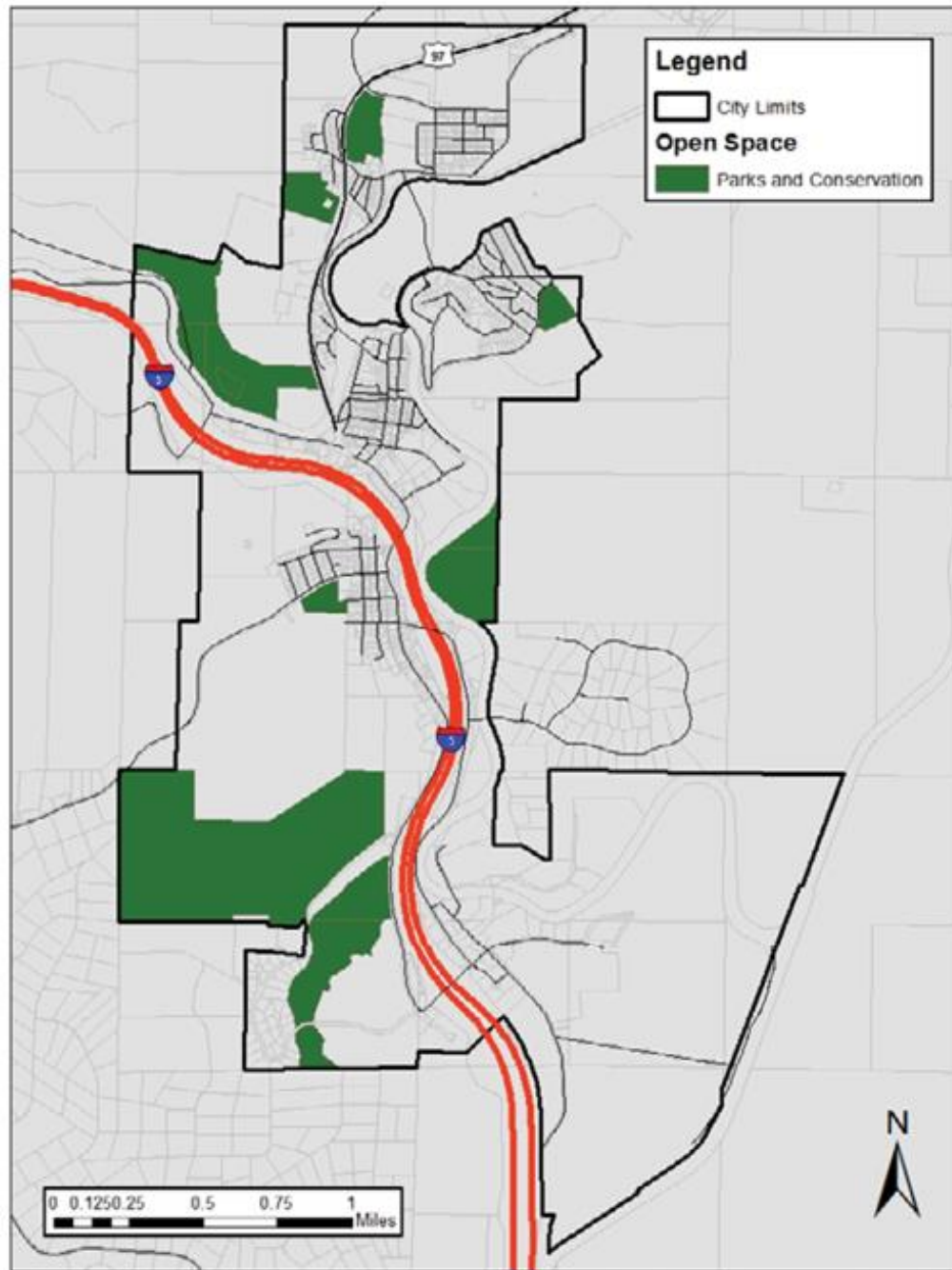
Open Space occupies 435 acres of land in Weed, making up 14 percent of the City's total acreage. Map 7.1 shows the spatial distribution of open space lands in the City. Table 7.1 shows the breakdown of open space land in Weed. Parks acreage consists of three parks, which are Charlie Byrd Park, Bel Air Park, and Sons of Lobis Field. Although Carrick Park is a part of the Weed Recreation and Parks District it is not located within City Limits and therefore is not incorporated into the park acreage. The remainder of the acreage is classified as open space land. This acreage includes open space for the purpose of scenic beauty as well as the Weed Golf Course.

Table 7.1 Open Space Land Use Breakdown by Parcel and Acreage

| Open Space Land Use | Parcels | Acres | Percent of Acreage |
|---------------------|---------|-------|--------------------|
| Parks | 3 | 30.4 | 7.0% |
| Open Space | 11 | 404.8 | 93.0% |
| Total | 14 | 435.2 | 100.0% |

Source: Cal Poly Land Use Inventory, 2015.

Map 7.1 Open Space Land Use Map



Open Space Land Use Map

Open Space Element

Source: Cal Poly Land Use Inventory, 2015

7.3.1 Parks

The City of Weed owns about 33.4 acres of park space consisting of four parks, all of which are operated and maintained by the Weed Parks and Recreation District (WPRD). Map 7.2 shows the spatial location of each park and Table 7.2 shows the sizes of various parks in Weed.

Bel Air Park

Bel Air Park is located next to the College of the Siskiyous. The park is 7 acres and includes a playground, bocce ball courts, horseshoe pits, a gazebo, a picnic area, and a baseball field that is often used by youth. Bel Air Park is home to the Weed Community Pool, which is open between June and August, when the weather is warm. The Weed bocce ball courts were constructed by Weed Rotary; it hosts frequent tournaments as well as recreational play.

Charles “Charlie” Byrd Park

Charles Byrd Park is located in the northern part of the City. This 15-acre park offers outdoor basketball courts, a multipurpose field for events like soccer and youth activities, restrooms, picnic areas, and a playground. Charles Byrd Park is the location of the 9,000 square foot Weed Skate Park. This park was formerly known as Lincoln Park and was renamed in 2004 to honor Sheriff Charlie Byrd.

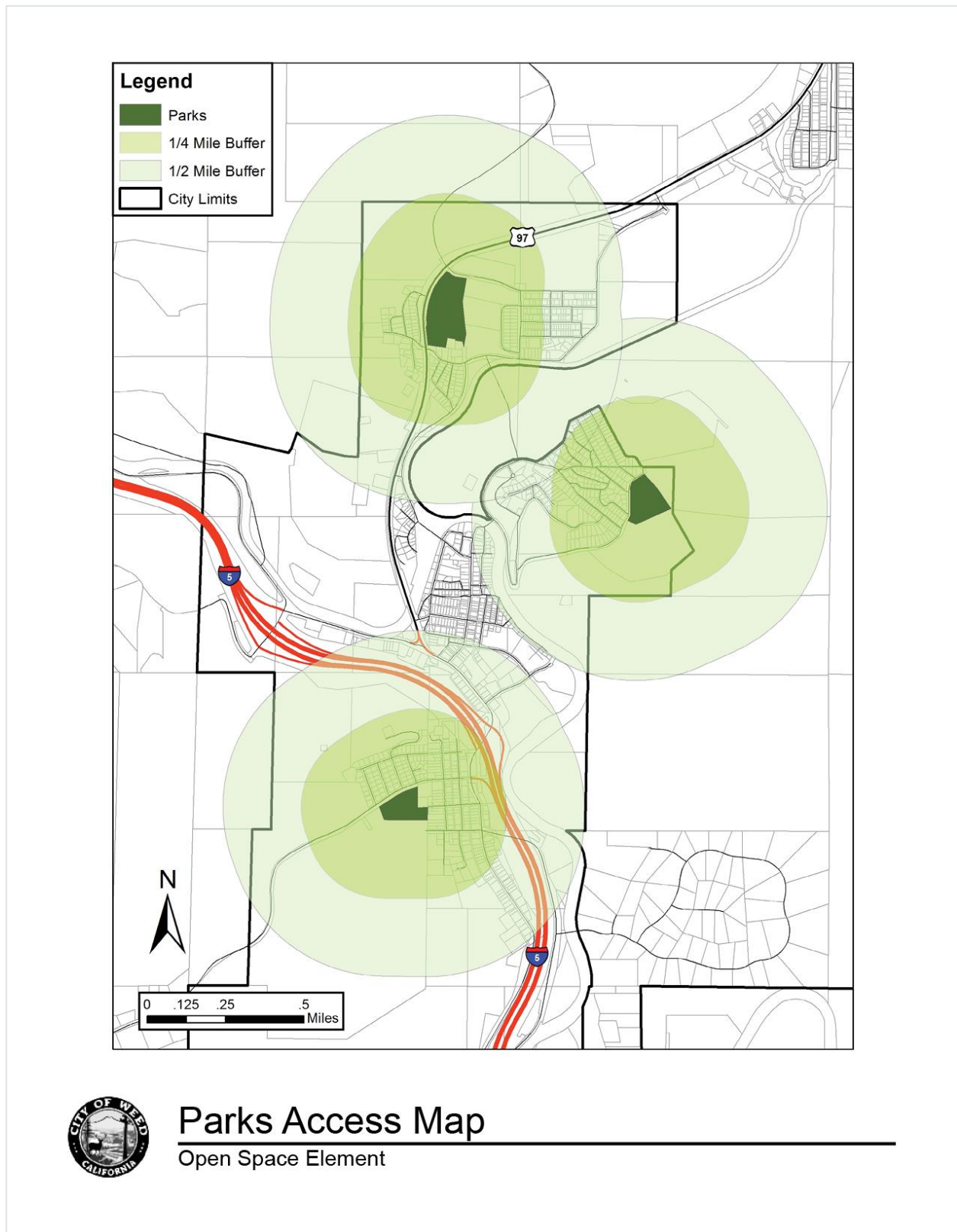
Sons Park and Lobis Field

Sons Park and Lobis Field is an 8.3-acre baseball field adjacent to Weed High School. It is maintained and operated by the WPRD and is used for the high school and local Babe Ruth and American Legion team activities. It is one of the oldest ball fields in Siskiyou County and still has its original grandstand. Lobis Field is adjacent to Son's Park both of which have come to be identified as one entity. The park and field are used by the Weed Youth Baseball League and Little League.

Carrick Park

Carrick Park is located in the nearby neighborhood of Carrick to the north of Weed along US 97. Carrick Park is not within the City limits, but is within its sphere of influence and part of the District. Carrick Park is a 3-acre park with picnic tables, basketball courts, and play equipment.

Map 7.2 Locations and Accessibility of Parks in Weed



Source: Cal Poly Land Use Inventory, 2015

Table 7.1 Acreages of Parks within Weed Parks and Recreation District

| Weed Parks and Specifications | | |
|-------------------------------|-------------|---|
| Park | Acres | Amenities |
| Bel Air Park | 6.8 | playground, ball field, bocce courts, horseshoe pits, gazebo, picnic areas, swimming pool |
| Charlie Byrd Park | 15.3 | basketball courts, multipurpose field, restrooms, picnic areas, playground, skate park |
| Sons Park & Lobis Field | 8.3 | ball field |
| Carrick Park | 3 | basketball courts, playground, picnic areas, year-round creek |
| Total* | 33.4 | |
| Acres per 1000 persons | 12.3 | |

**Total number of parks space acreage differs slightly from Table 7.1 due to the fact that Carrick Park is located outside City Limits*

Source: Weed Recreation and Parks District, 2015

Management and Maintenance

The primary agency responsible of management and maintenance of parks in the City of Weed is the Weed Parks and Recreation District (WPRD). The WPRD operates and maintains all the parks in the City. The agency was formed in 1950 and is directed by five board members and staffed by two full-time, seasonal maintenance employees who work from February to October. The City of Weed, Mt. Shasta, and Dunsmuir Parks and Recreation Districts are all independent offices but share the same administration offices in Mt. Shasta. The Weed Recreation and Parks District is a "Special District" (an independent, local governmental entity). Funding for District operations is partially supported by taxes, which is collected and administered through the Siskiyou County treasury.

7.3.2 Recreation Programs

The Weed Parks and Recreation District works with Mt. Shasta and Dunsmuir Parks and Recreation Districts to support youth summer programs including:

- Youth basketball
- Youth baseball
- Youth golf
- Youth bocce ball
- Youth theatre

Mt. Shasta Parks and Recreation District offers adult men's basketball and adult co-ed volleyball games.

7.3.3 Public Events

Public events in the City's parks are limited, but the events that are held annually and periodically are memorable to the residents of the City. Several public events are organized by the Chamber of Commerce and are held in Weed's parks. The Weed "Carnevale" is an annual event that was held for the first time in 1953. It lasts for an entire weekend and features continuous entertainment, live music, dancing, rides, games, and vendor booths. "WeedFest" is a fundraising concert and festival that was first held in 2013 and again in 2015. The festival featured multiple bands, vendors, food, and entertainment activities. While WeedFest was originally held at the Mt. Shasta Brewing Company, there are plans to begin holding it in the City's parks.

7.3.4 Connectivity

The City's park system offers many open space areas but as depicted on Map 7.1, certain neighborhoods have limited connectivity. Many parts of the City are missing pedestrian walkways, including sidewalks. There is room to improve pedestrian connectivity among neighborhoods, public parks and recreational facilities, the downtown district, civic facilities, schools, and public transportation. Many of the residents expressed the need for improved pedestrian and bicycle access between neighborhoods, public facilities, and downtown areas. Residents also wanted many small neighborhood pocket parks that are easily accessible by walking.

7.3.5 Meeting Park Space Standards

The City of Weed Municipal Code has a standard of five acres of neighborhood and community park space for every 1,000 residents. This standard does not differentiate between different park types. This differs from the national average of 10 acres per 1,000 persons recommended by the National Recreation and Park Association (NRPA, 2015). The National Recreation and Park Association (NRPA) recommend that neighborhood parks should provide at least 2.5 acres per 1,000 residents, while community parks should provide at least 5 acres per 1,000 residents. Table 7.2 shows the classification of each park in the City based on acreage. As shown, WRPD identifies one neighborhood park and three community parks. This is important for the future as changes may be proposed to include sufficient acreages of specific types of parks.

Table 7.2 Existing Parks in Weed Recreation and Parks District

| Existing Park | Acres | Park Type |
|----------------------------|-------|--------------|
| Neighborhood Park Standard | 2.5-5 | Neighborhood |
| Carrick Park | 3 | Neighborhood |
| Community Park Standard | 5-20+ | Community |
| Bel Air Park | 7 | Community |
| Charles Byrd Park | 13 | Community |
| Sons Park and Lobis Field | 5.5 | Community |

Source: Weed Recreation and Parks District, 2015

7.3.6 Park Space Ratio

According to the NRPA standards for neighborhood and community parks, Weed is not deficient in terms of total park acreage. However, if the population grows beyond 3,000 total residents, the current park acreage will not be sufficient to meet the established standards. Weed does not have any pocket parks and, while there are no adopted standards for such, the City should consider dedicating pocket parks to serve improve park access to under-served neighborhoods.

7.4 Issues and Opportunities

Community outreach conducted during the October 10, 2015 public meeting revealed that participants were concerned about insufficient access to parks and youth-centered recreation programs. There was also a desire for enhanced maintenance of parks and better connectivity to surrounding trails. Based on a review of current standards and regulations the City is well served by the total existing park space, despite accessibility concerns.

7.4.1 Strengths and Opportunities

Public feedback from the first public meeting, which occurred on October 10, 2015 showed that residents considered the City to have good access to nature and nice parks. Many residents enjoyed the City's proximity to Mt. Shasta and surrounding wilderness. The existing conditions in Weed show a good amount and distribution of parklands for residents to use. Parks are less accessible in the South Weed area, where there is great opportunity for development. New development in South Weed will likely require a new park to serve future residents. A number of vacant lots in Weed provide opportunities for small, neighborhood-serving parks. These pocket parks will improve access to parks as well as help meet future needs. Existing and new open space also provides room for recreation programs and outdoor events.

7.4.2 Threats and Constraints

The first community meeting also provided feedback that identified there are limited recreation programs and activities for children to engage in. This speaks to an underutilization of parks and open space, as well as a lack of amenities. A lack of such outdoor recreation programs can be attributed to a lack of funding or interest. The lack of a community center could also be contributing to the amount of available recreation programs and activities. The City's parks provide a good variety of activities for users to engage in, in fact, many cities cannot boast a high quality skate park like Weed can. While Weed can be proud of the variety of parks and activities available to the City's residents, improvements can be made to the general accessibility of existing parks.

7.5 Emerging Directions

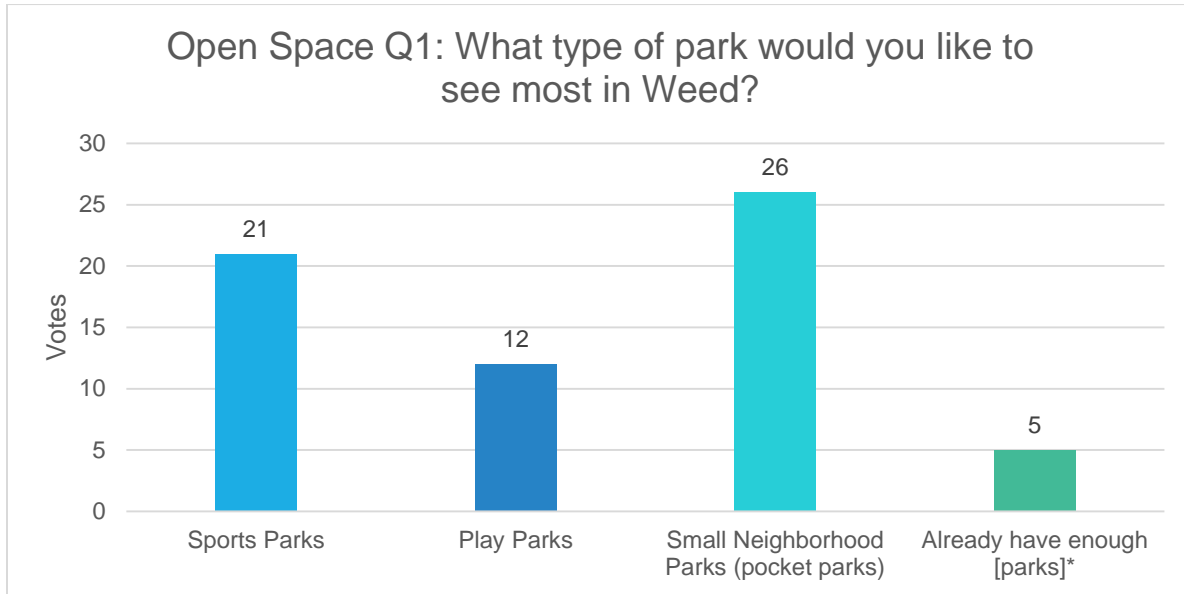
On November 7, 2015, the City held its second meeting for the General Plan Update to assist in guiding the emerging directions for Weed. Public outreach efforts were also directed at community members who were not able to attend the meeting by distributing surveys in parks, grocery stores, and other public places. Participants were asked two separate questions regarding open space (each with multiple answer options) and were asked to vote based on preference for various options.

Results from the preference questions revealed that small neighborhood parks were most desired, followed by parks for sports. Several participants abstained from voting as some believed the City had sufficient parks. Participants also identified outdoor events and more trails as activities they would like to enjoy in Weed.

Based on community input and existing conditions, the emerging directions for open space in Weed are to build more parks to meet future needs and improve access to open space, to increase maintenance of parks to contribute to Weed's scenic beauty, to create more outdoor recreation programs for the youth, and to increase usage of parks and open space. Outdoor events, festivals, and recreation programs will ensure usage of the City's parks and help build an appreciation for the outdoors. The City should identify vacant land for new parks, particularly vacant lots ideal for small neighborhood parks. The City should locate funding for new parks and open space land for future residents as well as expand the Parks and Recreation District to improve park maintenance and increase accessibility for all ages and abilities. Regardless of whether or not the City can secure funding for expanding the Parks and Recreation District, the City should collaborate with local non-profit organizations and schools to maintain City parks. The South Weed area, while ripe for development of a new park for future residents, is in need of greater park access now. While the City is well served by the existing parks, the lack of access to parks in South Weed should be addressed before said parks are required by existing standards.

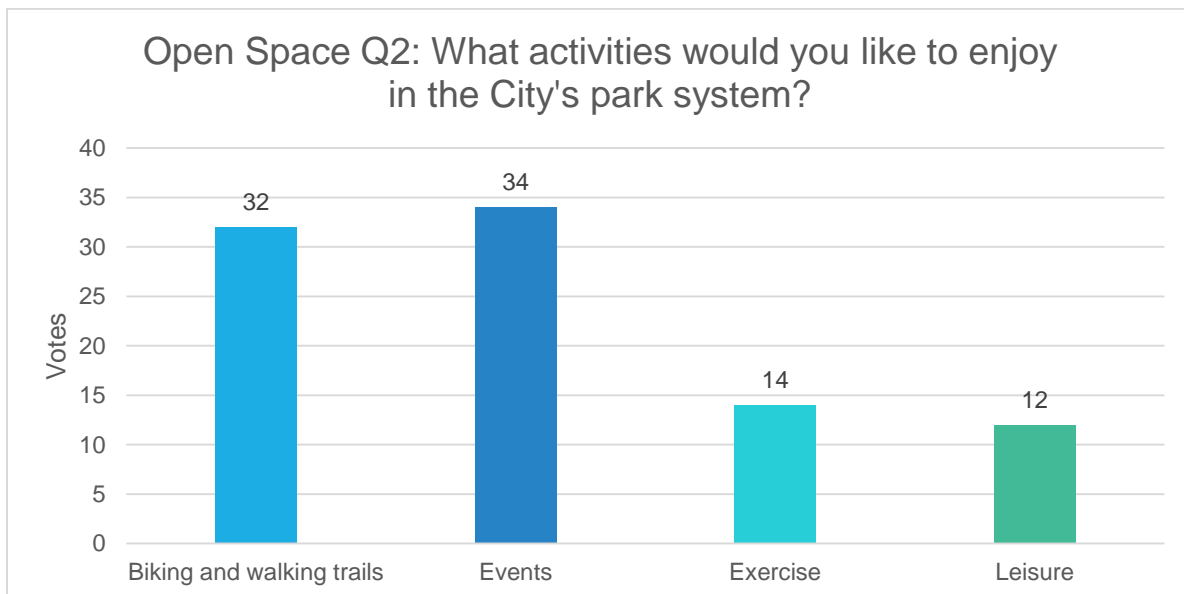
7.5.1 Community Preferences

Figure 7.1 Preferred type of Park in Weed, Total Votes 64



**Answers not originally in the questionnaire and added by participants*

Figure 7.2 Type of activities in parks, Total Votes 92



7.6 References

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8 CONSERVATION

8.1 Introduction

Conservation is defined by the Office of Planning and Research as, "the management of natural resources to prevent waste, destruction, or neglect" (Governor's Office of Planning and Research, 2003). Conservation is a required element of the General Plan, providing direction related to the conservation, development, and utilization of natural resources. This chapter describes the regulatory setting, existing conditions, issues and opportunities, and emerging directions for conservation of natural resources within the City of Weed and surrounding areas.

The natural resources discussed in this chapter include water, soil, minerals, and biological resources. State law and local issues guide the discussion of these topics. The topics covered in this chapter are as follows:

- Location
- Topography
- Climate
- Soil
- Mineral Resources
- Biological Resources
- Water Conservation
- Energy Conservation

8.2 Regulatory Setting

The following federal, state, and local regulatory documents provide guidance for the conservation of natural resources in the City of Weed.

8.2.1 Federal Regulations

Water

Federal Clean Water Act, 1948

The Federal Clean Water Act is a federal law protecting the quality of the nation's surface water. Although implementation focuses primarily on surface water, this law also applies to groundwater. Furthermore, the act establishes the basic structure for regulating the discharge of pollutants into waters in the United States and regulates quality standards for surface waters (United States Environmental Protection Agency, 2015). The City of Weed, like any other city in the country, is required to comply with this act. Water services are provided by the City of Weed's Public Works Department, though some areas in the northern portion of the City are serviced by personal wells.

Biological Resources

Federal Endangered Species Act, 1973

The Federal Endangered Species Act requires that the U.S. Fish and Wildlife Service and National Marine Fisheries Service maintain a list of native species and protection measures for species that are considered "endangered" or "threatened". An endangered species is defined as "a species in danger of extinction throughout all or a significant portion of the species range". A threatened species is defined as "a species likely to become endangered within the foreseeable future" (U.S. Fish and Wildlife Service, 2013). The City of Weed may be within the boundaries of a wildlife corridor for several threatened and endangered species.

Migratory Bird Treaty Act, 1918

Under the Migratory Bird Treaty Act, it is illegal for anyone to "take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or their nests or eggs unless a valid permit is issued" (U.S. Fish and Wildlife Service, 2013). Several wildlife refuges, located in Siskiyou County and specifically near Weed, include some migratory bird habitats. This act applies to the birds in the refuges, as well as any other migratory birds present in Weed.

Energy and Mineral Resources

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission regulates the interstate transmission of electricity, natural gas, and oil (Federal Energy Regulatory Commission (FERC), 2015).

8.2.2 State Regulations

Water Resources

Porter-Cologne Water Quality Control Act, 2016

The Porter-Cologne Water Quality Control Act aims to protect water quality and beneficial uses of water within the State of California. Authority of water quality within the State rests with the State Water Resources Control Board; however, this Act transfers authority over to regional water boards to adopt water quality control plans for watersheds within their region. Each basin plan should include information regarding: 1) the beneficial uses of the water in the basin that is protected, 2) water quality objectives and standards for both surface water and groundwater sources, and 3) the necessary actions to ensure that these standards are met through the control of non-point and point sources of pollutants in water within the State. (California Wetland Information System (CWIS), 2002). The City of Weed is located in the North Coast Region, which is monitored by the North Coast Region Water Quality Control Board. The City of Weed borders the Central Valley Region, which is monitored by the Central Valley Coast Region Water Quality Control Board. The North Coast Region Water Quality Control Board developed a strategic plan in 2008 to manage water resources.

Groundwater Management Act (Assembly Bill 3030), 1992

The Groundwater Management Act, originally enacted in 1992, has been periodically updated. The intent of Assembly Bill (AB) 3030 is to encourage local agencies to work together to manage groundwater resources in their jurisdiction. Additionally, this bill aims to provide a methodology for developing and implementing a groundwater management plan. Current legislation enacted on September 16, 2014, further updated AB 3030. The update consists of three separate bills (AB 1739, AB 1168 and SB 1319) that aim to ensure the long-term protection and sustainability of groundwater resources. The bills will provide authority to a Groundwater Sustainability Agency to provide technical assistance to jurisdictions that extract or use groundwater for purposes of water conservation and protection. This act also required that groundwater basins be designated as high, medium, or low priority by January 31, 2015 (Department of Water Resources, 1992). The City of Weed currently has not adopted a groundwater management plan.

Groundwater Elevation Monitoring Program Act (Senate Bill X 7-6), 2009

Enacted in 2009, this act provides state water grants and loans for public agencies that assume responsibility for monitoring local groundwater elevations in the basin or sub-basin that supplies water to the area. A systematic procedure is to be used to measure water elevations in all basins and sub-basins in California. The goal of this act is to track the seasonal and long-term variations in groundwater levels (California Department of Water Resources, 2015).

Senate Bill 610 and 221, 2013 and 2011

The purpose of Senate Bill (SB) 610 and 221 is to coordinate local water supply and land use decisions to help provide California's cities, farms, and rural communities with adequate water supplies. Additionally, these bills increase requirements and incentives for urban water suppliers to prepare and adopt comprehensive management plans on a timely basis. SB 610 is broader legislation that applies to any large development project and land use plan that is subject to the California Environmental Quality Act (CEQA). It requires Urban Water Management Plans and water supply assessments for large development projects. SB 221 applies to the Subdivision Map Act, in which adequate water supply is to be proven before a subdivision map including 500 or more dwelling units is approved. (California Department of Water Resources, 2003). The City of Weed has a Water Master Plan that was last updated in 2003.

Urban Water Conservation Act (Senate Bill X 7-7), 2009

The goal of the Urban Water Conservation Act of 2009 is to reduce per capita urban water use by 20 percent by December 31, 2020, making incremental progress of a 10 percent reduction by December 31, 2015. Under this act, each urban retail water supplier is to develop water use targets and an interim water use target by July 1, 2011. Baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use shall also be established. Water suppliers must meet these water conservation requirements by 2016 in order to be eligible for state water grants or loans (Department of Water Resources, 2015). As of October 2015, Weed did not establish water use targets, which could render the City ineligible for state water grants or loans.

Assembly Bill 2572 (Water Metering Legislation), 2004

Enacted in 2004, Assembly Bill (AB) 2572 requires urban water suppliers to install water meters on all municipal and industrial water service connections by January 1, 2025 on all service connections constructed before 1992. Additionally, AB 2572 requires urban water suppliers to charge customers who have meters installed based on the volume of deliveries (amount of water used) by January 1, 2010. This bill has made a finding that water metering and volumetric pricing is one of the most effective water conservation tools (California Water Code, 2004). As of October 2015, the Public Works Department for the City did not have information related to the number of meters or homes not on meters in the City.

California Green Building Standard Codes– Cal Green

The 2010 Cal Green Code set new standards for maximum flow rates of plumbing fixtures in new construction. Taking effect on January 1, 2011, this collection of construction requirements has resulted in the most significant reduction in indoor water use in the history of California building codes. All new buildings in the City of Weed must meet building code standards set by Cal Green (ConSol, 2015). Civil Code Section 1101.1-1101.8 extends these standards not only into new buildings but existing buildings as well. By January 2014, all noncompliant fixtures should be replaced during all building alterations or improvements to single-family residential real property. By January 2017, all noncompliant fixtures in single-family residential real property shall be replaced. By January 2019, all noncompliant plumbing fixtures in multifamily residential real property shall be replaced with water-conserving plumbing fixtures. The City of Weed is experiencing an abundance of new construction after the Boles fire. All of these buildings must be up to code in terms of low flow fixtures.

Biological Resources

California Endangered Species Act, 1970

The California Endangered Species Act is a state law that provides for the protection of native plant and animal species and their habitats that are under threat of extinction or significant decline. Species included under this Act include fish, amphibians, reptiles, birds, mammals, invertebrates, and plants. This law allows for take or otherwise lawful development projects; however, it encourages early consultation to avoid potential impacts to threatened or endangered species. (California Department of Fish and Wildlife, 2015). State threatened and endangered species found in Weed are protected by this act.

California Fish and Game Code 2080

Section 2080 of the California Fish and Game Code prohibits the taking of any species determined to be threatened or endangered. As defined in Section 86 of the Fish and Game Code, a taking is to "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill" (California Department of Fish and Wildlife, 2015). All threatened or endangered species in Weed are protected by this act.

California Environmental Quality Act (CEQA), 1970

CEQA is the State version of the National Environmental Policy Act (NEPA) and applies to all discretionary projects proposed by or to be approved by a public agency. The purpose of CEQA

is to: 1) Disclose the potential environmental impacts of a proposed project, 2) Prevent or minimize damage to the environment through the development of project alternatives, mitigation measures, and monitoring, and 3) To encourage interagency cooperation early on in the process. (California Department of Fish and Wildlife, 2015). All proposed projects within the City of Weed are required to meet the standards of CEQA.

Energy and Mineral Resources

California Energy Commission

The California Energy Commission is the State's primary energy policy and planning agency. The agency has been responsible for reducing electricity and gas demand in the State by adopting new standards for building and appliance energy efficiency. (California Energy Commission, 2015).

California Global Warming Solutions Act (AB 32), 2006

Adopted in 2006, also known as the California Global Warming Solutions Act, Assembly Bill (AB) 32 is an Act that aims to reduce greenhouse gas emissions in the State of California to 1990 levels by 2020. The goals of this Act include improving the state of the environment, natural resources, and energy efficiency (California Environmental Protection Agency, 2006). The City of Weed does not currently have a comprehensive energy conservation strategy; however, local improvements can contribute to reaching the goals of AB 32.

California Assembly Bill 758, 2010

Assembly Bill 758 requires the California Energy Commission, in collaboration with California Public Utilities Commission, to develop a comprehensive plan to achieve greater energy efficiency in the existing buildings in the State of California. California is a leader in building energy efficiency, with one of the lowest energy consumption rates in the country. Through advanced building codes, appliance standards, incentive programs, and public outreach, the State of California can continue to be a leader in energy efficiency and conservation (Public Resources Code, 2009).

California Code of Regulations; Title 24 Part 6

Title 24, also known as the California Green Building Standards Code, is an act that prescribes energy efficiency standards to residential and non-residential buildings in cities in California. Part 6 of the Act includes standards for indoor and outdoor lighting, insulation, roofing materials, and other building materials that contribute to energy conservation practices. (Energy Code Ace, 2013).

Surface Mining and Reclamation Act (SMARA), 1975

Enacted in 1975, the SMARA provides a comprehensive framework for surface mining and reclamation policy, including regulations for surface mining operations. Regulations under this Act aim to minimize environmental impact on mined lands, and to reclaim mined lands to a usable condition. Production, conservation, and protection of the State's mineral resources is encouraged under SMARA. Chapter 9, Division 2 under California Public Resource Code

requires the State Mining and Geology Board to adopt State policy to reclaim mined lands and conservation of mineral resources (California Code of Regulation, 1975).

8.2.3 Local and Regional Regulations

Water Resources

Siskiyou County Climate Adaptation Plan

Siskiyou County has adopted a climate adaptation plan titled, “Renew Siskiyou: A Road Map to Resilience”. The document provides background information regarding existing conditions of the County’s water resources and provides insight into future conservation practices including the safeguarding and protection of water resources, regulation of groundwater resources, and the implementation of collaborative watershed restoration projects.

Biological Resources

There are no local regulations regarding biological resources in Weed.

Energy and Mineral Resources

Siskiyou County General Plan

The Siskiyou County General Plan does not have a mineral resource section within the Conservation Element and does not identify specific areas of mineral resources within the County. However, in the Siskiyou County General Plan, there is a mention of sufficient aggregate resources in the County. (Siskiyou County, 1973)

8.3 Existing Conditions

In addition to the core elements that are typically included in the Conservation Element of a general plan, other traditional components are included to provide an overview of the geographic, geologic, hydrologic, and climate setting of the study area. The core components include water resources, biological resources and energy and mineral resources, as they exist within the City of Weed and its Sphere of Influence.

8.3.1 Traditional Components

8.3.1.1 Location and Topography

The City of Weed is located in the center of the southern portion of Siskiyou County, approximately 70 miles north of Redding, at an elevation of 3,500 feet above sea level (Weed Chamber of Commerce). Weed is halfway between Portland, OR and San Francisco, CA, where Interstate 5 (I-5) and U.S. Highway 97 (US 97) intersect. City of Weed is nestled at the base of Mount Shasta. The Shasta River runs through the southwest portion of the City, and there are many surface water sources including Beaugan Creek in northern Weed and Boles Creek, which runs along I-5. Map 8.1 displays the topography of the City of Weed.

8.3.1.2 Climate

The City's climate is characterized by four distinct seasons. During the summer, daytime temperatures can reach up to 80 or 90 degrees Fahrenheit; however, the heat is partially alleviated by the strong southern winds moving at an average speed of 22 mph. Summer nights often cool dramatically into the 50-degree range. Autumn weather can set in as early as Labor Day, and winters are dry but sometimes snowy with average daytime temperatures in the 30 to 40-degree range, and dropping as low as 20 degrees at night (Weed Chamber of Commerce, 2015). Table 8.1 shows the monthly average temperature highs and lows as well as average precipitation. The average annual high temperature is 63.4 degrees and the average annual low temperature is 35.2 degrees. Annual precipitation averages around 23.66 inches, with most of the rain falling in the winter months and early spring (U.S. Climate Data, 2015).

Table 8.1 City of Weed Temperature and Precipitation by Period

| Period | Avg. High (Degrees Fahrenheit) | Avg. Low (Degrees Fahrenheit) | Average Precipitation |
|---------|-----------------------------------|----------------------------------|--------------------------|
| January | 42 | 23 | 7.06 in. |
| April | 55 | 31 | 2.65 in. |
| July | 84 | 47 | 0.39 in. |
| October | 62 | 35 | 2.21 in. |

Source: City of Weed Chamber of Commerce, 2015

Map 8.1 Location and Topography of the City of Weed



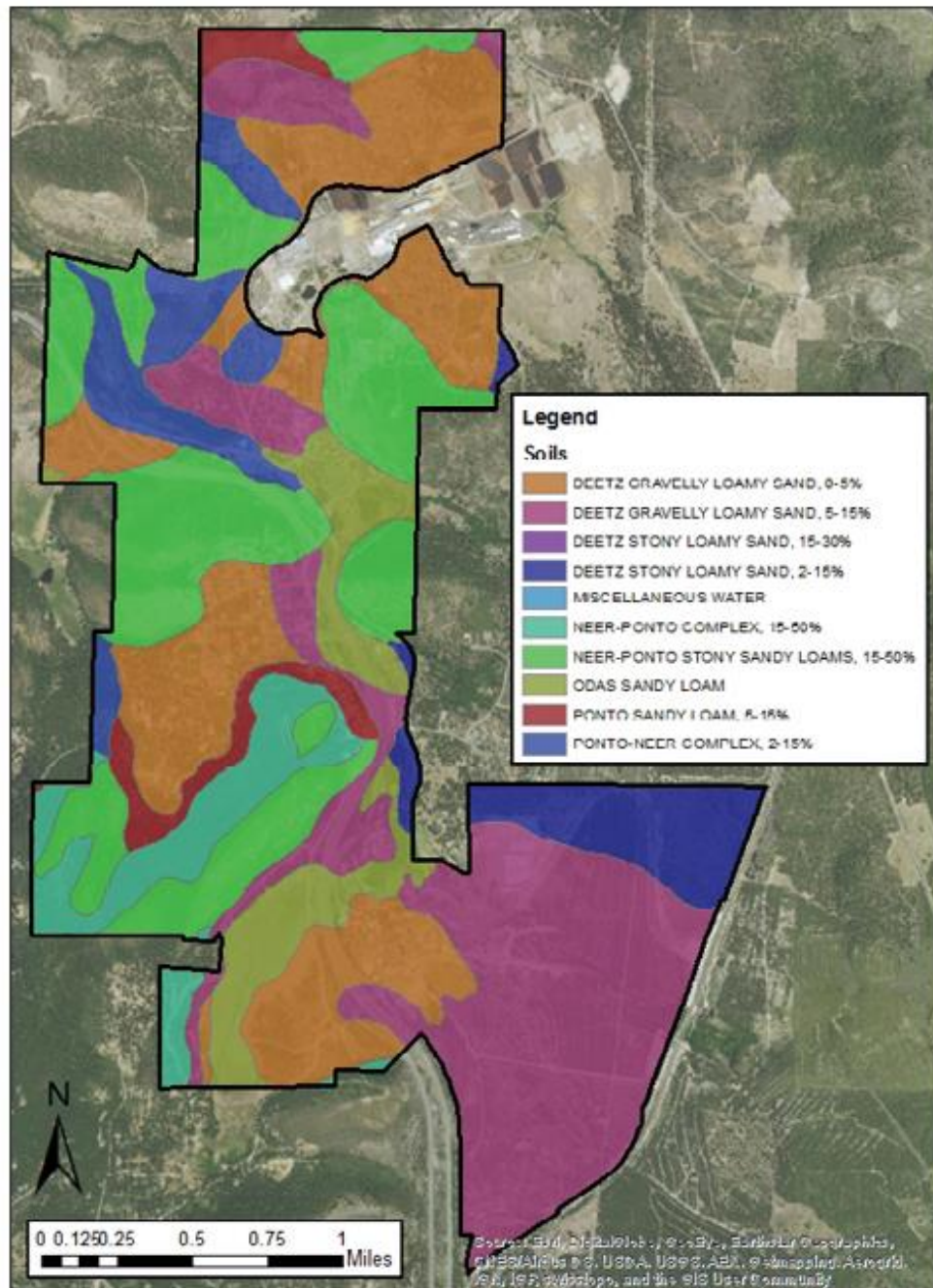
Source: Google Maps, 2015

8.3.1.3 Soil

Soil mapping indicates different soil types and characteristics that determine the compatible uses in a given area. The types of soils present in an area often determine what type of development can occur. Map 8.2 shows the primary soil types in Weed (USDA, 1988).

Most of the developed city center's soil type is the Deetz series, which consists of deep, somewhat excessively drained soils that formed in glacial outwash from volcanic rock and ash sources (USDA). The areas surrounding Weed consist of mostly Neer and Ponto soil series, which consist of moderate to deep, well-drained soil that is also formed from volcanic rock and ash sources. Both soil types are classified as "Not prime farmland" by USGS Soil Survey.

Map 8.2 City of Weed Soil Map



Soils Map

Conservation Element

Source: City of Weed, 2015

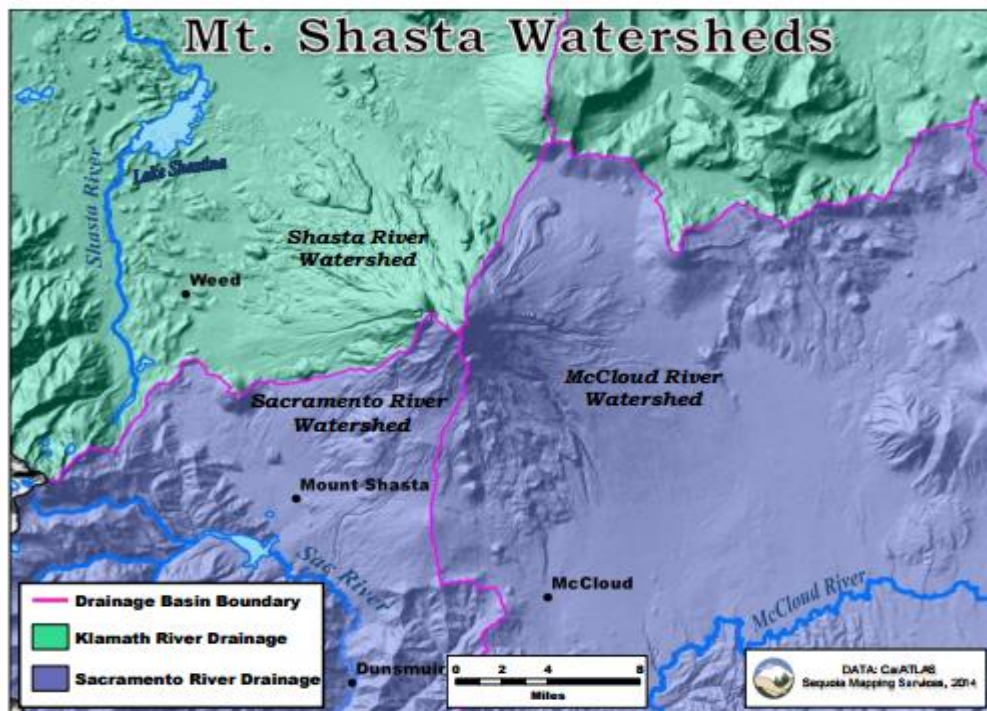
8.3.2 Water Conservation

This section discusses water conservation in terms of water supply and demand as well as water quality in the Shasta River Watershed and the City of Weed. The City of Weed uses groundwater resources within the city limits for a portion of their water use. The remainder is pumped from outside city boundaries. Water conservation, particularly of groundwater, is important in Weed due to the City's reliance on groundwater as a water resource and current drought conditions. Groundwater often serves as a buffer when drought conditions occur. However, lowering of the water table can occur if too much groundwater is extracted.

8.3.2.1 Hydrology and Hydrogeology

The City of Weed is located in the Shasta River Watershed. Mt. Shasta, rising 14,162 ft. above sea level, delivers water to two of California's largest river systems: The Klamath River and the Sacramento River (Siskiyou County, 2014). Roughly speaking, the Klamath River drainage is on the northern facing side of Mt. Shasta, while the Sacramento River drainage is on the southern facing side of the mountain. The City of Weed is located within the Klamath River Drainage area, and more specifically in the Shasta River Watershed Map 8.3 provides an overview of the Mt. Shasta watersheds.

Map 8.3 Mt. Shasta Watersheds



Source: Siskiyou County, 2014

Precipitation drifts from Mt. Shasta down into the Klamath River drainage, and is stored above ground as snow and perennial glaciers at higher elevations, and as surface water at lower

elevations contained in rivers, lakes, creeks, wetlands, and reservoirs. Subsurface water is stored in confined and unconfined aquifers throughout the watershed (commonly known as the water table or groundwater). This groundwater is the water source that is pumped from Mazzei Well and Gazelle Well (Siskiyou County, 2014).

The Shasta Watershed is a semi-arid farming valley fed by the Shasta River. It includes the towns of Yreka, Weed, Montague, and Big Springs. The Shasta River flows into the Klamath River along a 58-mile course and receives groundwater and runoff from the Shasta Valley, which includes the City of Weed.

8.3.2.2 Groundwater Resources

Groundwater accounts for a great portion of the municipal water supply in the City of Weed, and maintaining an adequate supply of this resource is essential. This section discusses water resources in the Shasta River Watershed as well as local groundwater wells.

8.3.2.2.1 Water Supply and Demand

The City of Weed generates its water supply by extracting water from two wells and one spring: Mazzei well, Gazelle well, and Upper Beaughan Springs respectively (California Public Utilities Commission, 2006). Water supplies have historically been abundant in southern Siskiyou County (including Weed) and relatively scarce in the northern parts of the County. The City depends greatly on spring water but also utilizes groundwater to supply water to its residents. Water is primarily provided by Beaughan Springs, while Mazzei well and Gazelle well are used for emergency backup supply. (California Public Utilities Commission, 2006). Table 8.2 shows the breakdown of water sources and capacity for the City of Weed in millions of gallons per day (MGD).

Table 8.2 Water Supply Infrastructure

| Supply System | APN | Year Constructed | Capacity (MGD) |
|-----------------------------------|-------------|------------------|----------------|
| Mazzei Well | 060-601-150 | 1975 | 0.96 |
| Gazelle Well | 060-531-270 | Unknown | 0.72 |
| Beaughan Springs Headworks | Leased | Unknown | 1.29 |

Source: LAFCO Municipal Service Review Report for the City of Weed, 2011

Current water usage in Weed is 1.6 million gallons per day (MGD), while the maximum capacity is 2.1 MGD (LAFCO, 2011). Thus, the City is at approximately 75 percent of its total water supply capacity. More than 70 percent of California's water supply is from northern California, while the majority of demand is from southern California (Siskiyou County, 2014). Siskiyou County is in northern California and thus faces tremendous water pressures from southern California. The County has adopted a climate adaptation plan entitled, "Renew Siskiyou: A Road Map to Resilience" (Siskiyou County, 2014). The document contains background information regarding existing conditions of the County's water resources and provides insight into future conservation practices including the safeguarding and protection of water resources, regulating the use of groundwater, and the implementation of collaborative watershed restoration projects.

8.3.2.2.2 Water Quality

The City of Weed primarily receives gravity-fed, ice-cold spring water that is so clean it is not treated before entering municipal and service district pipes (Siskiyou County, 2014). This water is of prime quality based on a recent study performed by the U.S. Geological Survey on groundwater quality in the Klamath Mountains (USGS, 2014). Water pumped from Beaughan Spring and Mazzei well are of drinking water quality and are known for their great taste. The Gazelle well is still of drinking water quality but is said to have a bad taste and therefore is used only as a secondary resource.

8.3.2.2.3 Water Treatment and Wastewater

The City of Weed maintains two wastewater treatment facilities and a collection system to provide sewer services to residents and businesses within the City. Currently there are approximately 1,050 residents generating about 0.45 million gallons of sewage per day (MGD) during dry periods, and doubling to almost 1 million gallons during wet weather periods. The cost for this service is established by Council resolution and is intended to cover the cost of acquisition, construction, reconstruction, administration, maintenance and operation of the system, and to provide for the timely payment of principal and interest on any outstanding debt obligation. The City issued bonds for the construction of wastewater improvements in 1977. These bonds will be fully repaid in 2018 (City of Weed, 2012).

8.3.3 Biological Resources

This section provides an overview of the existing biological resources in the City of Weed and Siskiyou County. Biological resources include plant and animal life that exist within the City and Sphere of Influence. Federal and state regulations attempt to protect and conserve the biological diversity that exists within the area. Siskiyou County is part of the California Department of Fish and Wildlife's Northern region, which is subject to all federal and state regulations. There are no local regulations for biological resources at this time. Four wildlife areas exist in the County in close proximity to Weed. The following subsections discuss the different ecosystems and natural habitats surrounding the City of Weed, as well as ecological conservation, threatened and endangered species, and wildlife refuges within the area.

8.3.3.1 Klamath-Siskiyou Bioregion

The City of Weed is located in the Klamath-Siskiyou bioregion. The Klamath Mountains have a diverse and complex vegetative pattern due to the varying climate and topography of the area. This bioregion incorporates a mixture of plants from the influence of the neighboring Sierra Nevada region and the Oregon/California coastal mountains (Smith and Sawyer 1988). Conifer forests and woodlands exist throughout the bioregion and are predominant in Weed's surrounding area. The Klamath-Siskiyou bioregion can be classified into three main zones: lower montane, mid-upper montane, and subalpine. Montane refers to ecosystems at higher elevations. Figure 8.1 shows that the City of Weed and its surrounding areas are primarily classified as lower montane with some upper montane.

8.3.3.1.1 Lower Montane

The lower montane zone is characterized by rugged terrain with a complex intermix of vegetation. Grasslands are mostly found in the valleys of lower montane zones, whereas shrublands exist in the mountainous areas. The lower montane shrublands most often include:

- White leaf (*Arctostaphylos viscida*),
- Greenleaf manzanitas (*Arctostaphylos patula*),
- Brewer oak (*Quercus garryana* var. *breweri*), and
- Deer brush (*Ceanothus intergerrimus*) species.

These shrublands are often present near historic mining districts and predominantly consist of Douglas-fir trees and mixed evergreen forests.

8.3.3.1.2 Mid to Upper Montane

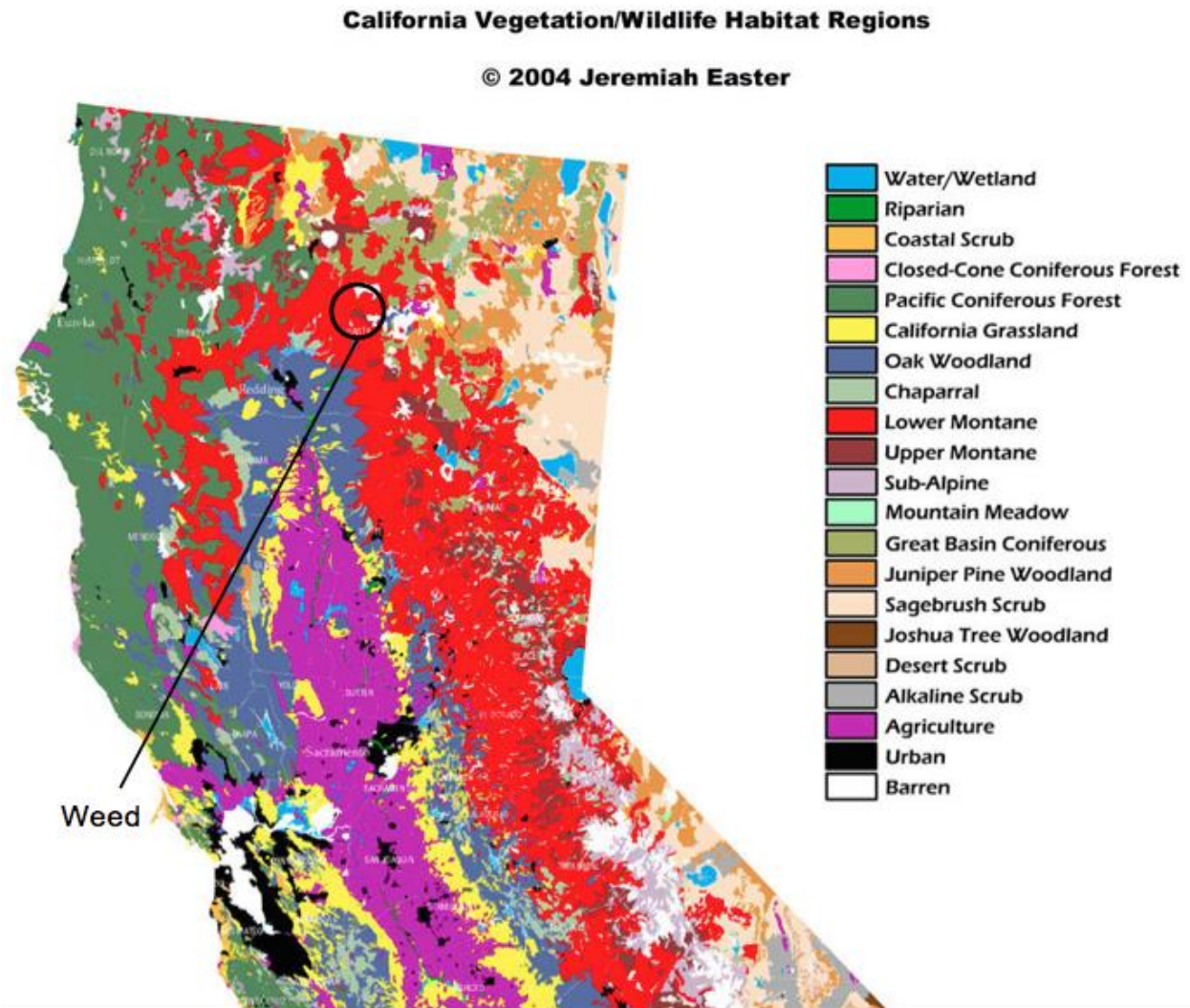
Mid to upper montane areas are characterized by prairies of dense perennial grasses. These zones have grasslands in shallow ultramafic soils and on cemented glacial tills, whereas wet montane meadows are scattered throughout the upper-montane and subalpine areas. Shrublands are found at higher elevations on poor sites and where severe fires have removed tree cover. The shrub types in this zone include:

- tobacco brush (*Ceanothus velutinus* var. *velutinus*),
- shrub tan oak (*Lithocarpus densiflorus* var. *echinoides*),
- golden (*Chrysolepsis chrysophylla*) and bush chinquapin (*Chrysolepsis sempervirens*),
- huckleberry oak (*Quercus vaccinifolia*), and
- greenleaf manzanita (*Arctostaphylos patula*).

Similar areas to grasslands include woodlands dominated or co-dominated by any combination of:

- blue oak (*Quercus douglasii*),
- Oregon white oak (*Quercus garryana*),
- California black oak (*Quercus kelloggii*),
- gray pine (*Pinus sabiniana*), or ponderosa pine (*pinus ponderosa*).

Figure 8.1 California Vegetation Regions



Source: Easter, Jeremiah, UC Berkeley, 2004

There are 17 types of conifers in mid to upper montane areas. Hardwood species in the area include:

- golden chinquapin (*Chrysolepis chrysophylla*),
- bigleaf maple (*Acer macrophyllum*),
- Pacific madrone (*Arbutus menziesii*),
- tanoak (*Lithocarpus densiflorus*),
- California black oak (*Quercus kelloggii*), and
- canyon live oak (*Quercus chrysolepis*).

8.3.3.1.3 Subalpine

Subalpine zone forests occur at the highest elevation of the Klamath-Siskiyou bioregion, roughly 7,536 feet (NGS, 2015). This is about twice the elevation of the City of Weed and therefore not

as predominant in the area as the lower, and mid to upper montanes. The subalpine zone typically consists of open lands with patches of woodlands and a discontinuous understory of shrubs (Sawyer and Thornburgh 1977). The upper-montane and subalpine zones include woodlands with a mixture of western white pine, Jeffrey pine, whitebark pine, foxtail pine, mountain hemlock, or curl-leaf mountain-mahogany (Skinner 2006).

8.3.3.2 Regional and Local Vegetation Habitat

Local and regional vegetation in Weed is classified by CalVeg, which is a system used by the Department of Agriculture's Forest Service to classify existing vegetation. There are six different regions in California that fall under the CalVeg system. Siskiyou County falls within the North Interior region, or Zone 4, along with Lassen, Modoc, Shasta, and Trinity Counties. Siskiyou County is substantially forested but also features classifications of grassland, chaparral, sagebrush, and cultivated urban and industrial areas. Both Siskiyou County and the City of Weed primarily use the predominant natural resource of forest land for timber with other considerations of open space and habitat conservation. Oak Woodlands and oak forests are important hosts for many species of birds and plants, but are in great danger due to increasing development. The California Oak Foundation projects that one million acres of oak woodland will succumb to development within the next 30 years while an additional 750,000 acres will be put in jeopardy. Ecosystems with oak woodlands and forests provide benefits such as grazing, water filtration, erosion prevention, and support for pollinating bees and other species (NAS, 2014). The National Audubon Society, a non-profit organization that works to preserve and restore natural ecosystems, provides recommendations for oak woodland rehabilitation that include the following:

- plant and restore oak woodlands near rivers and streams while retaining chaparral, riparian, and grassland habitats nearby
- plant grasses and shrubs next to oak trees to mimic the diversity of natural oak woodlands
- protect young trees and sensitive habitat areas from damage from grazing and non-native species with fencing
- avoid attracting non-native bird species that parasitize oak trees
- thin oak woodlands and forests instead of completely removing trees
- maintain habitat corridors between oak habitats and other habitats
- leave dead trees and branches in place for nesting sites and opportunities for birds and prey species

The largest threats to these vegetation types in Weed are wildfires and logging without regeneration. The following sections describe the oak woodland and oak forest vegetation types, which are the most predominant in Weed.

8.3.3.2.1 Vegetation Types: Oak Woodland

Siskiyou County consists of nearly one million acres of oak woodland. This includes a balance of blue oak, black oak, canyon live oak, and Oregon white oak. Blue oak woodlands include gray pine and either interior or coast live oak. Oregon white oak woodlands include black oak, Douglas-fir, and ponderosa pine. Oak woodlands are typically found within chaparral and woodland Eco regions. In California, sixty percent of North Interior oak woodlands are privately

owned. The US Forest Services (USFS) manages 33 percent of oak woodlands, while the Bureau of Land Management (BLM) manages six percent. Siskiyou county oak woodlands are less than 5 percent developed and less than one percent at risk (Gaman 2006).

8.3.3.2 Vegetation Types: Oak Forests

There are nearly 1.1 million acres of oak forest in Siskiyou County. The canyon live oak and black oak are the predominant species in the area's oak forests. These two species occur with the local conifer species, including Douglas fir, ponderosa pine, sugar pine, and madrone (Gaman 2006). The oak woodlands differ from oak forests by being subjected to more frequent wildfires, lacking a dense and woody understory of true forests, and often having lower canopies (Epstein et. al, 2002).

8.3.3.3 Environmental Concern with the Lumber Industry

The Roseburg Forest Products Company has a major influence on timber in the City of Weed and surrounding area. The U.S. Department of the Interior Bureau of Land Management (BLM) issued a categorical exclusion for district-wide Special Forest Products Sales for the Fiscal Year of 2016. The categorical exclusion under the National Environmental Policy Act (NEPA) states that the Roseburg district's actions will have no significant impacts to the human environment and no further environmental analysis is required (DOI Categorical Exclusion, 2015).

The Roseburg Forest Products Company also implements environmental practices to support sustainability. Roseburg recycles waste materials and forest thinning into clean energy through a biomass cogeneration plant in the City of Weed. Environmental Management Systems are also established at every facility, and the company supports 60-year-old second growth Douglas fir trees on 4,534 acres of land (Roseburg Sustainability White Paper, 2014).

8.3.3.4 Endangered and Threatened Plant and Animal Species

The U.S. Fish and Wildlife Service compiles lists of federally endangered and threatened plant and animal species for different geographic quadrangles. These quadrangles consist of geographic regions that are 7.5 minutes in length, covering a relatively small geographic area. An endangered species is defined by the U.S. Fish and Wildlife Service as, "any species that is in danger of extinction throughout all or a significant portion of its range". Threatened is defined as "any species that is likely to become an endangered species within the foreseeable future throughout all or significant portions of its range" (U.S. Fish and Wildlife Service, 2013). Under the Federal Endangered Species Act, the taking of any listed species is prohibited. Take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct" (U.S. Fish and Wildlife Service, 2013).

Table 8.3 catalogs all federally listed endangered and threatened species that may potentially be impacted by a project in the City of Weed. The City of Weed may serve as a corridor for moving endangered and threatened plant and animal species, but no critical habitats have been

identified. Because of the potential existence of these species, proposed projects in Weed must request an official letter from the Yreka Fish and Wildlife Services office for assistance in evaluating the potential impacts of the specific project and receive conservation measure recommendations.

Table 8.3 Endangered and Threatened Plant and Animal Species

| Federally Listed Species | Threatened (T) | Endangered (E) | Candidate (C) |
|--|-----------------|----------------|---------------|
| Oregon Spotted Frog <i>Rana pretiosa</i> | T | | |
| Northern Spotted Owl <i>Strix occidentalis</i> | T | | |
| Yellow-billed Cuckoo <i>Coccyzus americanus</i> | T | | |
| Whitebark Pine <i>Pinus albicaulis</i> | | | C |
| Conservancy Fairy Shrimp <i>Branchinecta conservatio</i> | | E | |
| Vernal Pool Fairy Shrimp <i>Branchinecta lynchi</i> | T | | |
| Vernal Pool Tadpole Shrimp <i>Lepidurus packardii</i> | | E | |
| Delta Smelt <i>Hypomesus transpacificus</i> | T | | |
| Longfin Smelt <i>Spirinchus thaleichthys</i> | | | C |
| Lost River Sucker <i>Deltistes luxatus</i> | | E | |
| Shortnose Sucker <i>Chasmistes brevirostris</i> | | E | |
| Gentner's Fritillary <i>Fritillaria gentneri</i> | | E | |
| Hoover's Spurge <i>Chamaesyce hooveri</i> | T | | |
| Slender Orcutt Grass <i>Orcuttia tenuis</i> | T | | |
| Valley Elderberry Longhorn Beetle <i>Desmoceris californicus dimorphus</i> | T | | |
| Fisher <i>Martes pennanti</i> | (proposed) T | | |
| Gray Wolf <i>Canis lupus</i> | | E | |

Source: Information of Planning and Conservation Trust Resource Report, 2015

Table 8.4 lists migratory birds of concern that may also potentially occur in Weed or its surrounding areas as well as their occurrence either year-round or during certain breeding seasons. Birds are protected under the Migratory Bird Treaty Act. Any activity which results in the taking of migratory birds is prohibited unless authorized by the U.S. Fish and Wildlife Service. There are no provisions for allowing the taking of migratory birds that are unintentionally killed or injured (FWS, 2015).

Table 8.4 Migratory Birds of Concern

| Migratory Birds of Concern | Occurrence |
|--|-------------------|
| Bald Eagle <i>Haliaeetus leucocephalus</i> | Year-round |
| Calliope Hummingbird <i>Stellula calliope</i> | Breeding |
| Cassin's Finch <i>Carpodacus cassinii</i> | Year-round |
| Flammulated Owl <i>Otus flammeolus</i> | Breeding |
| Fox Sparrow <i>Passerella iliaca</i> | Breeding |
| Green-tailed Towhee <i>Pipilo chlorurus</i> | Breeding |
| Lewis's Woodpecker <i>Melanerpes lewis</i> | Year-round |
| Loggerhead Strike <i>Lanius ludovicianus</i> | Year-round |
| Long-billed Curlew <i>Numerius americanus</i> | Breeding |
| Nuttall's Woodpecker <i>Picoides nuttallii</i> | Year-round |
| Oak Titmouse <i>Baeolophus inornatus</i> | Year-round |
| Olive-sided Flycatcher <i>Contopus cooperi</i> | Breeding |
| Peregrine Falcon <i>Falco peregrinus</i> | Year-round |
| Purple Finch <i>Carpodacus purpureus</i> | Year-round |
| Sage Thrasher <i>Oreoscoptes montanus</i> | Breeding |
| Short-eared Owl <i>Asio flammeus</i> | Year-round |
| Snowy Plover <i>Charadrius alexandrinus</i> | Breeding |

| | |
|--|------------|
| Swainson's Hawk <i>Buteo swainsoni</i> | Breeding |
| Western Grebe <i>aechmophorus occidentalis</i> | Year-round |
| White Headed Woodpecker <i>Picoides albolarvatus</i> | Year-round |
| Williamson's Sapsucker <i>Sphyrapicus thyroideus</i> | Year-round |
| Willow Flycatcher <i>Empidonax traillii</i> | Breeding |

Source: Information of Planning and Conservation Trust Resource Report, 2015

The City of Weed does not have any identified critical habitats within the City limits. However, areas of the City have potential wildlife corridors for endangered species.

8.3.3.5 Wildlife refuges in Siskiyou County

The California Department of Fish and Wildlife has established four wildlife refuge areas in Siskiyou County. These are Butte Valley Wildlife Area, Cantara-Ney Springs Wildlife Area, Horseshoe Ranch Wildlife Area, and Shasta Valley Wildlife Area. These wildlife refuges attempt to mimic the natural habitat that is critical to the survival of threatened and endangered species in Siskiyou County.

Butte Valley Wildlife Area

The Butte Valley Wildlife Area is roughly 13,400 acres. It consists of wetlands, sage flats, and farmlands, as well as the 4,000-acre Meiss Lake. Butte Valley provides a viewing area for waterfowl, bald eagles, and sandhill cranes. It is a type B Wildlife area, which restricts hunter access during waterfowl season.

Cantara-Ney Springs Wildlife Area

The Cantara-Ney Springs Wildlife Area was established as a wildlife area by the Fish and Game Commission in 1996. It is located along the upper Sacramento River and includes 154 acres of mixed conifer, hardwoods and riparian vegetation. This wildlife area hosts many bird species such as osprey, kingfisher, herons, and many species of migratory songbirds.

Horseshoe Ranch Wildlife Area

Horseshoe Ranch Wildlife Area consists of approximately 5,000 acres of Department of Fish and Wildlife property, supplemented by an additional 4,000 acres of Bureau of Land Management land. The area includes steep and rolling hills of shrubs, oaks, and conifers surrounding Scotch Creek and several of its tributaries. Many species in this refuge include bobcats, coyotes, red-tailed hawks, and golden eagles.

Shasta Valley Wildlife Area

In 1991, the Fish and Game Commission designated the Shasta Valley Wildlife Area that is known for its stunning backdrop of Mt Shasta. The area contains approximately 4,700 acres of Great Basin juniper woodland, riparian forest, seasonal wetlands, and crop lands. Sandhill cranes, waterfowl, raptors, deer, porcupines, coyotes and shorebirds are the most commonly observed wildlife in the Shasta Valley Wildlife Area. Additionally, there are three deep water reservoirs and numerous seasonal wetlands that run through the area (CDFW 2015).

8.3.3.6 State Wildlife Action Plan

The State Wildlife Action Plan examines the health of wildlife and prescribes actions to conserve wildlife and vital habitat before they become scarcer and costlier to protect. The Plan also promotes wildlife conservation while furthering responsible development and addressing the needs of a growing human population. The plan creates a vision for fish and wildlife conservation statewide, stratifies analysis of impacts and stressors by ecoregions, incorporates climate change impacts and adaptation strategies, updates species at risk, vulnerable species and species of greatest conservation need, and recommends conservation actions consistent with planning documents developed by other agencies (CDFW 2015). The State Wildlife Action Plan works to protect areas such as bio diverse corridors of the City of Weed. Although no specific habitats have been identified within city boundaries, the existence of these species within the immediate vicinity make Weed a candidate host in the future.

8.3.4 Mineral and Energy Resources

This section discusses mineral resources and energy production in the City of Weed and surrounding areas. Furthermore, this section discusses ways that Weed can participate in energy conservation and the benefits of doing so. Energy conservation is not a legally required component of the conservation element; however, in order to comply with Assembly Bill 32, addressing energy conservation is essential.

8.3.4.1 Geologic and Mineral Resources

The City of Weed's geologic foundation of tertiary volcanic rocks, such as quaternary alluvium, is derived from Mount Shasta. Quaternary alluvium is a type of soil that is loose and unconsolidated and is derived from Mount Shasta and its rivers and creeks. Most of the quaternary alluvium is present in the northeastern part of the City.

The National Mineral Resource Assessment conducted a scientific study to estimate the amount of undiscovered gold, silver, copper, lead and zinc that could be present in the mineral deposit. These deposit studies were limited to 1 kilometer or less below the surface of the United States. Most of California falls under the Pacific Coast Mineral-Resource Assessment Region, including the City of Weed and its surrounding area. Weed is part of Tract PC28 and PC40 (National Mineral Resource Assessment, 1998). This area is reported to contain gold, though it is sub-economical at this time for exploration and extraction. Tract 28 contains hot spring gold-silver,

more commonly known as fine-grained silica and quartz in silicified breccia with gold. Tract 40 contains low-sulfide Au-quartz vein, commonly known as gold quartz. (USGS, 1999)

8.3.4.2 Energy Production

There are no known energy production facilities in the City of Weed. However, Roseburg Forest Product Company's factory in County of Siskiyou operates cogeneration combined heat and power plant that can provide up to 12 MW output. Depending on the usage at the factory, Roseburg's cogeneration power plant provides 3-10 MW to the power grid (Wood Bioenergy Magazine).

However, there are known or potential geothermal resources in Siskiyou County. These resources are limited to the eastern half of the County. The City of Weed lies at the edge of this known or potential geothermal resource area, but there has been no exploration of this potential resource (Laney and Brizzee, 2003).

8.3.4.3 Energy Conservation

Assembly Bill 32 aims to reduce greenhouse gas emissions in the State of California to 1990 levels by 2020 (Environmental Protection Agency, 2006). Energy conservation in municipalities plays an important role in greenhouse gas reductions in the State, and can serve as a money-saving strategy for municipalities and residents. Additionally, a co-benefit of energy and water conservation can be achieved through several energy-efficiency measures. Updating building codes and incentive programs are also potential strategies to increase energy conservation. Community members of the City of Weed identified with energy conservation. Taking advantage of the unique microclimate of Weed could enable the community to expand renewable energy production in the City, for instance, by harnessing wind power.

In accordance with Title 24, also known as the California Building Standards Code, City of Weed must incorporate using energy efficient building materials, indoor and outdoor light, insulation, and roofing materials that contribute to energy conservation practices. The most significant efficiency improvements to the non-residential standards are lighting controls, windows, HVAC system and building operations. For residential standards, most significant efficiency improvements are available with envelope insulation, windows, and HVAC system. Local power providers, such as Pacific Power may offer incentives to residents wanting to upgrade to energy efficient appliances. (California Energy Commission)

8.4 Issues and Opportunities

This section describes the strengths, opportunities, issues, and constraints pertaining to water resources, biological resources, and energy and mineral resources within the City of Weed. The information reflects the existing conditions of natural resources and conservation in Weed as well as community feedback gathered during public meetings held on October 10th, 2015 and November 7th, 2015.

8.4.1 Strengths and Opportunities

8.4.1.1 Water Resources

The City of Weed has a large amount of hydrological resources. Runoff from Mt. Shasta and other hillsides collects in Shasta Valley in rivers, creeks, streams, and lakes. Runoff also collects in sub-basins that is later pumped from wells. The City of Weed gets its water from Beaughan Springs and from groundwater pumped from Mazzei Well. The water resources are of great quality as the City is close to sources of precipitation runoff and snow melt. Water resources have historically been plentiful, with enough rainy days and snow pack to meet water demand. The drought however puts pressure on the water supply while demand has stayed constant. The City of Weed maintains two wastewater treatment facilities that treat water and sewage before it reenters streams and rivers.

8.4.1.2 Biological Resources

The existing biological resources conditions make the City of Weed and its surrounding areas biologically diverse. With the various species that occur in the area, conservation efforts such as wildlife refuges serve as opportunities to further protect wildlife.

As mentioned in the Biological Resources section of this chapter, the City of Weed manages to support the local lumber industry while maintaining the implementation of environmental practices to avoid timber depletion. Roseburg Forest Products Company has dedicated 4,534 acres of land to old growth Douglas-fir trees, which will help ensure long-term sustainability of the area's timber resources.

8.4.1.3 Energy and Mineral Resources

Participants at the first community meeting on October 10th identified that a main strength of Weed is that the City has a wide range of natural resources in its vicinity. Participants also noted that a major opportunity in terms of energy is to harness the City's strong winds in order to generate wind power. Residents also mentioned the desire to develop a sustainable management plan for non-renewable resources.

There are many opportunities in the City to improve renewable energy sources. The City should focus on developing sustainable management plan for non-renewable energy, and develop plans to harness the wind energy. The City should also consider incentives for residents and commercial businesses to use solar panels to increase the amount of renewable energy sources within the City.

8.4.2 Issues and Constraints

8.4.2.1 Water Resources

While the City of Weed has high quality and adequate water resources, the City is lacking historical data and does not have any systems in place to continue to monitor demand and use by sector. Having this data can help the City to develop water conservation plans and identify future water resource needs. The data is especially necessary due to the reduced flow associated with major drought periods. One of the City's major sources of water, Beaughan Springs, is being leased to the City but the lease ends in June of 2016 (Brannon, 2014). The potential loss of this water resource will greatly reduce the available water to the City and its residents. In addition, natural disasters and fire risk are affecting the security and safety of water storage tanks causing great losses of useable water.

8.4.2.2 Biological Resources

During the community meeting on October 10th, participants expressed concern over the environmental health effects of the timber industry in the City of Weed. Some participants were particularly concerned with the level of emissions and particulate matter emitted from the timber industry and the health impacts of poor air quality.

Based on the existing conditions of biological resources in Weed, it is clear that there are threatened and endangered species in Siskiyou County and areas surrounding Weed that could be negatively impacted by development. There are potentially 40 biological resources (endangered species, migratory birds, and wetlands) within the vicinity of Weed. These include the gray wolf, Northern Spotted Owl, and Oregon Spotted Frog, which may be affected by future projects in Weed. This may require extensive conservation measures for future development if biological assessments and surveys identify specific habitats within project boundaries.

8.4.2.3 Energy and Mineral Resources

There were no immediate concerns regarding energy and mineral resources during community outreach meetings. However, attendees did indicate wanting to take advantage of renewable energy, such as wind and solar power. Attendees also wanted a reduction in the amount of particulate matter coming from the timber industries located in the unincorporated areas close to the City.

8.5 Emerging Directions

Overall response from Weed citizens indicated a need to increase renewable energy sources in residences, and capitalize on the available wind power in the City. Though there is huge potential for harnessing wind power, the City of Weed does not currently have transmission lines to collect or sell surplus energy to nearby cities. This represents the biggest constraint to the installation and success of wind power facilities.

Based on existing conditions and community input, the emerging directions for conservation in the City of Weed are:

- to maintain access to clean drinking water sources while limiting water usage for landscaping purposes,
- to maintain timber as a resource while avoiding depletion,
- to maintain biodiversity, and to develop strategies to harness wind power.

8.5.1.1 Water Resources

Water Conservation

The emerging directions for water resources in the City of Weed are to improve water monitoring, increase awareness and education, engage in water conservation planning, improve fixture installations, and to adopt a water shortage contingency plan. The City should concentrate on water conservation measures and strategies already in place and identify policy and program improvements for the continued conservation of water resources. Community outreach participants identified water conservation as the conservation topic they cared most about in Weed. The City has a Water Master Plan that was last updated in 2003 and the information in the document is outdated. The City can improve upon existing water conservation strategies by updating the Water Master Plan, identifying current and future water demand needs, and gathering data regarding water usage and distribution for residential, industrial, and public use purposes. The use of recycled water from the wastewater treatment facility is a potential strategy to recharge the groundwater table. Furthermore, examining potential strategies to cleanse and purify water pumped from Gazelle Well may help provide water security for future and emergency use. The City should also ensure that the strength and durability of current water storage tanks are safe from hazards, including fire damage. A previous water storage tank was destroyed during the Boles fire of 2014. The following emerging direction topics provide further detail about possibilities for continued water conservation.

Water Monitoring

In order to better monitor water use, Assembly Bill 2572 requires all new connections to install water meters by 2025. On existing metered units, urban water suppliers are to charge customers based on volume of delivery (use) by January 1, 2010 (California Water Code, 2004). The City of Weed does not comply with Assembly Bill 2572 as it lacks data on the number or volume of existing meters. Furthermore, the City should monitor water use by sector to identify

where water use could be reduced in order to develop policies and programs for water conservation.

Awareness and Education

Educating members of the community about the importance of water conservation is a key strategy for encouraging efficient use of water. The City may be interested in including water conservation information and tips in local water bills or through educational booths at city-wide events. School education programs may also be considered as a possible tool to further educate youth and the student population on water processes and conservation. The City should also look for possible outside funding sources to assist in implementing such programs.

Water Conservation Planning

Under the Urban Water Conservation Act of 2009, each urban retail water supplier is to develop water use targets and an interim water use target by July 1, 2011. Baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use should also be established. Water suppliers must meet these water conservation requirements by 2016 in order to be eligible for State water grants or loans (Department of Water Resources, 2015). In order to be eligible for State water grants or loans, the City should begin a strong effort to gather all the necessary information to complete this process. This data can then be utilized in the development of an updated Master Water Plan or a water shortage contingency plan.

Fixture Installations

Residential uses related to toilets, showers and faucets account for 25 percent of indoor water use. Low-flow water fixtures can be installed in homes to reduce water usage from these appliances. The City of Weed currently requires all new construction to implement low-flow fixtures for toilets and showerheads; however, many older residential buildings and public facilities do not have low-flow fixtures (ConSol, 2015). In order to be compliant with Civil Code Section 1101.1-1101.8 and Cal Green, the City should begin informing residents of the requirement to transfer all noncompliant plumbing fixtures to low-flow fixtures by 2017 for single-family residential buildings and by 2019 for multi-family residential buildings. The City should therefore encourage and promote the installation of low-flow water fixtures throughout.

Water Shortage Contingency Plan

As of October 2015, the City of Weed does not have a formal Water Shortage Contingency Plan. Though a water shortage contingency plan is not required by state or federal regulations, the City may benefit from the creation of this plan. Persisting drought conditions and challenging water rights put pressure on the water resource supply. A water shortage contingency plan could provide the City and residents with a plan to secure water resources, reduce demand, and act appropriately in emergency situations.

8.5.1.2 Biological Resources

The wildlife refuges located in areas around the City of Weed can continue to provide habitats for threatened species. The adopted State Wildlife Action Plan can provide additional protection and conservation.

The Yreka Fish and Wildlife office established a Northern Spotted Recovery Plan to recover the Northern Spotted Owl and remove its threatened species listing. The primary task of this plan is to evaluate and characterize the risk posed by wildfire to the species' habitats and make recommendations for long-term conservation approaches for the Klamath Province (Yreka FWO, 2014).

8.5.1.3 Mineral and Energy Resources

The City of Weed is interested in the sustainable use of resources, generating renewable energy, and energy efficiency. Public meeting participants expressed interest in finding ways to increase energy conservation on a city-wide and individual scale. There is potential for the City of Weed to participate in energy conservation at a local level through the implementation of city-wide policies and objectives that encourage energy efficiency in buildings and homes. The city may be interested in making public facilities more energy efficient as well. This could include transitioning to energy efficient bulbs and fixtures instead of traditional bulbs and fixtures in city buildings, streetscapes (street lights and lamps), and other public facilities. Incentive programs are an effective method to encourage energy conservation in residential and commercial buildings, which may be challenging for Weed due to lack of funding. However, it may be possible for the local municipality to participate in low-cost retrofits and upgrades in existing government buildings. Money savings in the long-run often result from participation in building retrofits and upgrades.

Clean Energy Initiative

Community input from the public meeting on October 10th showed that residents believe the City should actively promote the development of renewable energy technology such as solar panels and wind power. Examining the feasibility of drafting and implementing policies and objectives related to energy conservation at the local scale is an important consideration for the City. High winds reaching an average of 22 mph make wind power an especially feasible and popular option. Clean energy technology also provides additional industry to the City of Weed that can benefit its economy.

Energy Efficient Buildings and Facilities

The Boles Fire of 2014 destroyed 152 homes in the City of Weed. This event, though devastating, provides an opportunity to improve building construction and the energy efficiency of new construction and repairs. Under the California Green Building Standards Code (CalGreen), new construction projects must meet energy standards including the use of ENERGY STAR appliances and other energy efficient fixtures. The requirements of CalGreen provide an opportunity for the City to also retrofit existing buildings to be energy efficient by installing energy efficient fixtures and appliances and passive solar design.

The co-benefit of energy and water conservation, coupled with the financial benefit of these energy saving strategies, may encourage homeowners and residents in the City of Weed to participate. Energy efficient appliances require an initial investment, but often lead to energy savings in the long-term. Pacific Power, the local electricity provider for the City of Weed, offers many incentives to upgrade to energy efficient appliances. Wattsmart Incentives for California, a

creative program through Pacific Power, provides many solutions to energy savings such as upgrading light bulbs, HVAC systems, appliances, solar power, new construction and many more items that the Weed Community can embrace. Adoption of these options can increase energy conservation in the City and are an important consideration for emerging directions.

8.5.2 Community Preferences

On November 7th, 2015, the City of Weed held its second public meeting for the General Plan Update to assist in guiding the emerging directions for the City. Participants answered three separate conservation questions, each with multiple answer options. Participants expressed preference for each option through dot exercises. Conservation received 201 votes. The following are the results from the preference exercise:

The top conservation priority among participants was water as a resource. Community members were especially concerned with securing water resources in the City for public use. When asked which conservation activities participants were willing to use, most community members voted for using solar panels as a cleaner energy source. Air pollution received the most votes as the most pressing environmental health issue. Residents were especially worried about the emissions from industry in and surrounding Weed. Figures 8.2, 8.3, and 8.4 summarize responses to questions on the conservation element at the second public meeting.

Figure 8.2 Top Conservation Priority, Total Votes 77

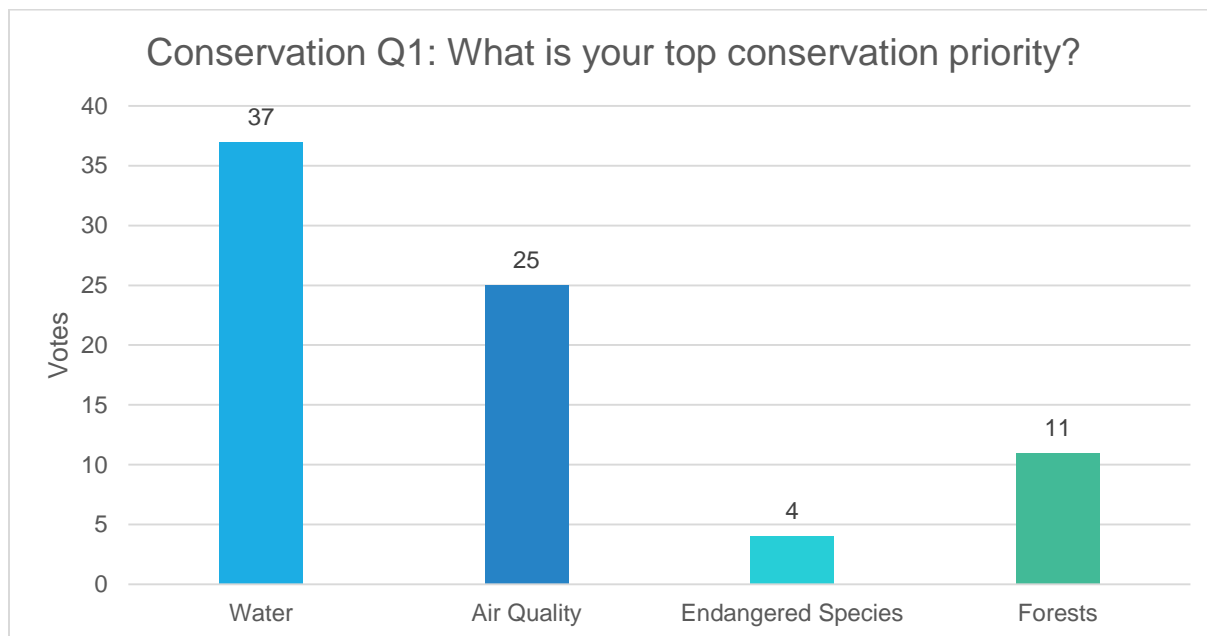


Figure 8.3 Conservation Activity Willingness, Total Votes 81

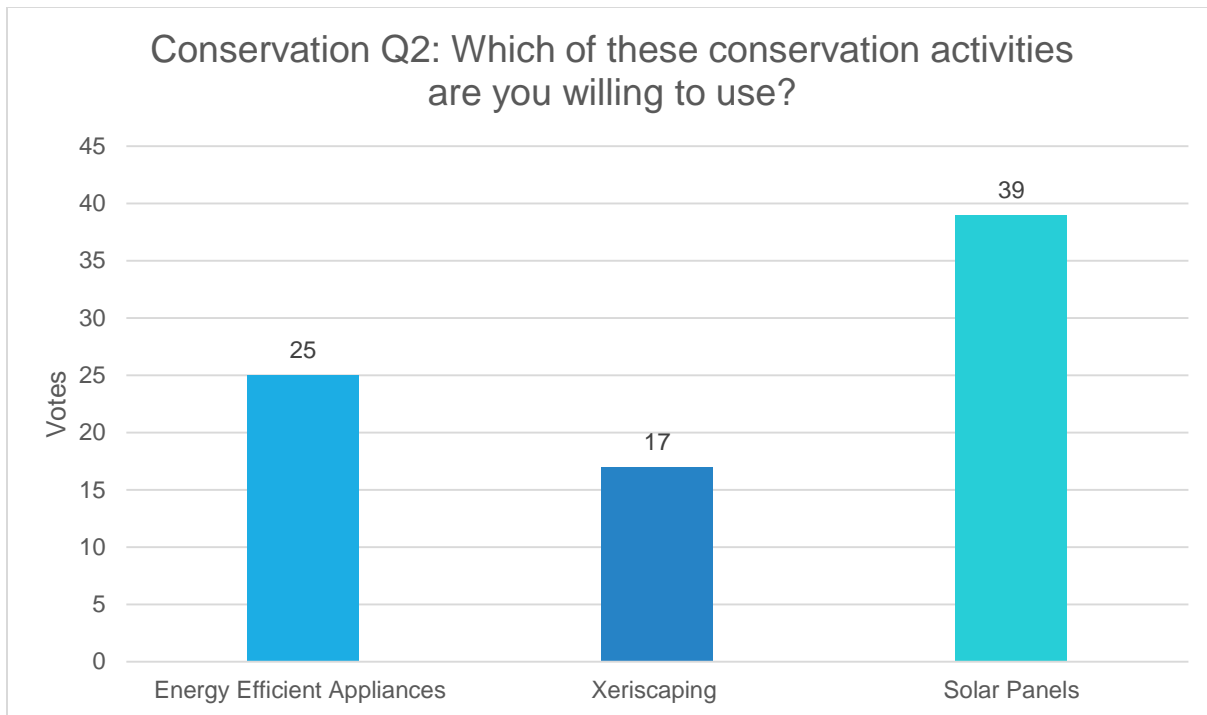
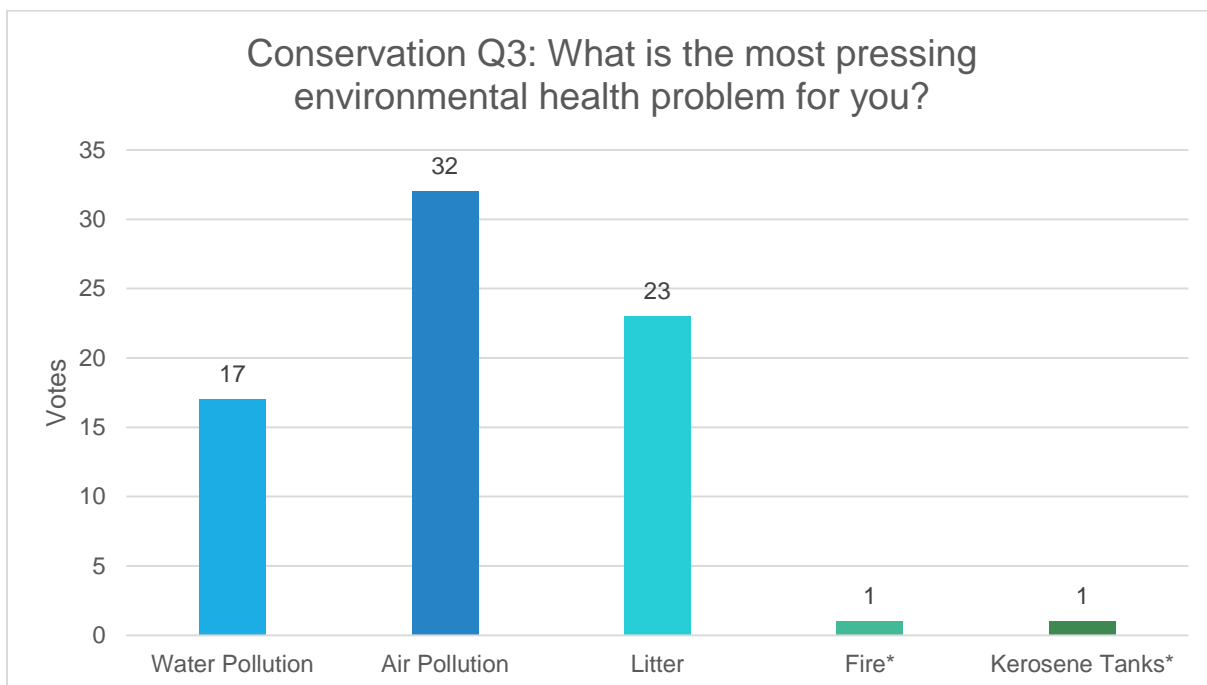


Figure 8.4 Pressing Environmental Issues, Total Votes 74



**Answers not originally in the questionnaire and added by participants*

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9 AIR QUALITY

9.1 Introduction

The Air Quality Element of the 2040 Weed General Plan is to promote and protect public health and welfare in the City. This chapter discusses the City's status in meeting federal, state, and local air quality standards. The City of Weed is located in the Northeast Plateau Air Basin, which is regulated by the Siskiyou County Air Pollution Control District (the District). The Northeast Plateau Air Basin comprises Siskiyou County, Modoc County, and Lassen County; however, this element only focuses on attainment levels in Siskiyou County. The Siskiyou County Air Pollution Control District reports to the California Air Resources Board (CARB), which monitors the status of compliance with federal and state air quality standards. Currently, Siskiyou County is classified as attainment for many air pollutants, which means that Siskiyou County meets or exceeds standards set by either Federal or State standards. The purpose of the Air Quality Element is to identify the City's goals and objectives in achieving necessary air quality standards as set forth by the California Air Resource Board and U.S. EPA. This section includes: (1) the regulatory setting for air quality, (2) an overview of ambient air quality conditions and an emissions inventory, (3) a description of the local setting including air quality conditions and major pollutant sources; and (4) a discussion of air quality issues pertinent to the City's future.

9.2 Regulatory Setting

Air quality is regulated and monitored at multiple levels in the United States. This section discusses the federal, state, and local standards and regulations pertaining to air quality in Weed.

9.2.1 Federal Regulations

Air Quality

Federal Clean Air Act

To protect public health and welfare, the National Environmental Protection Agency (EPA) establishes National Ambient Air Quality Standards (NAAQS) for common and widespread pollutants, otherwise known as "criteria" pollutants. The "criteria" air pollutants include ozone, carbon monoxide, particulate matter (2.5 and 10), sulfur dioxide, nitrogen dioxide, and lead. The EPA regulates these pollutants by developing human health-based and/or environmentally based criteria which determine permissible levels of pollution. The standards for these pollutants include the primary standards, which are based on human health, and secondary standards, which are based on a set of limits intended to prevent property and environmental damage. The NAAQS are listed for the six "criteria" pollutants in Table 9.1.

Criteria Air Pollutants

Both the EPA and CARB's air quality standards mandate regulation of six "criteria" air pollutants. These pollutants are monitored because they are the most common and dangerous pollutants to human and environmental health. The six "criteria" air pollutants are listed below as well as in Table 9.1.

- **Ozone** - Ground level ozone is the main component in smog. Ground-level ozone is created on warm, sunny, windless days and coincides with temperature inversions. Both urban and rural environments can experience high levels of ozone due to high winds that spread the pollutant over long distances. Ozone forms through chemical reactions between volatile organic compounds (VOC) and nitrogen oxides (NO_x), which are emitted from industrial facilities, motor vehicle exhaust, and chemical solvents. High levels of ozone create a public health concern by increasing susceptibility to respiratory infections and diseases, as well as the risk of cardiac disorders. Children are at the greatest risk from ozone exposure because their lungs are still developing and their outdoor exposure may be higher during peak ozone concentration periods.
- **PM 10 and PM 2.5** - PM 10 and PM 2.5 refer to particulate matter which consists of particles or droplets less than 10 microns in diameter or less than 2.5 microns in diameter, respectively. The largest particle pollutants are 30 times smaller than the average diameter of a human hair. Particulate matter consists of airborne dust particles emitted from combustion products, construction operations, agricultural operations, and diesel soot. Due to their small size, both PM 10 and PM 2.5 can bypass the human body's natural filtration system and become lodged in the lungs which can cause many respiratory illnesses and permanent lung damage. PM 2.5 has much more damaging effects than PM 10 due to its even smaller diameter, which can easily pass through the nose and throat. PM 2.5 particles are linked to asthma, heart attacks, bronchitis, and other respiratory illnesses.
- **Carbon Monoxide** - Carbon monoxide (CO) is an odorless, colorless gas emitted from combustion processes. The majority of carbon monoxide comes from mobile sources. CO interferes with the blood's ability to carry oxygen to the body's tissues and can result in major health complications and even death. Cleaner vehicle and emissions technology has dramatically reduced carbon monoxide concentrations (EPA, 2014).
- **Nitrogen Dioxide** - Nitrogen dioxide (NO₂) is one in a group of highly reactive gases known as "nitrogen oxides (NO_x). NO₂ forms from the combustion of fossil fuels and is a major contributor to smog formation, acid deposition, and fine particle pollution. Exposure to NO₂ can irritate one's nose, throat, and can exacerbate health complications for those with asthma.
- **Sulfur Dioxide** - Sulfur dioxide (SO₂) is another gas that is part of a group of highly reactive gases known as "sulfur oxides (SO_x). Fossil fuel combustion is the most prevalent source of SO₂. Like many of the other criteria air pollutants, sulfur dioxide can cause respiratory illnesses and can react with other atmospheric compounds to form small particles that can affect sensitive areas of the lungs and throat.
- **Lead** - Lead is typically found naturally in the environment but can also be emitted from manufactured products. Historically, sources of lead were generated by vehicle fuel combustion and industrial processes. However, the EPA's regulation of vehicle gasoline and efforts to remove lead from fuel has dramatically decreased lead emissions from the transportation sector. Between 1980 and 1999, levels of lead in the air decreased by 94 percent (EPA 2014). Today, the major sources of lead emissions are ore and metals processing, and leaded aviation gasoline.

Table 9.1 National Ambient Air Quality Standards

| National Ambient Air Quality Standards | | | | |
|--|-----------------------|-----------------|--------------------------------|---|
| Pollutant | Primary/Secondary | Averaging Time | Concentration | Regulation Standard |
| Ozone (O₃) | Primary and Secondary | 8 Hour | 0.075 ppm | Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years |
| PM 10 | Primary and Secondary | 24 Hour | 150 micrograms per cubic meter | Not to be exceeded more than once per year on average over 3 years |
| PM 2.5 | Primary and Secondary | Annual | 15 micrograms per cubic meter | Not to be exceeded |
| | | 24-Hour | 35 micrograms per cubic | 98th percentile, averaged over 3 years |
| Carbon Monoxide (CO) | Primary | 1 Hour | 35 ppm | Not to be exceeded more than once per year |
| | | 8 Hour | 9.0 ppm | |
| Nitrogen Dioxide (NO₂) | Primary | 1 Hour | 100 ppb | 98th percentile, averaged over 3 years |
| | Primary and Secondary | Annual | 53 ppb | Annual Mean |
| Sulfur Dioxide (SO₂) | Primary | 1 Hour | 75 ppb | 99th percentile of 1 Hour daily maximum concentrations, averaged over 3 years |
| | Secondary | 3 Hour | 0.5 ppm | Not to be exceeded more than once per year |
| Lead | Primary | Rolling 3 month | 0.15 | Not to be |

| | | | | |
|---|-----------------------|---------|----------------------------|----------|
| | and Secondary | average | micrograms per cubic meter | exceeded |
| Sulfates | No National Standards | | | |
| Hydrogen Sulfide | | | | |
| Visibility Reducing Particles | | | | |
| Key: Primary standards-public health protection Secondary standards-public welfare protection ppm (parts per million) ppb (parts per billion) measure by volume | | | | |

Source: United States, EPA, NAAQS, 2013.

Greenhouse Gas Emissions Environmental Protection Agency Clean Air Act, 2009

In December 2009, under Section 202(a) of the Federal Clean Air Act, it was determined that six key well-mixed greenhouse gases constitute a threat to public health and welfare, and that combined emissions from motor vehicles cause and contribute to climate change (EPA, 2009). Based on these findings, in April 2010, the EPA finalized the light-duty vehicle rule controlling GHG emissions. Beginning in 2011, any 2012 model year vehicles is subject to rule requirements including miles per gallon targets. This policy is discussed in further detail in the subsequent federal regulatory section. Thresholds were also set for GHG emissions at new and existing industrial facilities.

National Highway Traffic Safety Administration (NHTSA) and Environmental Protection Agency

National Program for GHG and Fuel Economy Standards

Under a partnership between the NHTSA and EPA, coordinated steps have been made to enable and encourage the production of a new generation of clean vehicles through reduced GHG emissions and improved fuel use for on-road vehicles and engines. The EPA's 2012 to 2016 average vehicle fleet wide standard is 35.5 miles per gallon for passenger cars, light-duty trucks, and medium-duty passenger vehicles. The recently expanded program now sets EPA's standards for model years 2017 through 2025 at 54.5 mpg. The program for heavy-duty vehicles and engines is also planned to be extended beyond model year 2018. These regulations are important to the City of Weed since motor vehicles are a major source of nitrogen oxide and carbon monoxide pollution.

9.2.2 State Regulations

Air Quality

California Air Resources Board California Clean Air Act

California Air Resources Board (CARB) is responsible for monitoring and regulating each of California's 35 air districts. The Clean Air Act provides a planning framework for attainment of the California Ambient Air Quality Standards (CAAQS). California Health and Safety Code Section 39607 (a-f) designates CARB to regulate each basin, and determine whether they meet attainment or nonattainment standards. For areas with nonattainment status, attainment plans are required to demonstrate a five percent per year reduction, averaged every consecutive three-year period. CARB standards for criteria air pollutants are often stricter than the Federal NAAQS. In addition to the six criteria air pollutants monitored by the EPA, CARB has set standards for three additional air pollutants. Those include sulfates, hydrogen sulfide, and visibility reducing particles. Table 9.2 shows the CAAQS for all nine pollutants.

Table 9.2 California Ambient Air Quality Standards

| Pollutant | Averaging Time | Concentration | Regulation Standard |
|--------------------------------------|----------------|--------------------------------|-------------------------------|
| Ozone (O3) | 1 Hour | 0.09 ppm | Not to be exceeded |
| | 8 Hour | 0.070 ppm | |
| PM 10 | 24 Hour | 50 micrograms per cubic meter | Not to be exceeded |
| | Annual | 20 micrograms per cubic meter | |
| PM 2.5 | Annual | 12 micrograms per cubic meter | Not to be exceeded |
| | | | |
| Carbon Monoxide (CO) | 1 Hour | 20 ppm | Not to be exceeded |
| | 8 Hour | 9.0 ppm | |
| Nitrogen Dioxide (NO2) | 1 Hour | 0.18 ppm | Not to be exceeded |
| | Annual | 0.030 ppm | |
| Sulfur Dioxide (SO2) | 1 Hour | 0.25 ppm | Not to be exceeded |
| | Annual | 0.04 ppm | |
| Lead | 30-Day Average | 1.5 micrograms per cubic meter | Not to be equaled or exceeded |
| Sulfates | 24 Hour | 25 micrograms per cubic meter | Not to be equaled or exceeded |
| Hydrogen Sulfide | 1 Hour | 0.03 ppm | Not to be equaled or exceeded |
| Visibility Reducing Particles | 8 Hour | See Note 1 | Not to be exceeded |

Note 1. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: Ambient Air Quality Standards, 2013

Greenhouse Gas Emissions

California Air Resources Board

California Assembly Bill 4420, 1988

In September 1988, The California Energy Commission (CEC) was statutorily directed to prepare and maintain the inventory of greenhouse gas (GHG) emissions and to study the impacts of GHGs and climate change on the State's energy supply and demand, economy, environment, agriculture, and water supplies. The CEC was also required to draft recommendations for addressing, reducing, and mitigating related impacts, and to coordinate research with federal, state, academic, and industry research projects.

California Assembly Bill 1493, 2002

In July 2002, The "Pavley" bill required the registry, in consultation with the State Air Resources Board, to adopt procedures and protocols for the reporting and certification of reductions in GHG emissions from mobile sources for use by the State Board in granting emission reduction credits. This bill required the State Board to develop and adopt, by January 1, 2005, regulations that achieve the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks.

California Global Warming Solutions Act, California Assembly Bill 32, 2006

The California Global Warming Solutions Act of 2006 required the California Air Resources Board (CARB) that 1990 emissions levels be achieved by 2020. AB 32 also requires the CARB to adopt regulations that require the reporting and verification of statewide GHG emissions, and monitor and enforce compliance with this program. AB 32 directs a Climate Action Team established by the Governor to coordinate the efforts set forth under Executive Order S-3-05 to continue its role in coordinating overall climate policy.

The Sustainable Communities & Climate Protection Act, SB 375, 2008

Senate Bill 375 (SB) requires the CARB to develop regional GHG emission reduction targets for passenger vehicles. CARB is to establish targets for 2020 and 2035 for each region covered by one of the State's 18 metropolitan planning organizations (MPO). Each of California's MPOs must prepare a report on sustainable communities strategies (SCS) as an integral part of its regional transportation plan (RTP). The SCS should contain housing, land use, and transportation strategies that would allow the region to meet the regional GHG targets (CARB, 2014).

California Code of Regulations Title 24 Part 6

Title 24, also known as the California Green Building Standards Code, is an act that prescribes energy efficiency standards as well as to improve indoor air quality, by addressing chemical emissions from carpets, resilient flooring materials, wood products, paints, adhesives, insulation, sealants and ventilation. In April 2012, Governor Brown issued Executive Order B-18-12 that directs State agencies to implement feasible voluntary measures from California Green Building Standards Code. (CARB, 2012)

9.2.3 Local and Regional Regulations

Siskiyou County Air Pollution Control District

The City of Weed is located in the Northeast Plateau Air Basin, which is monitored by the Siskiyou County Air Pollution Control District (the District). The District is tasked with monitoring criteria pollutants in the ambient air and regulating stationary sources of air emissions within the County. The Siskiyou County Air Pollution Control District does not have any monitoring stations in City of Weed; the nearest station is located in Yreka. The California Air Resources Board is responsible for regulating state-wide compliance assistance, forecasting, air monitoring, mobile emission sources, research, emergency responses to immediate air quality threats, and rule development as well as overseeing the Siskiyou County Air Pollution Control District. Map 9.1 shows the location of the Northeast Plateau Air Basin in relation to Siskiyou County.

The Siskiyou County Air Pollution Control District works to manage and improve air quality through air monitoring and control and through a number of programs including TIMBER Log Truck Grants. The Truck Improvement/ Modernization Benefitting Emission Reductions (TIMBER) program provides streamlined voucher funding options to reduce emissions by replacing 2006 or older model diesel engine log trucks with 2010 or newer models.

The district monitors for ozone and particulate matter as mandated by the State and Local Air Monitoring System (SLAMS), as well as acid rain. The district also supplies burn permits and enforces air quality standards. The district supplies source permits for major emitters which are inspected for compliance on a regular basis.

9.3 Existing Conditions

This section discusses current air quality conditions in the City of Weed and Siskiyou County. It also discusses the status of air pollutants monitored at the federal and state level.

9.3.1 Weed and Siskiyou County Climate

The City of Weed is located in the Northeast Plateau Air Basin, which is characterized by its four distinct seasons. During summer, daytime temperature can reach 90 degrees Fahrenheit. Autumn weather can set in as early as Labor Day and winters are dry and sometimes snowy with daytime temperature averages in the 30s to 40s, and dropping into the 20s at night.

9.3.1.1 Airflow and Inversions

The movement of air in the Northeast Plateau Air Basin is a major factor that impacts air quality within the City of Weed and Siskiyou County. In Weed, there are strong south prevailing winds that move at an average speed of 22 mph. These strong winds have the potential to carry particulate matter from highways and forest product manufacturing facilities, which can affect air quality within the City. However, these winds can also carry emissions and particulate matter away from the City or within the City depending on the strength and direction of the wind. On sunny days, sunlight can be a catalyst in the formation of some air pollutants (such as ozone).

In meteorology, a temperature inversion is a condition in which the temperature of the atmosphere increases with altitude in contrast to the normal decrease with altitude. When temperature inversion occurs, cold air is trapped under warmer air at higher altitudes. Inversions can be seen during cold winter months. The warm air on top of cold air acts as a lid, and suppresses the "vertical mixing" meaning that the air does not circulate as it should. Inversions play a major role in air quality, since emissions from vehicles, industries and fireplaces is trapped near the ground, which leads to poor air quality. City of Weed and surrounding areas do not usually see extreme cases of inversion, though in winter months, weak inversions occur in the community.

A large contribution to air pollution during inversions comes from fireplaces, and other wood smokes. The City of Weed and surrounding areas still use wood as the main source of heating, which can cause poor air quality in the community. (National Weather Service)

9.3.2 Status of the Northeast Plateau Air Basin District

The City of Weed is located in Siskiyou County and is therefore under the jurisdiction of the Siskiyou County Air Pollution Control District. Siskiyou County enjoys some of the best air quality in the State, and is classified as attainment in many categories of air pollution. The City of Weed is also located along Interstate 5 and US Route 97, which have been identified as major sources of air pollution within the City. Forest product manufacturing facilities can produce nitrogen oxides, total reduced sulfur compounds, sulfur oxide, and particular matter, which are

known to have detrimental impacts on public health and welfare. based on the California Ambient Air Quality Standards set forth by the CARB. Table 9.3 shows the attainment status for air quality. The federal Clean Air Act and the California Clean Air Act requires that air basins or portions be classified as either “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the standards have been achieved. Jurisdictions with nonattainment are also required to prepare air quality plans that include strategies for achieving attainment. Siskiyou County is in attainment or unclassified status for all of the NAAQS and the CAAQS (SCAPCD, 2006).

Table 9.3 Northeast Plateau Air Basin Federal and State Air Quality Standards Attainment Status, 2013.

| Northeast Plateau Air Basin Federal and State Air Quality Standards Attainment Status, 2013 | | |
|--|---|---------------------------------------|
| Pollutant | California Ambient Air Quality Standard | National Ambient Air Quality Standard |
| Ozone | Attainment | Unclassified/Attainment |
| PM 10 | Attainment (Siskiyou County only) | Unclassified |
| PM 2.5 | Attainment | Unclassified/Attainment |
| Carbon Monoxide | Unclassified | Unclassified/Attainment |
| Nitrogen Dioxide | Attainment | Unclassified/Attainment |
| Sulfur Dioxide | Attainment | Unclassified |
| Sulfates | Attainment | N/A |
| Lead | Attainment | Unclassified/Attainment |
| Hydrogen Sulfide | Unclassified | N/A |
| Visibility Reducing Particles | Unclassified | N/A |

Source: California Air Resource Board, 2013

In 2013, the CARB released estimated annual air basin emissions data for mobile source, area wide, and stationary emission sources. Table 9.4 shows a summary of these estimated emissions organized by emissions source and pollutant. According to the report, the main sources of total organic gases (TOG) and reactive organic gas (ROG) emissions are from waste disposal, and wastewater treatment centers (stationary sources). The main sources of carbon monoxide are motor vehicles, especially light duty passenger vehicles, and medium duty trucks (mobile sources). Nitrogen oxides were most heavily emitted from motor vehicles, with higher concentrations from heavy duty diesel trucks (mobile source). Lastly, wind dust is the largest source of particulate matter throughout the County.

Table 9.4 Siskiyou County Annual Average Air Basin Emissions Summary, 2012

| 2012 Estimated Siskiyou County Air Pollution Control District Annual Average Air Basin Emissions Summary | | | | | | | | |
|---|--|-------------|-------------|------------|------------|-------------|--------------|---------------|
| Emissions Source | Average Criteria Pollutant Emissions (Tons/day) | | | | | | | |
| | TOG | ROG | CO | NOX | SOX | PM | PM 10 | PM 2.5 |
| Area Wide Emissions | 20.8 | 6.9 | 20.2 | .2 | .1 | 25.3 | 15.5 | 3.6 |
| Stationary Emissions | .9 | .8 | .6 | .4 | .0 | .8 | .6 | .4 |
| Mobile Source Emissions | 3.2 | 2.9 | 20.8 | 8.9 | 0.0 | .4 | .4 | .3 |
| Total | 24.9 | 10.6 | 41.6 | 9.5 | .1 | 26.6 | 16.5 | 4.3 |

Source: California Air Resources Board, 2013

9.3.3 Climate Change and Greenhouse Gases

In recent years, there has been heightened awareness about global increase in greenhouse gas emissions (GHGs), which can profoundly impact the planet and human health. The earth's climate has been evolving for millions of years and has experienced both warm trends and ice-age cycles. While the climate has been relatively stable, the past 50 years have indicated a rapid warming trend which most climate scientists, based on extensive investigation in a number of different fields, believe is not attributable to nature alone (US EPA, 2014). The United States, as well as the State of California, are developing policy statements, adaptation plans, and policies to address this global issue.

9.4 Issues and Opportunities

This section discusses the strengths, opportunities, issues, and constraints pertaining to air quality in Weed. The information is based on existing conditions, as well as community feedback gathered during the two public meetings on October 10th, 2015 and November 7th 2015.

9.4.1 Strengths and Opportunities

The City of Weed has excellent air quality by state and federal standards. The air in general is clean with low incidence of dangerous toxins, pollutants, and particulate matter. This clean air provides great opportunities for outdoor recreation for all ages while also maintaining high quality habitat for plant and animal species. The air quality can be associated with the high elevation, surrounding forests, and high winds. The City of Weed can strive for additional improvements by increasing renewable energy, and promoting alternative modes of transportation.

9.4.2 Issues and Constraints

Although the overall air quality in Weed is good, the presence of I-5 and US 97 as major highways through the City contributes to vehicle emissions such as Carbon Dioxide (CO₂) and Nitrogen Oxide (NO_x) that can be detrimental to public health and welfare. The forest manufacturing industry is also a stationary source that emits particulate matter into the environment which can cause health complications. Local timber manufacturing industries are also major stationary sources that emit particulate matter and Nitrogen Oxide into the environment. The City still relies on wood for heating in residential homes. Wood burning and wood smokes are a large contributor to poor air quality as they emit higher amounts of pollution than smoke from oil or gas fired furnaces. Furthermore, the rural setting of Weed within Siskiyou County contributes to dependence on personal automobiles for transportation, which are a major cause of air pollution.

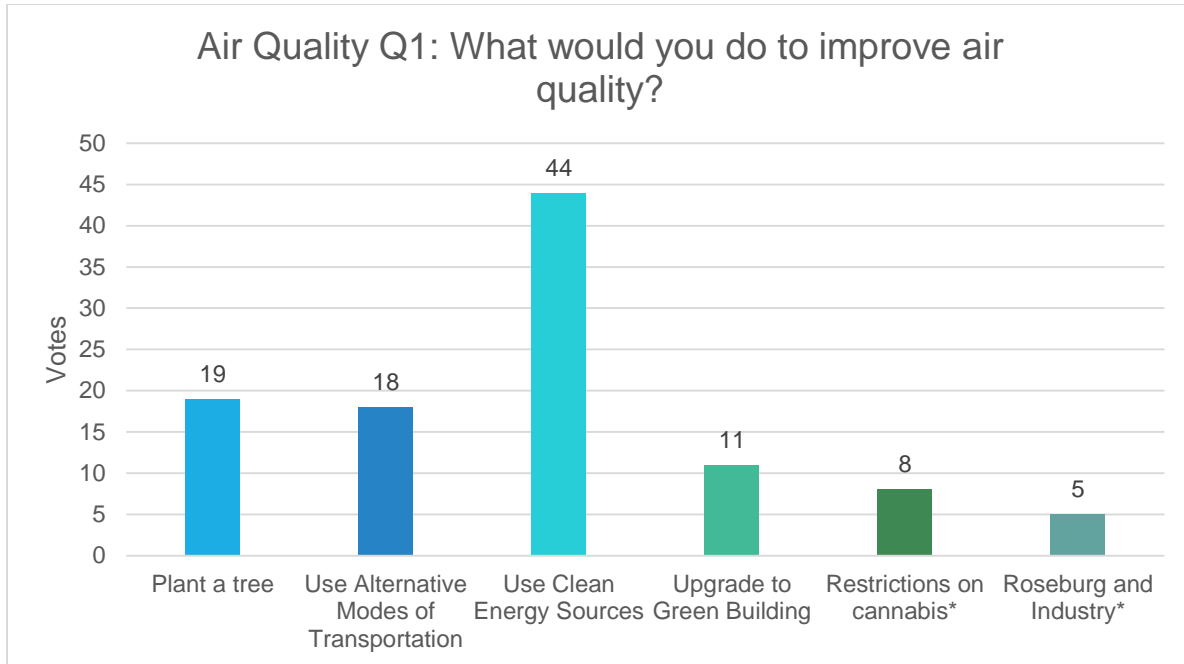
9.5 Emerging Directions

On November 7th, 2015, the City held its second public meeting for the 2040 General Plan Update to assist in guiding the emerging directions for City of Weed. Participants were asked one question related to air quality (each with multiple answer options) and were asked to vote based on preference for various options to improve air quality. Using clean energy sources to improve air quality received a strong majority of the votes. The second group of most popular choices for improving air quality were planting more trees and using alternative modes of transportation. Figure 9.1 shows the results of the preference survey.

Based on existing conditions and community preferences, the emerging directions for air quality in Weed are to continue to attain good air quality, invest in clean energy and promoting alternate modes of transportation. Due to its location and relatively small population, the City of Weed should continue to be within state and federal attainment levels for criteria air pollutants. Investment in clean energy and alternative transportation can contribute to improving the City's air quality by reducing emissions from energy consumption and automobile use. Due to the rural setting of the City, many residents still rely on personal automobiles for transportation, which causes much air pollution within the area. City of Weed can promote electric vehicles and build electric vehicle charging infrastructure to limit air pollution from automobiles. City of Weed still uses wood for heating and to generate energy for many homes and industries. Burning wood can be detrimental to air quality. In cases of inversion, the City can consider limiting or instituting educational campaign on the value of limiting the use of woodstoves and fireplaces under certain weather conditions. Furthermore, conserving and enhancing the natural environment of Weed's many forests can ensure the continuation of clean air by promoting natural processes that sequester carbon from the air.

9.5.1 Community Preferences

Figure 9.1 Methods to Improve Air Quality, Total Votes 105



**Answers not originally in the questionnaire but added by participants*

9.6 References

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10 NOISE

10.1 Introduction

According to the California State Government Code §65302(b), the Noise Element is one of the mandatory elements of the General Plan. Recognizing the effects of noise on people's health and general well-being, the State of California requires that all local jurisdictions prepare statements of policy indicating their plans regarding noise generating and noise sensitive land uses. Local jurisdictions must also establish maximum noise levels for each land use category, set standards for noise generation from transportation facilities and immobile noise sources, and develop a program for implementation of noise control measures. California also requires local government agencies to identify and quantify community noise levels expressed in Community Noise Equivalent Levels (CNEL) or day-night average levels (Ldn) as defined in the definitions section below.

This section documents the noise environment in the City of Weed, and begins by providing definitions of noise levels and measurement, as well as the regulatory setting at federal, state, regional, and local levels with their respective standards and regulations. This chapter then provides a description of the existing noise conditions in Weed in terms of noise sources and sensitive receptors. Lastly, a summary of the preferences gathered from a series of community outreach events are provided, which help recognize the community's needs, wants, and concerns for the future.

10.1.1 Definitions and Impacts

The noise exposure, or ambient noise, is a measure of noise that a person experiences over a period of time. The noise level is a measure of noise that the same person will experience at a given instant in time. Noise levels in communities constantly vary depending on the time, the day, atmospheric conditions, or other variables. Thus, community noise environments encompass all the noises, which are mainly the product of distant noise sources. The result is a relatively stable background noise exposure. Noise is defined as unwanted sound. The most common effects of noise are annoyance and stress. Noise can also lead to interference with activities such as sleep, speech, and the learning process. In more extreme situations, noise can have substantial physiological effects such as hearing loss.

Ambient Noise: The composition of noise from all sources near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location

A-Weighted Decibel (dBA): The A-weighted decibel measures sound in a manner similar to the response of the human ear and gives a good correlation with a person's reaction to noise.

Community Noise Equivalent Level (CNEL): The average equivalent A-weighted decibel sound level during a 24-hour day, obtained after the addition of 5 decibels added to readings obtained from 7:00pm to 10:00pm and 10 decibels added to sound levels in the night from

10:00pm and before 7:00am.

Day-Night Sound Level (Ldn or DNL): The average equivalent A-weighted decibel sound level during a 24-hour day, obtained after the addition of 10 dB added to readings obtained in the night from 10:00pm and before 7:00am.

Decibel (dB): A unit of measurement describing the amplitude of sound on a logarithmic scale.

Equivalent Continuous Noise Level (Leq): The sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. Leq is typically computed over 1-, 8-, and 24-hour periods.

Intrusive Noise: The noise that intrudes over and above the existing ambient noise at a given location.

Noise: Sound that is loud, unexpected, and is generally described as unwanted.

Noise Contours: Lines drawn about a noise source indicating equal levels of noise exposure. CNEL and Ldn are the metrics utilized herein to describe annoyance due to noise and to establish land use planning criteria for noise.

Peak Particle Velocity (PPV): The velocity of a particle in a medium as it transmits a wave.

Statistical Sound Level (Ln): The sound level that is exceeded “n” percent of the time during a given sample period.

Vibration Decibel (VdB): Commonly used to describe vibration velocity’s average amplitude. The vibration velocity level is reported in decibels of 1×10^{-6} inches per second.

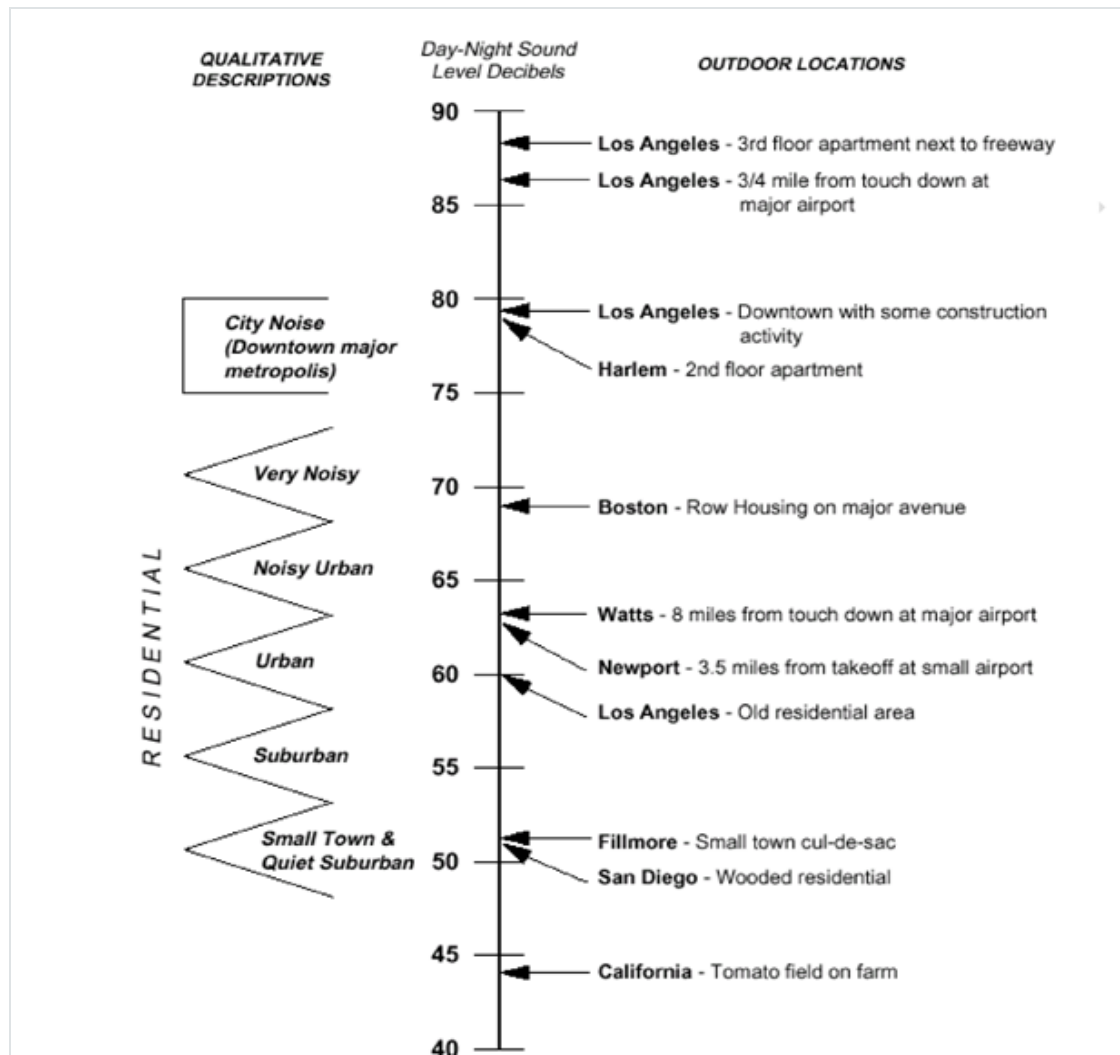
Tables 10.1 and 10.2 give examples of sound generators and their relative decibel readings. These tables illustrate dBA measurements.

Table 10.1 Associated Decibel Intensities of Sound Generators

| Sound Description | Intensity Level (dBA) |
|--------------------------------|-----------------------|
| Instant Perforation of Eardrum | 160 dBA |
| Military Jet Takeoff | 140 dBA |
| Threshold of Pain | 130 dBA |
| Front Row of a Rock Concert | 110 dBA |
| Walkman at Maximum Level | 100 dBA |
| Vacuum Cleaner | 80 dBA |
| Busy Street Traffic | 70 dBA |
| Normal Conversation | 60 dBA |
| Whisper | 20 dBA |
| Rustling Leaves | 10 dBA |

Source: Bies and Hansen, 2009

Table 10.2 Associated Decibel Intensities in Urban Locations



Source: OPR 2015

10.2 Regulatory Setting

Federal and State agencies generally establish standards for mobile noise sources, whereas local agencies set standards for stationary noise sources. Local regulations regarding noise also include implementation of ordinances and general plan policies. While general plans establish principles in order to guide future city development, ordinances identify standards and procedures to cope with noise sources. This section defines the regulatory context of noise and vibration levels in the City of Weed.

10.2.1 Federal Regulations

Department of Housing and Urban Development (HUD)

Environmental Criteria and Standards, 24 CFR Part 51

The United States Environmental Planning Division has prepared a set of criteria and standards that are presented in 24 CFR Part 51. New residential construction qualifying for HUD financing proposed in high noise areas (exceeding 65 dBA Ldn) must incorporate noise attenuation features to maintain acceptable interior noise levels (HUD, 2014). A goal of 45 dBA Ldn is set forth for interior noise levels, and attenuation requirements are geared toward achieving that goal. It is assumed that with standard construction, any building will provide sufficient attenuation to achieve an interior level of 45 dBA Ldn or less if the exterior level is 65 dBA Ldn or less. Approvals in a “normally unacceptable noise zone” (exceeding 65 decibels but not exceeding 75 decibels) require a minimum of 5 decibels additional noise attenuation for buildings if the day-night average is between 65 and 70 decibels, or a minimum of 10 decibels of additional noise attenuation if the day-night average is between 70 and 75 decibels.

The Environmental Planning Division has developed an electronic assessment tool that calculates the Day/Night Noise Level (DNL) from roadway and railway traffic. This is a web-based application of the existing Noise Assessment Guidelines (NAG) and a component of the Assessment Tools for Environmental Compliance (ATEC). Derivations of the basic noise equation from the noise regulation were applied to a new application of the NAG.

The site acceptability standards are the following:

- Exterior noise levels – Proposed HUD-assisted projects with a day-night average sound level of below 65 decibels are acceptable.
- Interior noise levels – Proposed HUD-assisted projects with a day-night average sound level of below 45 decibels are acceptable.

Federal Highway Administration

Title 23 of the Code of Federal Regulations, Part 772

The Federal Highway Administration (FHWA) requires that new Federal or Federal-aid highway construction projects, or alterations to existing highways that significantly change either the horizontal or the vertical alignment and/or increases the number of through traffic lanes, abate noise per Title 23 of the Code of Federal Regulations. The regulation requires the following procedures when planning and designing a highway project:

- (1) identify traffic noise impacts and examine the potential mitigation measures;
- (2) incorporate reasonable and foreseeable noise mitigation measures into the highway project; and
- (3) coordinate with local officials to provide helpful information on compatible land use planning and control.

Abatement is required when the “worst-hour” noise levels approach or exceed 67 dBA.

Federal Transit Administration

Vibration Impact Criteria

The Vibration Impact Criteria are designed to identify acceptable noise levels for noise-sensitive buildings, residences, and institutional land uses near railroads. The Vibration Decibel (VdB) thresholds that apply to residences and buildings are:

- 72 VdB for frequent events (more than 70 events per day);
- 75 VdB for occasional events (30 to 70 events per day); and
- 80 VdB for infrequent events (less than 30 events per day).

Federal Aviation Administration

Federal Aviation Regulations (FAR) Part 150, Airport Noise Compatibility Planning

This document is advisory in nature; it sets forth a system for measuring airport noise impacts and presents guidelines for identifying incompatible land uses. Completion of an FAR Part 150 plan by the airport is required to obtain Federal Aviation Administration funding for noise abatement.

Environmental Protection Agency (EPA)

Federal Noise Control Act, 1972

The inability to control noise, particularly within urban areas, presents an issue to the health and welfare of the Nation’s population. Federal action is essential when addressing major noise sources in commerce control; however, the primary responsibility for noise control rests with State and local governments. Transportation vehicles and equipment, machinery, appliances, and other products in commerce are major sources of noise. The Noise Control Act of 1972 created a national policy to protect all Americans from noise levels that might jeopardize their health or welfare. The Environmental Protection Agency (EPA) found that sleep, speech, and other types of activity would not be interfered with if the Ldn of residential areas did not exceed 55 dBA outdoors and 45 dBA indoors. The EPA also found that 5 dBA is an adequate margin of safety before the increase in noise level results in a significant increase, provided that the existing noise exposure did not exceed 55 dBA Ldn (EPA, 1972).

10.2.2 State Regulations

California Government Code

Section 65302(f)

California Government Code Section 65302(f) requires all General Plans to include a Noise Element that addresses noise-related impacts in the community. The State Office of Planning and Research (OPR) has prepared guidelines for the content of the Noise Element, which includes the development of contour maps of current and future noise levels. These maps must include contours for the following sources:

- Highways and freeways
- Primary arterial and major local streets
- Passenger and freight on-line railroad operations and ground rapid transit systems
- Commercial, general aviation, heliport, military airport operations, and all other ground facilities and maintenance functions related to airport operation.
- Local industrial plants, including but limited to railroad classification yards.
- Other stationary ground noise sources identified by local agencies contributing to the community noise environment.

California Code of Regulations, Title 24

The California Commission of Housing and Community Development officially adopted noise insulation standards in 1974. In 1988, the Building Standards Commission approved revisions to the standards (Title 24, Part 2, California Code of Regulations). As revised, Title 24 establishes an interior noise standard of 45 dB(A) for residential space (CNEL/Ldn). Acoustical studies must be prepared for residential structures to be located within noise contours of 60 dB(A) or greater (CNEL/Ldn) from freeways, major streets, thoroughfares, rail lines, rapid transit lines, or industrial noise sources. The studies must demonstrate that the building is designed to reduce interior noise to 45 dB(A) or lower (CNEL/Ldn).

California Code of Regulations, Title 21

The State Division of Aeronautics has adopted a standard that establishes an acceptable noise level of 65 dB for uses within the vicinity of airports. This standard applies to typical houses in urban residential areas in California and may have windows partially open.

California Building Code, Insulation Standards

The State of California establishes exterior sound transmission control standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings as set forth in the 2010 California Building Code (Chapter 12, §1207.11). Interior noise levels attributable to exterior environmental noise sources shall not exceed 45 dBA Ldn/CNEL in any habitable room. When exterior noise levels (the higher of existing or future) where residential structures are to be located exceed 60 dBA Ldn/CNEL, an acoustical analysis report must be submitted with the building plans. It must describe the noise control measures that have been incorporated into the design of the project to meet the allowable interior noise level. The proposed plan shall facilitate implementation of the noise insulation standards and shall be used to identify sites where noise levels exceed 60 dBA.

California Department of Transportation (Caltrans)

Construction Vibration

Caltrans has adopted guidance for construction vibrations, which is used in this analysis to address construction vibrations. Caltrans uses a vibration limit of 0.5-inches/sec-peak particle velocity (PPV) for new residential structures and modern industrial/commercial buildings that are structurally sound and designed to modern engineering standards. A conservative vibration limit of 0.3 inches/sec, PPV is used for older residential buildings that are found to be structurally sound. For historic buildings and some old buildings, a conservative limit of 0.25 inches/sec, PPV is used. A limit of 0.08 inches/sec, PPV is used to provide the highest level of protection for extremely fragile historic buildings, ruins, and ancient monuments. All of these limits have been used successfully, and compliance to these limits has not been known to result in appreciable structural damage. All vibration limits referred to herein apply on the ground level, and take into account the response of structural elements (i.e., walls and floors) to ground-borne excitation (Caltrans, 2004).

Governor's Office of Planning and Research (OPR)

General Plan Guidelines

The General Plan Guidelines produced by the Governor's Office of Planning and Research (OPR) provide the fundamental structures of a complete Noise Element in a General Plan. As part of the Noise Element development phase, OPR has provided the maximum allowable noise exposure by land use as shown in Table 10.3. The standards presented by the OPR reflect the noise-control goals to be applied to all communities by providing guidelines for noise-compatible land uses (OPR, 2003 & 2015).

Table 10.3 Community Noise Exposure Acceptability Levels

| Community Noise Exposure Ldn, dB | | | | | | | | |
|---|-------|-------|-------|-------|-------|-------|-------|-----|
| Land Use Category | 41-50 | 51-55 | 56-60 | 61-65 | 66-70 | 71-75 | 76-80 | >80 |
| Residential-Low Density Single Family, Duplex, Mobile Homes | | | | | | | | |
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| | | | | | | | | |
| Residential-Multiple Family, Group Homes | | | | | | | | |
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| Transient Lodging-Motels/Hotels | | | | | | | | |
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| Schools, Libraries, Churches, Hospitals, Nursing Homes | | | | | | | | |
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| Auditoriums, Concert Halls, Amphitheaters | | | | | | | | |
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| | | | | | | | | |
| Sports Arena, Outdoor Spectator Sports | | | | | | | | |
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| Playgrounds, Neighborhood Parks | | | | | | | | |
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| Golf Courses, Riding Stables, Water Recreation, Cemeteries | | | | | | | | |
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| Office Buildings, Business Commercial and Professional | | | | | | | | |
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| Industrial, Manufacturing, Utilities, Agriculture | | | | | | | | |
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| Normally Acceptable | Conditionally Acceptable | Normally Unacceptable | Clearly Unacceptable |
|--|--|---|---|
| Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements. | Specified land use is satisfactory based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements, but with closed windows and fresh air supply systems or air conditioning will normally suffice. | New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design. | New construction or development should generally not be undertaken. |

Source: OPR 2015

10.2.3 Local and Regional Regulations

Siskiyou County General Plan, Noise Element

The Siskiyou County General Plan recognizes the findings of the United State Environmental Protection Agency (EPA) regarding noise and its effects on people. The document also recognizes the State Housing Act (Administrative Code, Title 25, Article 4) that requires noise insulation from exterior sources of noise for non-single family detached residential units such as apartments and duplexes.

The Siskiyou County General Plan (2006) provides noise standards and land use compatibility for community noise as summarized in Table 10.4. Finally, Siskiyou County does not have laws or ordinances limiting construction noise.

Table 10.4 Siskiyou County Land Use Compatibility for Exterior Community Noise

| Land Use Category | Noise Ranges (L_{dn} , ^a dBA) | | | |
|---|---|-------|-------|----|
| | 1 | 2 | 3 | 4 |
| Passively Used Open Space (Auditoriums, Parks, Etc.) | 50 | 50–55 | 55–70 | 70 |
| Residential, Motels, Hospitals, Tec. | 60 | 60–65 | 65–75 | 75 |
| Office Buildings, Light Commercial, Heavy Commercial, Etc. | 65 | 65–70 | 70–75 | 75 |

^a Day-night average sound level that is equal to the 24 hour A-weighted equivalent sound level with a 10 decibel penalty applied to nighttime levels.

Noise Range 1 – Acceptable land use, no noise abatement required.
 Noise Range 2 – New construction or development, noise abatement features included.
 Noise Range 3 – New construction or development, noise abatement only after detailed analysis of noise reduction requirements.
 Noise Range 4 – New construction or development not allowed.

Source: Siskiyou County General Plan (2006)

City of Weed Municipal Code; Chapter 9.18 – Noise Control

The Municipal Code of the City of Weed establishes the maximum allowed exterior sound levels for each land use category. This information is summarized in Table 10.5.

Table 10.5 Siskiyou County Land Use Compatibility For Exterior Community Noise

| Receiving Land Zone | Time Period | Noise Level (dBA) | |
|---|------------------|-------------------|---------|
| | | 15 min Average | Maximum |
| Residential | 10 p.m. – 7 a.m. | 40 | 55 |
| | 7 a.m. – 10 p.m. | 50 | 65 |
| Multiple Dwelling, residential public places | 10 p.m. – 7 a.m. | 45 | 60 |
| | 7 a.m. – 10 p.m. | 50 | 75 |
| Limited commercial, multiple dwelling | 10 p.m. – 7 a.m. | 55 | 70 |
| | 7 a.m. – 10 p.m. | 60 | 75 |
| Commercial | 10 p.m. – 7 a.m. | 55 | 70 |
| | 7 a.m. – 10 p.m. | 60 | 75 |
| Industrial | Anytime | 75 | 90 |

Source: City of Weed, Municipal Code, 2006

In addition, construction and demolition equipment do not have to comply with exterior and interior noise limits according to the Weed Municipal Code. Typical noise levels from construction equipment are identified by the Federal Transit Administration and are included in Table 10.6.

Table 10.6 Typical Noise Level from Construction Equipment

| Construction Equipment | Noise Level (dBA, L _{eq} at 50 feet) |
|------------------------|---|
| Truck | 88 |
| Drill Rig | 98 |
| Air Compressor | 81 |
| Dozer | 85 |
| Grader | 85 |
| Mobile Crane | 83 |

Source: FTA, 2006

10.3 Existing Conditions

The purpose of the noise element is to identify the major producers of noise and any sensitive land uses that could be affected by noise within the City's Sphere of Influence. As stated previously, noise is defined as unwanted sound. This section documents the existing producers of noise and compares them with noise sensitive land uses within the city limit. To avoid conflict, land use planning and zoning aim at separating noise producers and noise sensitive receptors.

10.3.1 Noise Sources

10.3.1.1 State and Federal Highway

In the City of Weed, the main sources of highway noise are:

- Interstate Highway 5: Caltrans estimated in 2006 that Ldn noise levels near I-5 range from 75 dBA at 180 feet to 60 dBA at approximately 460 feet from the highway.
- US Highway 97: Caltrans estimated in 2006 that Ldn noise levels near this route range from 75 dBA at 120 feet to 60 dBA at approximately 400 feet from the roadway.

10.3.1.2 Stationary Noise Sources

Stationary noise sources include industrial land uses, roadway segments, and all the other land designations, which are noise producing. Stationary sources of noise do not produce the same level of noise throughout the day and night, with typical periods lasting from ten to twelve hours. The location of noise receptors relative to noise producers can result in unwanted sound.

In the City of Weed, the main stationary noise source is Roseburg Forest Product Company's wood processing industrial plant. Even though the plant is located outside of the city limits, it does affect the city noise environment, especially due to the production of veneers. The main noise sources associated with veneer production include docked veneer block, clipping of veneer, and veneer dryer. The veneer plant was damaged during the Boles Fire but has been updated, and is fully functional since 2015.

10.3.1.3 Mobile Noise Sources

Noise sources such as lawn mowers, power equipment, power engine tools, and other equipment are temporary noise sources. Local and regional agencies set standards on noise emission limits during certain hours of the day and night.

10.3.1.4 Railroad Noise

Two railroad lines run through the City of Weed. The first is The Central Oregon and Pacific Railroad (CORP), which operates a freight service line between Northern California and Oregon. This line hauls lumber, logs, and plywood from nearby industries and passes through the City daily. CORP terminated its freight service in 2008 but after extensive repairs through the Siskiyou Summit Railroad Revitalization project, the line started again in November 2015. The Siskiyou line now operates between Eugene, Oregon and Weed, California, consisting of

an average of 12 to 14 cars per day. Additionally, even though Amtrak does not operate a station within Weed, the Coast Starlight Train runs through the City daily.

10.3.1.5 Construction Noise

Construction sites typically involve an increase in ambient noise levels, particularly during demolition and infrastructure replacement phases. During construction, various activities that can cause unwanted sound levels and vibration depend on several factors. The highest construction related ground borne vibration levels are typically generated from pile driving and compaction equipment. The two primary concerns related to construction noise and vibrations are the potential to damage nearby structures, and the potential to interfere with the enjoyment of life.

10.3.1.6 Truck Route Noise

The following truck routes are streets or portions of streets that are adapted for the movements of vehicles exceeding a maximum gross weight of ten tons.

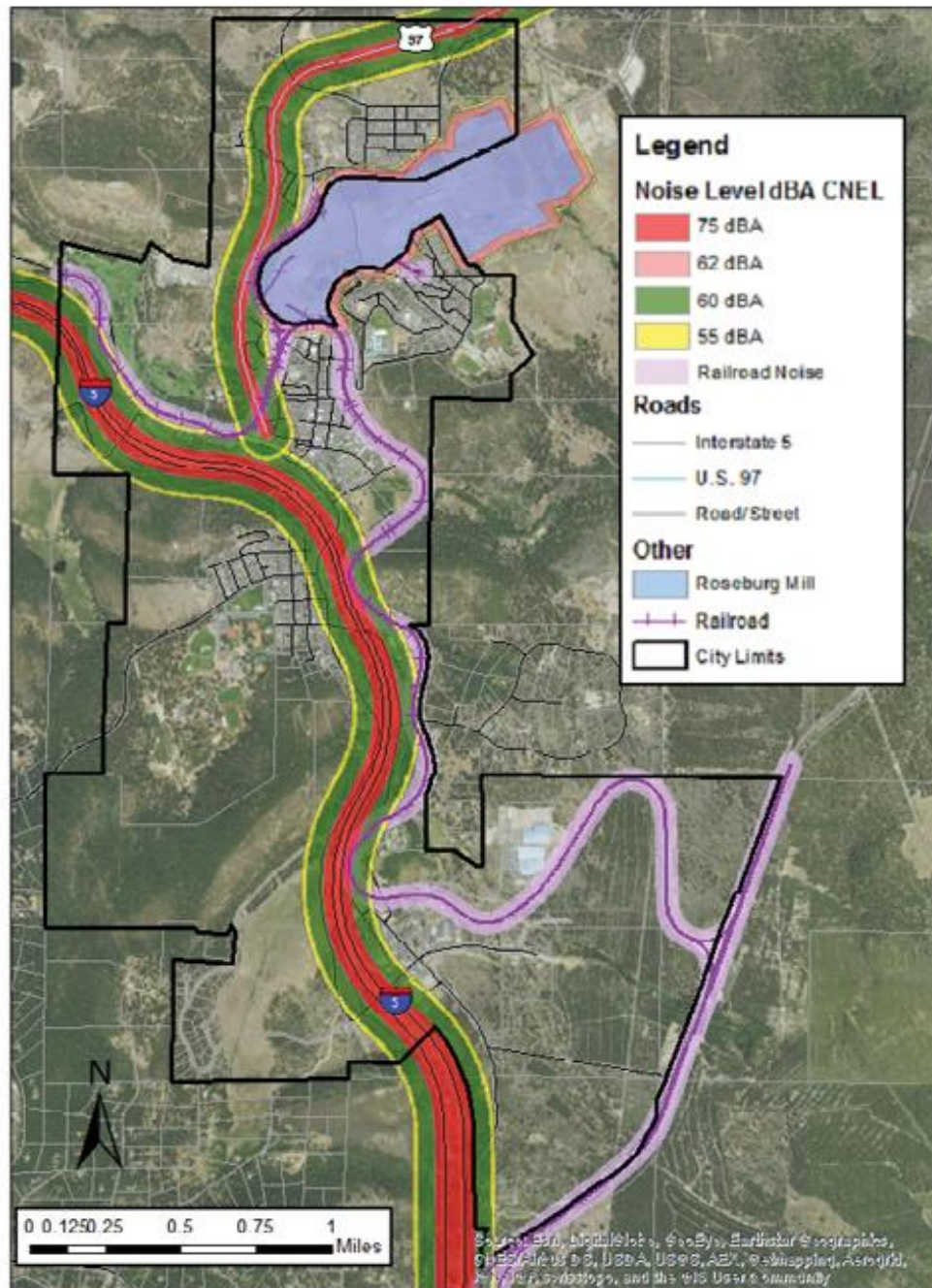
- Black Butte Drive from Shastina Drive to Vista Drive;
- Kellogg Drive from Black Butte Drive to Mary's Drive;
- Mary's Drive from Kellogg Drive to its northern terminus;
- Vista Drive from the South Weed Interstate 5 interchange to its easterly terminus;
- Main Street to Lake Street, East Lake Street to Boles Street to South Weed Boulevard.

10.3.1.7 Airport Noise

Weed airport is located eight miles from the City boundaries and has no impact on the City in terms of noise.

Map 10.1 shows the different sources of noise with their respective noise impact in decibels, and illustrates the effects of noise in the City of Weed.

Map 10.1 Main Sources of Noise in Weed



Existing Noise Contours Map

Noise Element

Source: Cal Poly Land Use Inventory, 2015

10.3.2 Noise Sensitive Land Uses

Some land uses are more sensitive than others are to unwanted sound and vibration levels. Places where people live, sleep, recreate, worship, and study are generally considered sensitive to noise because unwanted sound can disrupt these activities. In the City of Weed, schools, health services, recreation and open spaces, places of worship and convalescent homes are, as required, land uses with quiet environments for public health, safety, and enjoyment. Map 10.2 identifies the locations of the noise sensitive uses listed in the following subsections. Map 10.3 identifies the locations of the noise sensitive uses with respect to the noise generating sources.

Places of Worship:

- Assembly of God
- Church of Christ of Weed
- Lake Shastina Community Bible Church
- Grace Presbyterian Church
- Holy Family Catholic Church (momentary relocated at the College of the Siskiyous)
- Weed Berean Church

Health Services / Convalescent Homes:

- Shasta View Nursing Center (previously Sunbridge Care Center for Weed)
- Lakeside Residential Care

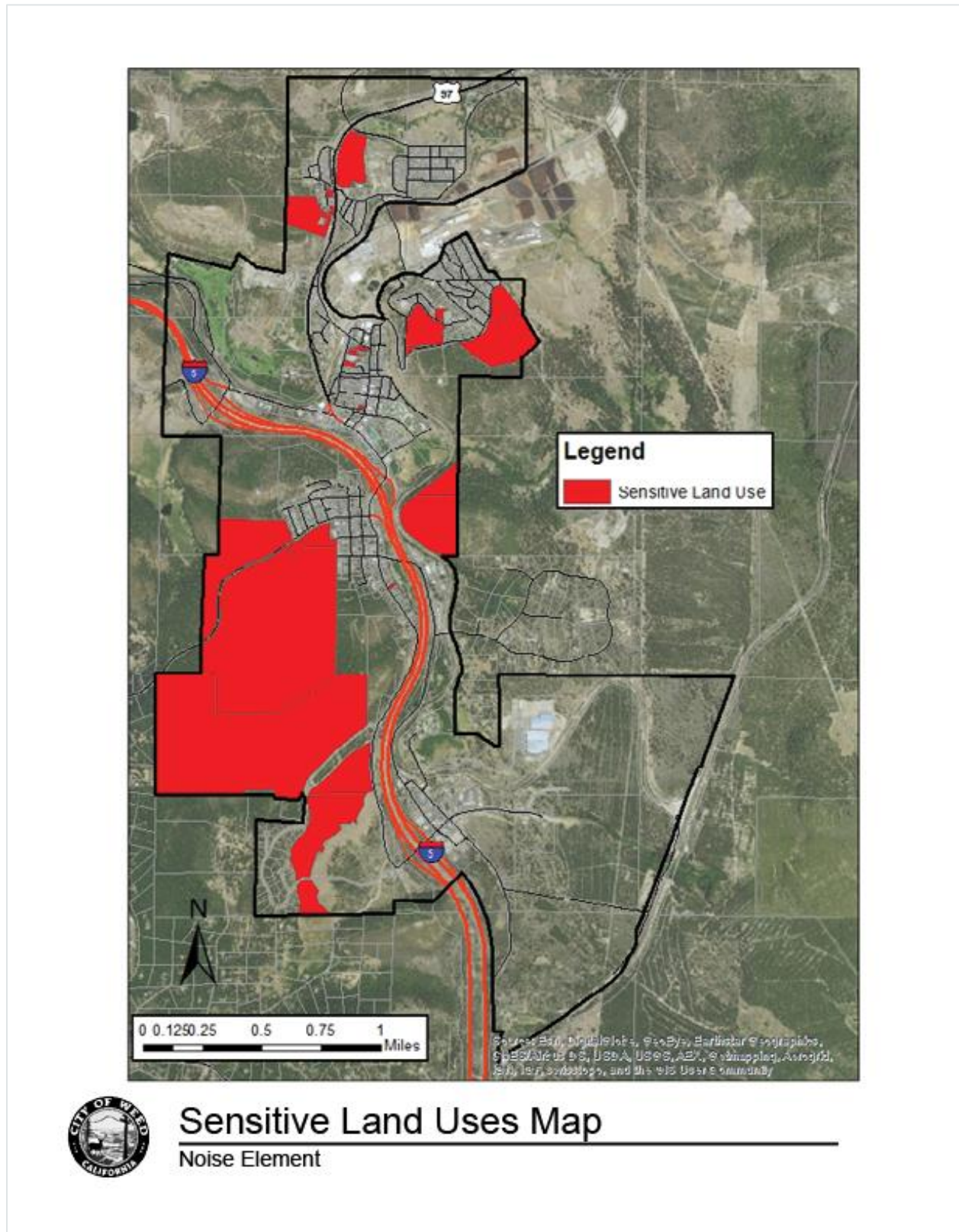
Recreation / Open Spaces:

- Bel Air Park
- Carrick Park
- Charlie Byrd Park
- Sons Park and Lobis Field

Schools:

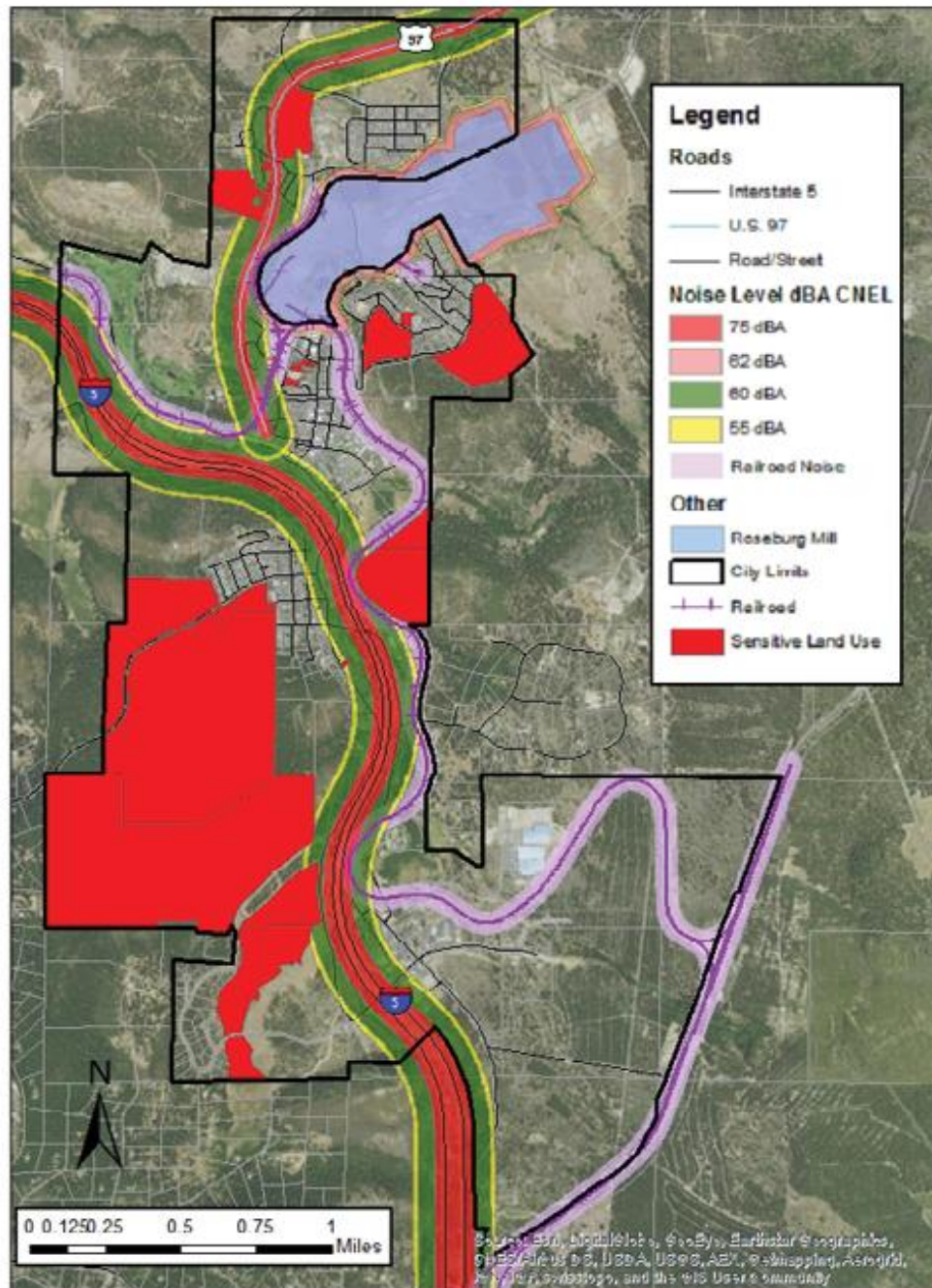
- Weed Union Elementary School
- Weed High School
- College of the Siskiyous
- Siskiyou Christian School

Map 10.2 Sensitive Noise Receptors in Weed



Source: Cal Poly Land Use Inventory, 2015

Map 10.3 Sensitive Noise Receptors and Generators in Weed, CA



Existing Noise and Sensitive Receptors Map

Noise Element

Source: Cal Poly Land Use Inventory, 2015

10.4 Emerging Directions

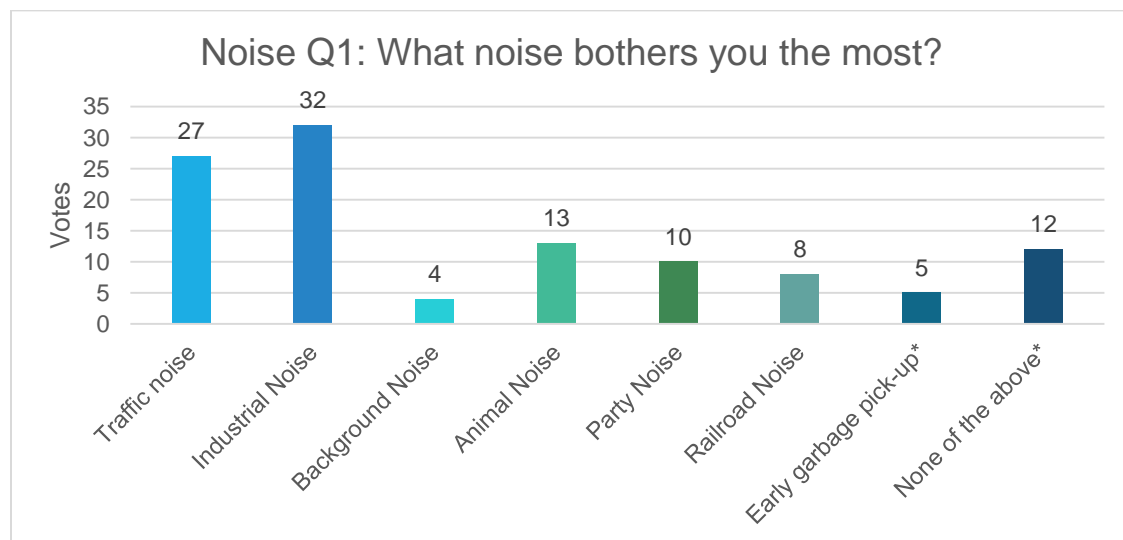
The existing conditions and community input received during outreach activities identified certain emerging directions for noise in the City of Weed. The City of Weed is generally a quiet town, with a limited number of noise sources throughout the city. The main sources of noise in Weed include the Roseburg Forest Products Company's wood processing industrial plant, Interstate Highway 5, and U.S. Highway 97. Temporary sources could include construction noise, parties, or residential power tools. Some land uses are more sensitive than others are to unwanted sound and vibration levels; therefore, it is important to separate these incompatible land uses.

On November 7th, 2015, the City held its second public meeting for the General Plan Update to assist in guiding the emerging directions for Weed. Participants were asked two noise questions (each with multiple answer options) and were asked to vote based on preference for various options. Figures 10.1 and 10.2 are the results from the preference exercises.

Participants frequently referred to the City as a peaceful, and quiet town with a few sources of noise. Participants identified industrial noise as the most bothersome source of noise. Most persons who choose this option live near Roseburg Forest Product Co. Mill. The second most bothersome noise source comes from traffic. Nonetheless, as participants explained this noise is not near residential areas and can be qualified as "good" because it is synonymous with "business" activity. Moreover, 5 percent of the participants explained that Weed was very quiet and any noise would stand out in such a peaceful atmosphere. As a result, they could only identify the early garbage pick-up as a bothersome source of noise. Finally, 11 percent of the participants were not bothered by noise in Weed and selected the option, "None of the above".

10.4.1 Community Preferences

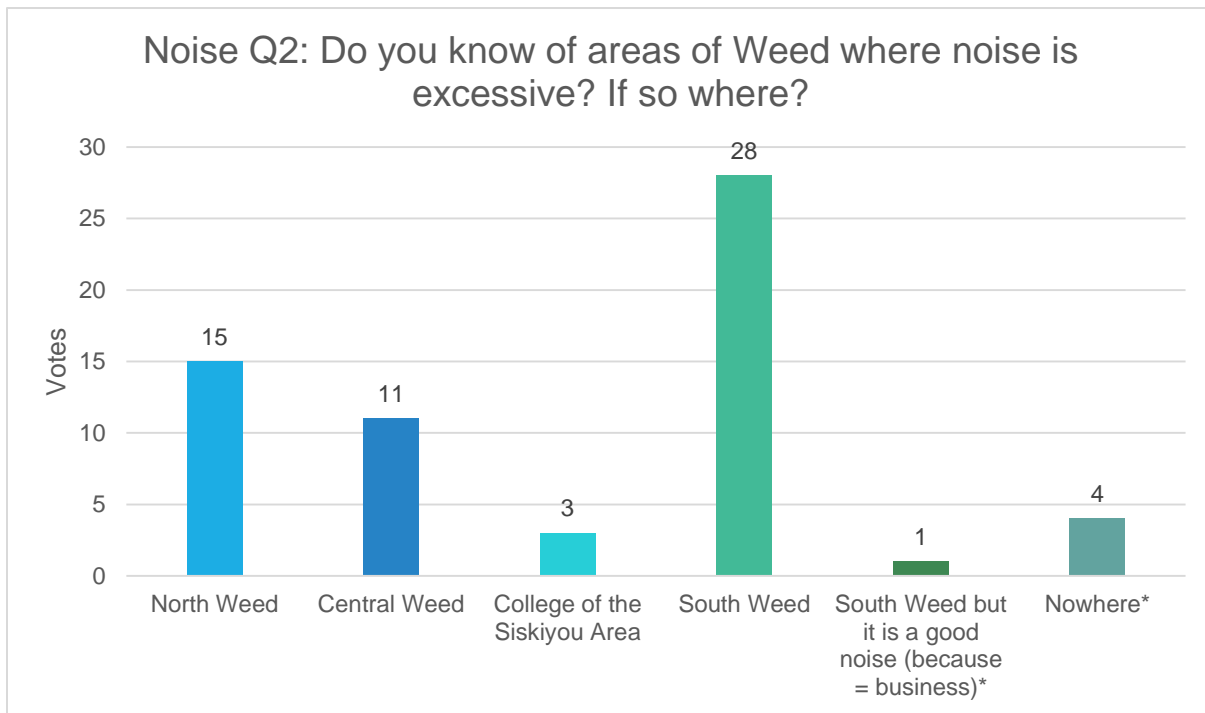
Figure 10.1 Most Bothersome Noise Sources in Weed, Total Vote 111



**Answers not originally in the questionnaire and added by participants*

Respectively half and one fourth of the participants identified South Weed and North Weed as areas with excessive noise. Nonetheless, as explain above, Weed is considered a quiet town and 7 percent of the participants did not think there were areas with excessive noise in Weed and decided to add the option “Nowhere”.

Figure 10.2 Areas in Weed Where Noise is Excessive, Total Vote 62



**Answers not originally in the questionnaire and added by participants*

10.5 References

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11 SAFETY

11.1 Introduction

The Safety Element is one of the seven mandatory elements of the General Plan. The purpose of the Safety Element is to measure the potential risks associated with natural and human-made hazards. Some naturally occurring hazards may be unavoidable, but their impacts on communities can be reduced through planning and preparation. The natural hazards addressed in the Safety Element include geologic, seismic, flood, and fire hazards. Human-made hazards include the disposal and transportation of hazardous materials and waste, aircraft hazards, and incidents that require emergency responses. Addressing these risks can help ensure the safety of citizens through the implementation of effective policies and decision-making guidelines in the occurrence of an emergency.

11.2 Regulatory Setting

This section describes the federal, state, and local regulations that pertain to the Safety Element. The policies and programs of the Safety Element are heavily regulated due to the pressing safety concerns associated within the element.

11.2.1 Federal Regulations

Seismic and Geologic Hazards

Uniform Building Code

The Uniform Building Code (UBC) defines different regions of the United States and ranks them according to their seismic hazard potential. There are four types of these regions: Seismic Zones 1 through 4, with Zone 1 having the lowest seismic potential and Zone 4 having the highest seismic potential. The City of Weed is located in a Zone 3 region.

The Federal Soil and Water Resources Conservation Act, 1977

The purpose of the Federal Soil and Water Resources Conservation Act (16 United States Code Sections 2001–2009) is to protect or restore the functions of the soil on a permanent sustainable basis.

Fire Hazards

Uniform Fire Code

The Uniform Fire Code contains regulations relating to construction and maintenance of buildings and land uses. Topics addressed in the Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new

and existing buildings and premises. The Code contains specialized technical regulations related to fire and life safety. The City of Weed complies with the Uniform Fire Code.

Flood Hazards

The Federal Emergency Management Agency (FEMA)

FEMA is the lead agency of advisory on building codes and floodplain management, helping equip local and state emergency preparedness and response coordination in the event of a disaster. FEMA administers national flood and crime insurance programs, supports the nation's fire service, and trains emergency response managers.

The Flood Plain Management Act (Cobey-Alquist Act), 1969

The Flood Plain Management Act created the National Flood Insurance Program, which facilitates the identification of flood hazard zones for insurance and floodplain management purposes. In addition, it provides a statement of probability of occurrence of future flood events. Regulations restrict development in Special Flood Hazard Areas, defined by FEMA as having a one percent or greater annual chance of flooding (also called the 100-year flood plain). Flood hazard zones have been identified within the City of Weed and development standards are met.

The National Flood Insurance Program (NFIP)

The National Flood Insurance Program (NFIP) is administered by FEMA to allow property owners in participating communities to purchase insurance protection from the federal government against losses from flooding. In order to be eligible for the program, property owner's land must be located in a participating community that has adopted a floodplain management ordinance. This serves to reduce future flood risks to new construction in Special Flood Hazard Areas.

Hazardous Materials and Waste

The Resource Conservation and Recovery Act (RCRA), 1976

The Resource Conservation and Recovery Act (RCRA) is the principal federal law governing the disposal of solid waste and hazardous waste under the responsibility of the California Department of Toxic Substances Control (DTSC). The DTSC implements and enforces the Hazardous Waste Control Laws for the State of California.

Aircraft Hazards

The Federal Aviation Administration

The Federal Aviation Administration is the lead agency for national aviation in the United States. Under the Department of Transportation, it has the authority to regulate and oversee all aspects of American Aviation. There is no airport located within Weed's city limits

11.2.2 State Regulations

Seismic and Geologic Hazards

Alquist-Priolo Earthquake Fault Zoning Act (Public Resources Code 2621), 1971

The Alquist-Priolo Earthquake Fault Zoning Act prevents the construction of buildings on active faults. As a requirement, the State geologist must establish earthquake fault zones around active faults and identify these zones in maps.

Seismic Hazards Mapping Act (Public Resources Code 2690), 1990

The Seismic Hazards Mapping Act (SHMA) provides seismic hazard mapping and technical advisory programs to assist cities and counties within California in fulfilling their responsibility to protect the public from the effects of strong ground shaking, liquefaction, landslides, or other ground failure and seismic hazards caused by earthquakes.

Unreinforced Masonry Law (Public Resources Code 8875), 1986

The Unreinforced Masonry Law requires jurisdictions located in the highest zone of seismicity, Zone 4, as identified in the Uniform Building Code, to inventory their unreinforced masonry buildings and establish programs to reduce risk related to these buildings (Seismic Safety Commission). Weed is located within a Zone 3 region.

California Building Code

The California Building Code includes additional amendments to the Uniform Building Code addressing seismic safety necessary for California.

Fire Hazards

Senate Bill 1241, 2012

Senate Bill 1241 requires counties within State Responsibility Areas (SRA) and lands designated as very High Fire Severity Zones in Local Responsibility Areas (LRA) to comply with Government code Section 65302(g)(3). This code rules that upon the next revision of the housing element on or after January 1, 2014, the safety element shall be reviewed and updated as necessary to address the risk of fire. Under this code, the draft amendment to the safety element of a county or city's general plan shall be submitted for review to the State Board of Forestry and Fire protection and to every local agency, which provides fire protection to the territory within that city or county at least 90 days prior to their planned adoption date. The City of Weed should identify fire safety needs as they are associated with housing in the upcoming general plan update along with regularly planned housing element updates.

Strategic Fire Plan for California, 2010

This document, produced by the State Board of Forestry and Fire Protection and the California Department of Forestry and Fire Protection, provides an overview of fire risk and state activities to reduce risk. The plan discusses statewide fire safety regulations including road and signage

standards, minimum water supply reserves for emergency fire use, and requirements for fuel breaks.

The California Department of Forestry and Fire Protection (Cal Fire)

The California Department of Forestry and Fire Protection (Cal Fire) is dedicated to the fire protection and stewardship of over 31 million acres of California's privately owned wild land.

Bates Bill (Government Code § 51175), 1992

This statute requires the Cal Fire director to evaluate fire hazard severities in Local Responsibility Areas (LRAs) and make recommendations to local jurisdictions based on High Fire Hazard Severity Zone locations. LRAs include incorporated cities, cultivated agricultural lands, and some desert lands that receive fire protection from city fire departments, fire protection districts, counties, or by Cal Fire under contract to local governments.

California Fire Code, Title 21, Part 9

The California Fire Code contains regulations regarding many aspects of wildfire and urban fire safety. This code specifies roadway and driveway design, access, building identification, water, and vegetation modification standards as well as defensible space requirements.

California Fire Code, Title 24, Part 9, California Code of Regulations

The California Fire Code is Part 9 of the California Code of Regulations, Title 24, also referred to as the California Building Standards Code. The California Fire Code incorporates the Uniform Fire Code with necessary California amendments. This Code prescribes regulations consistent with nationally recognized good practice for the safeguarding, to a reasonable degree, of life and property from the hazards of fire explosion, dangerous conditions arising from the storage, handling, and use of hazardous materials and devices, and from conditions hazardous to life or property in the use or occupancy of buildings or premises, and provisions to assist emergency response personnel.

California Health and Safety Code

State fire regulations set forth in Section 13000 et seq. of the California Health and Safety Code include regulations for building standards (as set forth in the California Building Code), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Flood Hazards

California Water Code

California law requires local governments to act as the responsible agency for flood control. Section 8401, paragraph (c), of the California Water Code states, "The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government." (SWRCB, 2015)

California Uniform Building Code

The state of California Building Code (CBC) contains requirements for constructing structures in flood hazard zones. These requirements are consistent with FEMA requirements for non-residential development in a 100-year floodplain. Weed complies with the State of California Uniform Building code.

Hazardous Materials and Waste

The Regional Water Quality Control Board (RWQCB)

The North Coast Regional Water Quality Control Board (RWQCB1) along with the Central Valley Regional Quality Control Board (5R) enforces the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil, groundwater, and surface water bodies for the planning area of Weed.

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program, 1993

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program was created in 1993 by California Senate Bill 1082 to consolidate, coordinate, and increase consistency of administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs. The program can be implemented at the local government level by Certified Unified Program Agencies.

The California Accidental Release Prevention Program Law (CalARP Program), 1997

The CalARP Program, under the California Safety Code Sections 25531-25543.3, coordinates with federal laws concerning accidental chemical release, allowing for local oversight of state and federal programs.

Hazardous Materials Transport Regulations

The Hazardous Materials Transport Regulations fall under the California Code of Regulations, regulated by the U.S. Department of Transportation (DOT) for all interstate transport of hazardous materials. The DOT establishes safe handling procedures and regulations of hazardous materials. The California Department of Transportation (Caltrans) enforces federal and state regulations and responds to hazardous materials transportation emergencies.

Unified Hazardous Waste and Hazardous Materials Management Regulatory Program, 1993

The Unified Hazardous Waste and Hazardous Materials Management Regulatory Program coordinates the administrative requirements, permits, inspections, and enforcement activities for environmental and emergency management programs under the California Senate Bill 1082.

California Division of Occupational Safety and Health (Cal/OSHA)

The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials.

Aircraft Hazards

California Public Utilities Code; Section 21670

The California Public Utilities Code Section 21670 requires County Boards of Supervisors to establish an Airport Land Use Commission (ALUC) in each county with an operating public airport. The County Board of Supervisors assigns ALUC responsibilities, duties, and powers to an appropriate body of supervisors.

California Public Utilities Code; Section 21675

The California Public Utilities Code Section 21675 requires the Airport Land Use Commission (ALUC) to create a Land Use Plan for the area surrounding its public airports that complies with the Federal Aviation Administration rules and regulations. Section 21675 also provides the necessary components of an Airport Land Use Compatibility Plan (ALUCP).

The California Aviation System Plan (CASP), 2011

The California Aviation System Plan (CASP) was established to ensure that the State has an adequate and efficient system of airports to serve California's aviation needs. The CASP defines the role of each airport in the State's aviation system and establishes funding requirements. Under the CASP, Weed Airport is classified as a community airport. CASP defines community airports as airports that are "located near small communities or in remote locations; serve, but are not limited to, recreation, flying, training, and local emergencies; accommodate predominately single-engine aircraft under 12,500 pounds; (and) provide basic or limited services for pilots or aircrafts."

Emergency Response Plan

At this time, there is no emergency response plan for the City of Weed. The Siskiyou County Emergency services is responsible for mitigating emergency responses in case of a disaster. OES obligation is to ensure the safety of those in the county and its incorporated areas such as Weed. If the city disaster council exists, it is responsible for the developing the city's emergency response plan, which should provide for the effective mobilization of all of the resources of the city. The plan shall take effect upon adoption by the approval of the city council.

11.2.3 Local and Regional Regulations

City of Weed Municipal Code; Chapter 9 - Public Peace, Morals, and Welfare

Chapter 9 of the City of Weed Municipal Code provides regulations and administrative procedures to maintain public peace. These regulations include details surrounding the illegal use of drugs and firearms, the governing of parks, city curfews (10:00 pm curfew for minors) and loitering, noise control, graffiti, and more. This chapter of the City Municipal Code lays out

the laws and ordinances for the City of Weed and are upheld by the jurisdiction of the City's police department.

City of Weed Municipal Code; Chapter 2 Section 16 - Fire Department

Chapter 2 Section 16 describes the organization and appointment of the fire department in the City of Weed including the assigned duties of each chief, captain, officer, and fire fighter.

City of Weed Municipal Code; Chapter 2 Section 24 - Emergency Services

Chapter 2, Section 24 of the City of Weed Municipal Code provides for: (a) the preparation and carrying out of plans for the protection of persons and property within the city in the event of an emergency; (b) the direction of the emergency organization; and (c) the coordination of the emergency functions of the city with all other public agencies, corporations, organizations, and affected private persons.

County of Siskiyou Municipal Code; Title 3 - Public Safety

The "Public Safety" section of the County of Siskiyou Municipal Code's purpose is to provide for the protection and promotion of safety within the county. This section includes detailed regulations and standards including civil defense (chapter 2), fire hazards (chapter 3), airport safety (chapter 6), hazardous materials (chapter 11), groundwater management (chapter 19), and more. This section provides details regarding the disaster management council, a council meant to respond during times of emergency, and references the County of Siskiyou Emergency Plan.

Siskiyou County Office of Emergency Services

The Siskiyou County Office of Emergency Services (OES) is committed to the protection of lives, health, and property of Siskiyou County residents when disaster strikes. Through advanced planning, training, and exercises, it is the responsibility of Siskiyou County OES to ensure there is a coordinated response from all levels of government. OES manages several federal and state grants which help to support this mission. During large emergencies, OES is responsible for activating and managing the Siskiyou Operational Area Emergency Operations Center. (Siskiyou County OES, 2015).

11.3 Existing Conditions

This section of the Background Report discusses the current state of safety in the City of Weed as well as a summary of a physical inventory of the City's vulnerable areas.

11.3.1 Seismic and Geologic Hazards

11.3.1.1 Soils

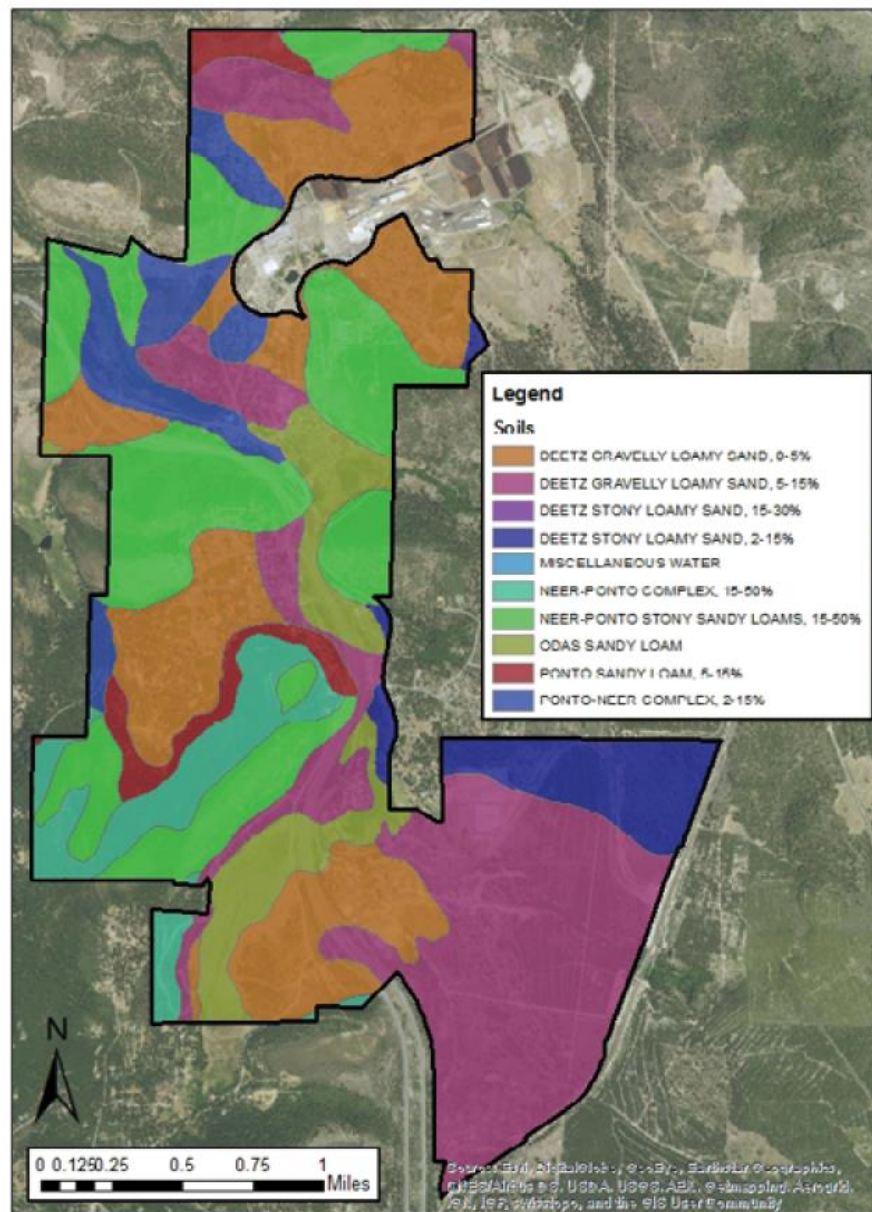
The City of Weed has seven common soil types as identified by the U.S. Department of Agriculture (USDA). Most of the developed city center's soil type is the Deetz series. Deetz

series consists of deep, somewhat excessively drained soils that formed in glacial outwash from volcanic rock and ash sources. The areas surrounding Weed consist of mostly Neer and Ponto soil series, which both consist of moderate to deep, well-drained soil that is also formed from volcanic rock and ash sources. Both soil types are classified as “Not prime farmland”. Map 11.1 shows the soil types in the City of Weed.

The common soil types found throughout the City are:

- Deetz Gravelly Loamy Sand
- Deetz Stony Loamy Sand
- Neer Ponto Complex
- Neer Ponto Stony Sandy Loams
- Odas Sandy Loam
- Ponto Sandy Loam
- Ponto Neer Complex

Map 11.1 Soil Types in the City of Weed



Soils Map

Safety Element

Source: City of Weed, 2015

11.3.1.1.1 Ground Settlement

Densification is a result of extraction of ground fluids. Densification causes ground settlement to occur over time (subsidence) or immediately, and decreases the earth's surface elevation. Settlement of the ground surface can be accelerated or accentuated by seismic events. During an earthquake, settlement can occur because of the relatively rapid compaction and settling of subsurface materials (particularly loose, non-compacted, and variable sandy sediments) because of the rearrangement of soil particles during prolonged ground-shaking. Weed is located near active fault lines which could generate earthquakes.

11.3.1.1.2 Expansion Potential

Expansive soils contain significant amounts of clay particles that can take in or release water, causing the soil volume to swell or shrink. When these soils expand or swell, the change in volume can place significant pressure on loads that are placed on them, such as buildings, and can result in structural damage or distress.

11.3.1.1.3 Subsidence

Subsidence is the ground settlement that results over time from the extraction of oil or groundwater. The process of subsidence occurs gradually, spreads over large areas, and is aggravated by ground shaking. The results of subsidence include maintenance problems on roads, canals, and underground utilities, resulting in a need for advanced engineering techniques to withstand subsidence. The City is adjacent to active faults which have the potential to cause subsidence.

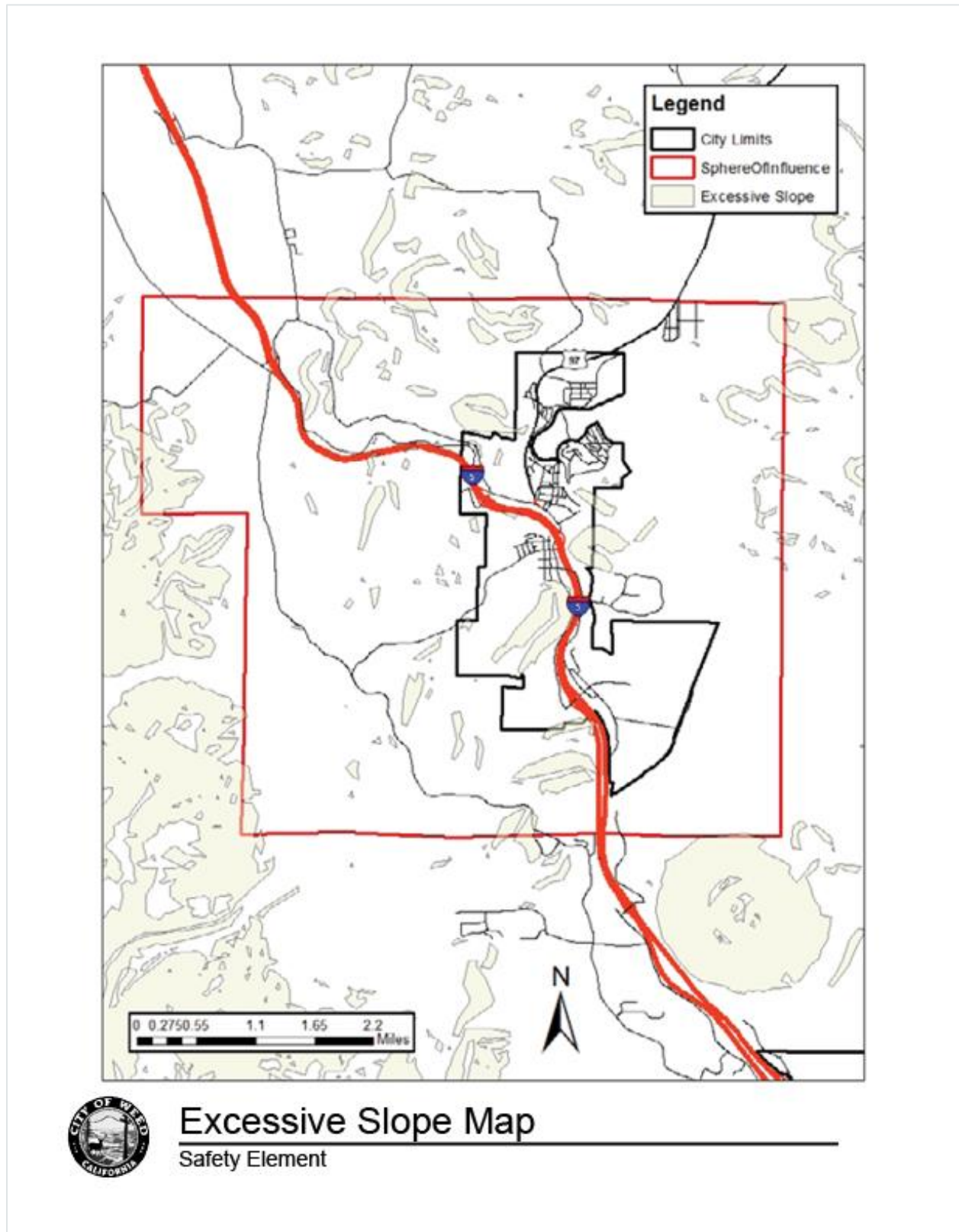
11.3.1.1.4 Soil Erosion

Erosion is the wearing away of soil and rock by processes such as wind and precipitation runoff. Soils containing high amounts of silt or clay are more susceptible to erosion while sandy soils are less susceptible. Soil erosion can threaten the stability of surrounding structures and road infrastructure.

11.3.1.1.5 Landslide Potential

A landslide is the sliding of a mass of loosened rock and/or soil down a hillside or slope. There are a variety of forms of landslides. The City of Weed is near Mt. Shasta which has high landslide potentials that are increased due to seismic and volcanic activity. The City of Weed is distanced enough from Mt. Shasta to not be affected by smaller landslide events (rock slides). However, other large scale landslide events such as "debris avalanches" may be of greater concern. Debris avalanches refer to a type of mega landslide similar to that which occurred when Mt. Shasta collapsed about 350,000 years ago, forming the huge deposit in Shasta Valley (USDA, 2012). These landslides have the potential to move rock and vegetation at speeds up to 100 miles per hours. Based on analysis of such landslide events, the City of Weed is at low risk of a high impact landslide event. Map 11.2 shows excessive slopes (that is, slopes that are at least 10 feet high over a horizontal distance of 25 feet or less) within the City's planning area.

Map 11.2 Excessive Slopes in Planning Boundaries



Source: City of Weed, 2015

11.3.1.2 Seismic Hazards

The City of Weed is located in a seismically active region, along with the rest of Siskiyou County. Weed is categorized as Zone 4 under the Uniform Building Code, indicating a high potential for seismic hazard. Seismic hazards can be grouped into two categories, primary and secondary hazards. Primary hazards involve the physical movement of the earth's surface during a seismic event because of fault rupture and ground shaking. Secondary hazards involve the effect that seismic events have on the earth's surface because of special characteristics of the soils and geology in the area. Four active faults in the region are capable of impacting Weed from ground shaking.

11.3.1.2.1 Faults

Map 11.3 shows the prominent faults in the area. There are two unnamed faults lying under Mt. Shasta. One of these faults, running east to west is 38.7 km long with a slip rate of <0.2 . The other fault, running north to south is also about 38.7 km in length with a slip rate of <0.2 . Both of these faults are inferred, meaning that there is little data on the fault lines. Therefore, location, length, and strength are not well-defined by data but rather are inferred through interpolation. Northeast of Weed are a series of faults making up the Yellow Butte Fault. They run approximately 25 km in length and have a slip rate of <0.2 (USGS, 2015).

11.3.1.2.2 Fault Rupture

Fault rupture is a primary hazard caused by the ground shaking of a seismic event. Fault rupture occurs when the earth's surface is broken apart and shifted because of an earthquake. Fault rupture has significant impacts when a structure or system element crosses the active fault. There are no active fault lines within city boundaries and thus the likelihood of surface fault rupture is very low.

11.3.1.2.3 Seismic Shaking

Seismic shaking or ground shaking is a primary hazard that results from a seismic event. Generally, Siskiyou County is an area of low seismic activity with no record of any death or injury resulting from earthquakes in the region and with any damages to buildings being minor (Siskiyou County General Plan, Seismic Safety and Safety Element, 1976). Accordingly, seismic shaking in the City of Weed is expected to have low to moderate intensities (ESA, 2007).

11.3.1.2.4 Secondary Hazards

Seismic events may result in secondary hazards including soil liquefaction, dynamic settlement, and shallow ground rupture. Because the City of Weed has low to moderate intensity seismic shaking potential, these secondary hazards are less of a concern as they relate to earthquakes.

11.3.2 Flood Hazards

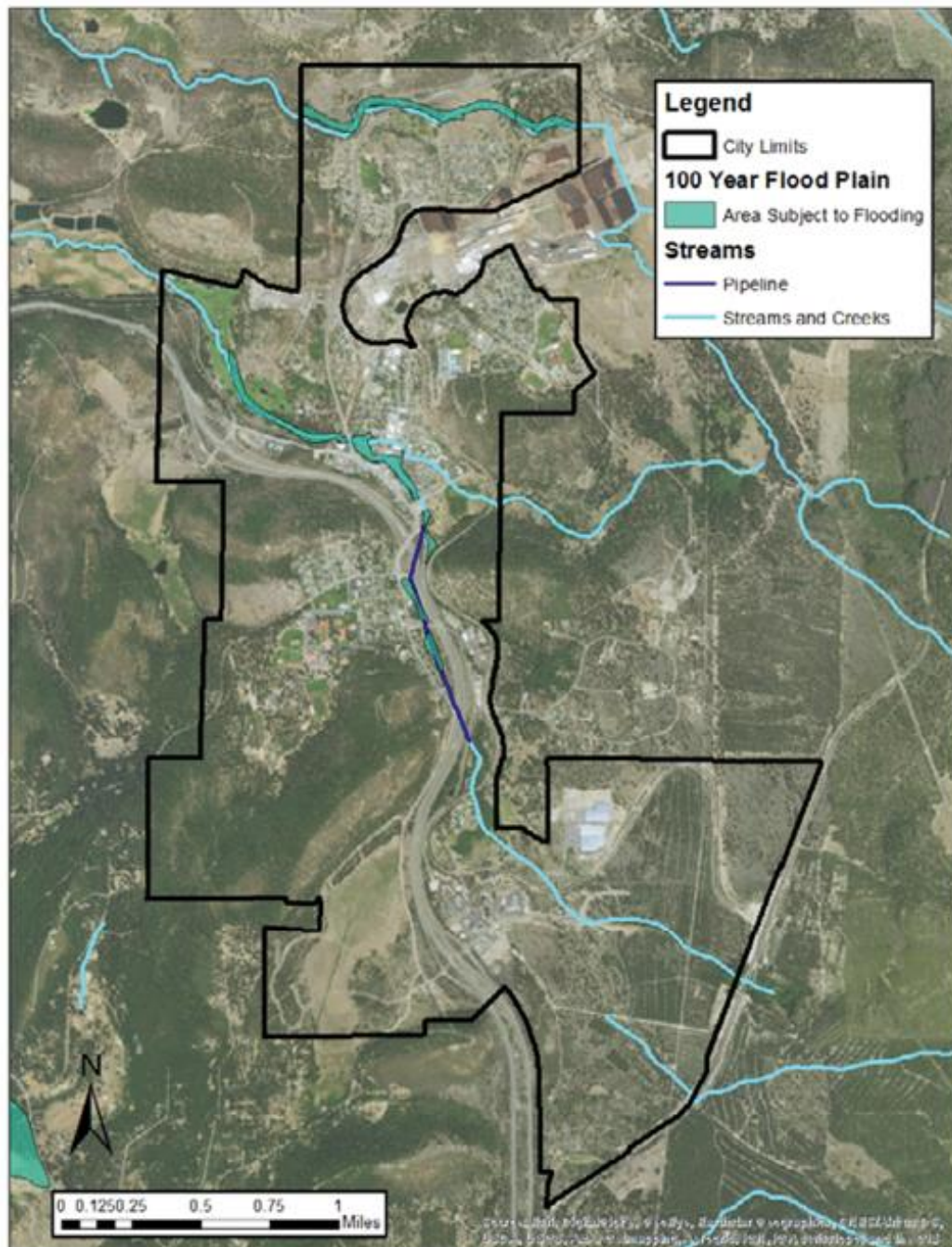
The City of Weed is not at great risk for flood. Map 11.4 shows the at risk areas of the City to be impacted in the occurrence of a 100-year flood. The area which would be most affected in the occurrence of a flood are the parcels surrounding Boles Creek, which runs through the center of the City. Should a 100-year storm occur, much of the land immediately surrounding the creek would be inundated. Weed is at a minor risk for a 100-year flood, and does not have a significant history of flood events associated with severe weather.

11.3.2.1 Dam Inundation

Dwinell Dam (which forms Lake Shastina) captures water from the Shasta River to supply to the town of Montague. The dam and its agricultural impacts (extraction, diversion, land clearing, and tailwater returns) have led to precipitous declines in salmon populations, which historically saw over 80,000 Chinook returning to the river to spawn annually (California Trout, 2014). The Shasta watershed includes the towns of Yreka, Weed, Montague and Big Springs.

Shasta County is home to several watersheds, which are captured by Shasta Dam. These include the Upper Sacramento, Pit, and McCloud Rivers as well as many other smaller streams. Water stored in this dam enters the Central Valley Project where it provides water for irrigation, municipal and industrial use, environmental flows for fish conservation, protects the Sacramento-San Joaquin Delta from saltwater intrusion, and generates hydroelectric power.

Map 11.4 100 Year Flood Plain Map



Flood Map

Safety Element

Source: City of Weed, 2015

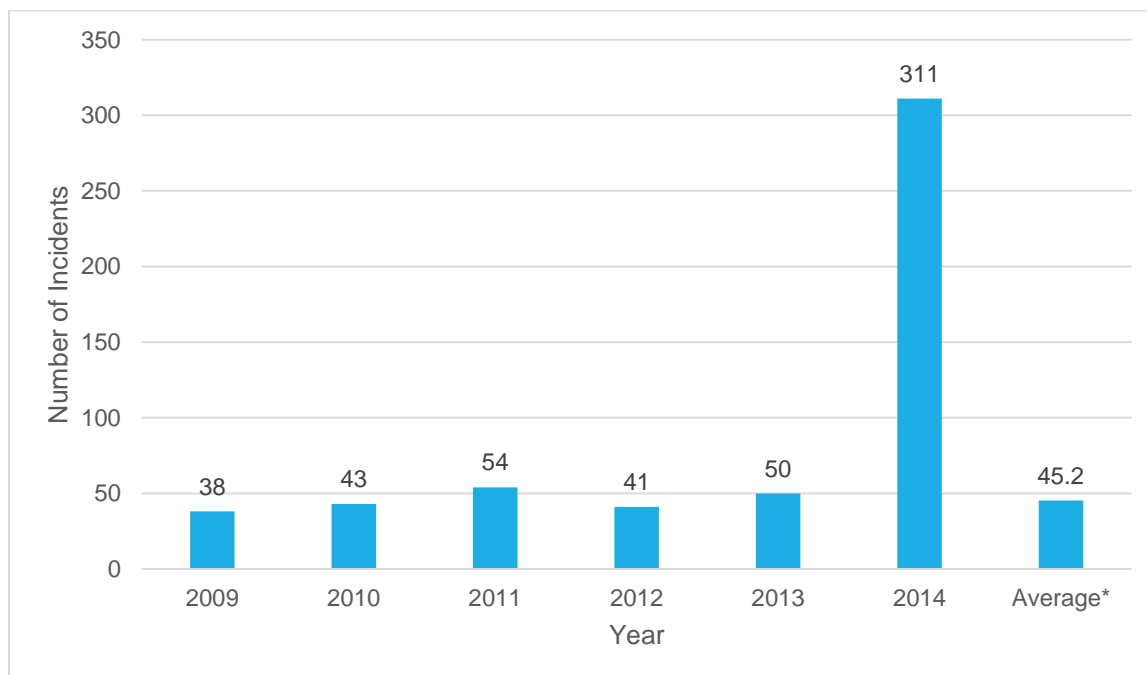
11.3.3 Fire Hazards

The City is within proximity of High Fire Hazard Zones. Fire potential is associated with the surrounding agricultural and natural settings abutting Weed. Fire hazards are heightened during times of drought. Weed is currently served by the Weed City Volunteer Fire Department, also known as the Long Bell Fire Department. It is important to note the City of Weed's history of fire related incidents in order to improve fire protection and prevention. One notable fire was the devastating Boles fire which occurred on September 15, 2014, resulting in the loss of 153 homes. Map 11.5 provides a city-level map of fire threats.

11.3.3.1 Fire Protection

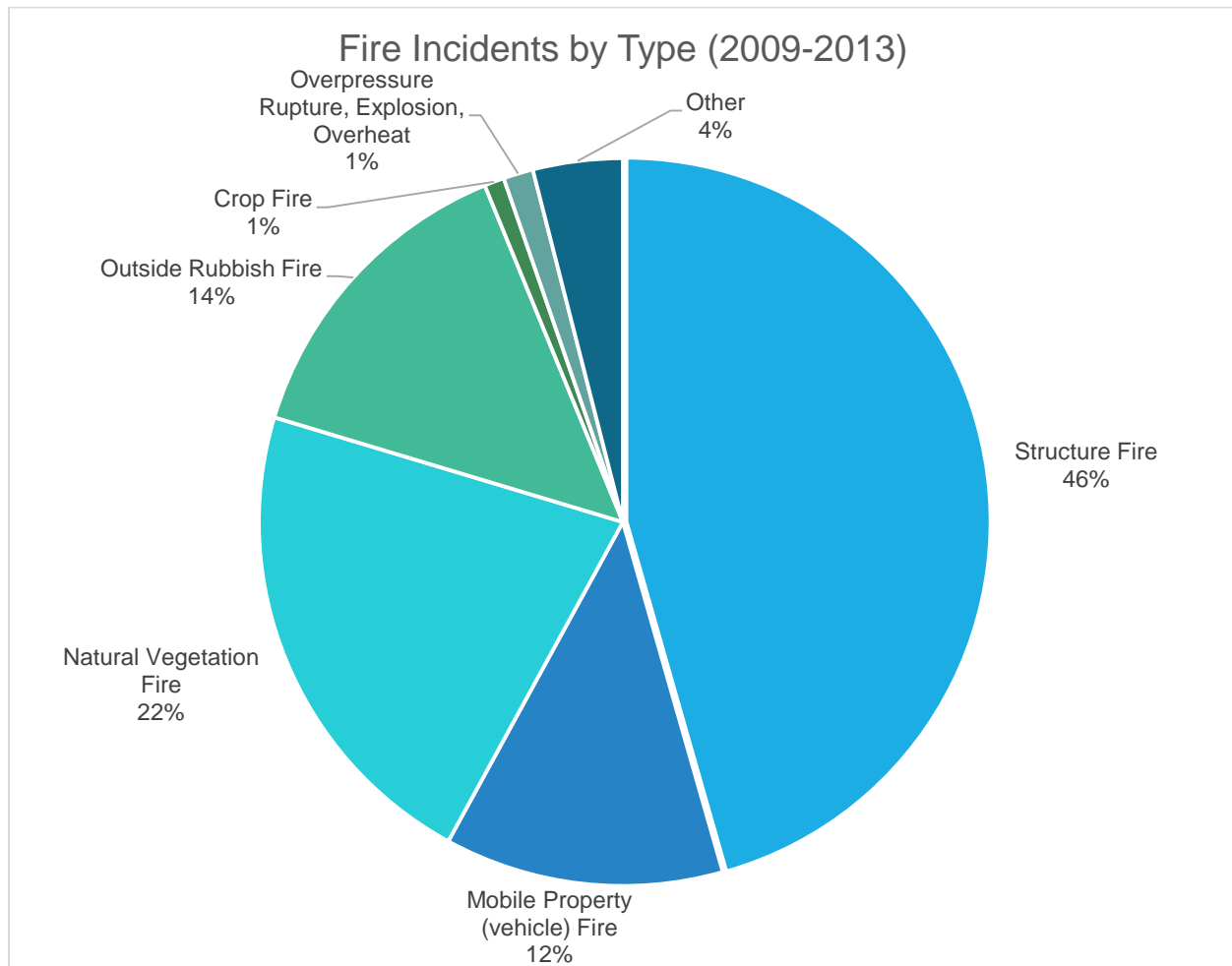
The Weed City Volunteer Fire Department responds to a great variety of incidents. The fire department keeps records of all fire incidents and fire damage. From the years 2009 to 2013, the Weed City Volunteer Fire Department responded to an average of about 45 incidents a year. Figure 11.1 displays the total number of incidents by year. These incidents may be related to a single fire incident but have affected multiple structures due to spreading. For instance, the Boles fire in 2014 contributed to the high total number of building fires (252 total) during that year. Figure 11.2 displays the proportions of fire incidents by type, omitting 2014 records from the data. Most of the fire incidents the fire department responds to are related to structure fires, vegetation fires, and vehicle fires.

Figure 11.1 Total Recorded Fire Incidents in Weed, California, 2009 - 2014



Source: Weed Volunteer Fire Department, Basic/Fire Data Standard Report, 2009 -2013

Figure 11.2 Fire Incidents by Type (2009-2013)

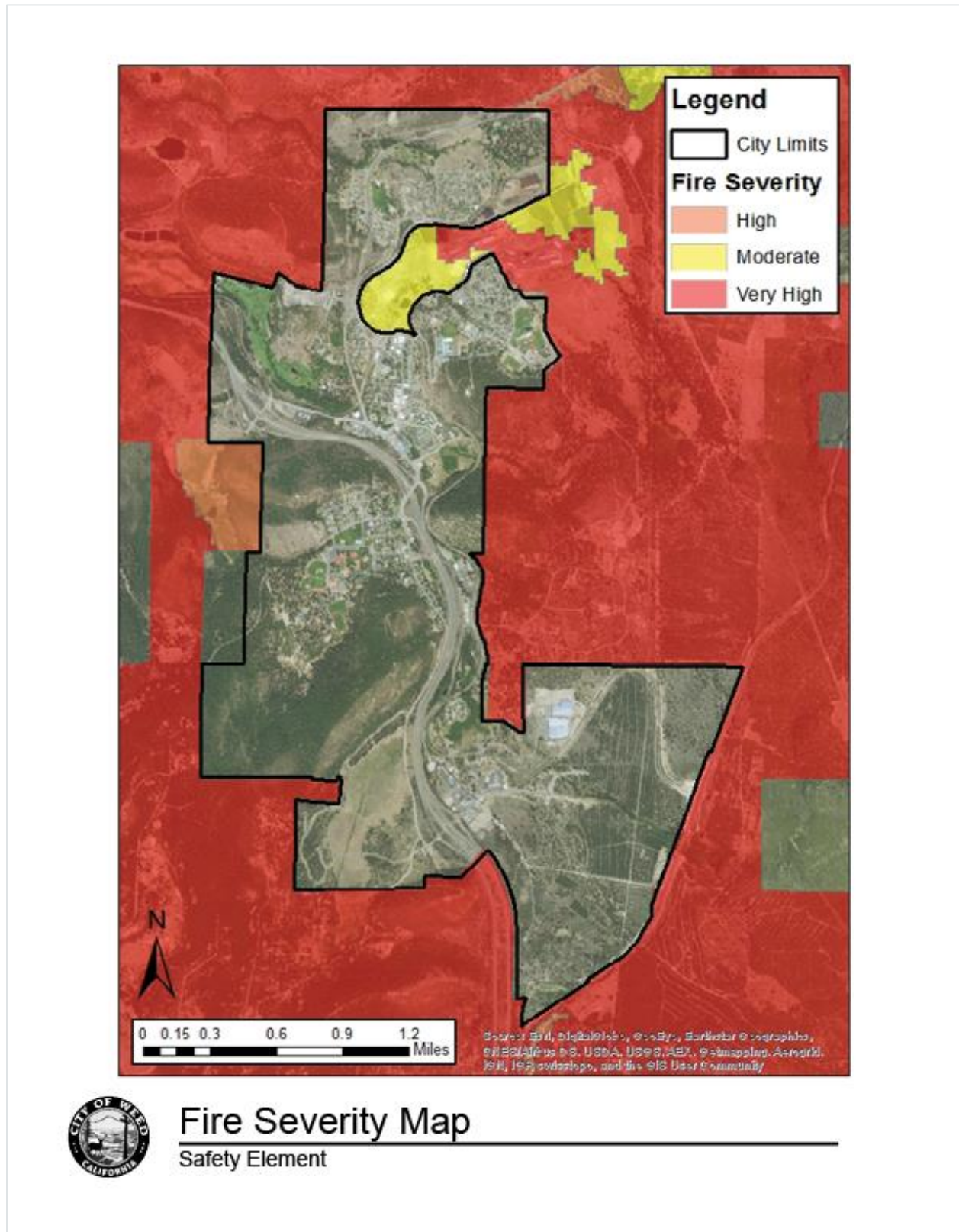


Source: Weed Volunteer Fire Department, Basic/Fire Data Standard Report, 2009 -2013

11.3.3.2 Fire Prevention

Fire suppression and preventative services in Weed are provided by the Weed City Volunteer Fire Department which works closely with the College of the Siskiyous Fire Technology Department. The Weed Fire Department has a response area of 4 square miles and protects a population of 3,000. An additional 15 square miles is included within the automatic aid contract with Siskiyou County. Automatic Aid is assistance dispatched automatically by contractual agreement between two communities or fire districts. Siskiyou County and the City of Weed work together under this contract. The station is staffed with thirty personnel, has three fire engines in its fleet, and is available for emergency response at all times. Response times average 3.67 minutes per call within the City of Weed.

Map 11.5 Fire Severity Map



Source: City of Weed, 2015

11.3.4 Volcanic Hazards

The City of Weed is in close proximity to Mt. Shasta. The Mt. Shasta watershed is a youthful and dynamic volcanic landscape, where eruptions have occurred once per 800 years over the last 10,000 years, and once per 600 years in the past 4,500 while the most recent evidence of an eruption is from about 200 years ago (USDA, 2012). The City of Weed is in close proximity to Mt. Shasta. The Mt. Shasta watershed is a youthful and dynamic volcanic landscape, where eruptions have occurred once per 800 years over the last 10,000 years, and once per 600 years in the past 4,500 while the most recent evidence of an eruption is from about 200 years ago (USDA, 2012).

Though the City of Weed is within the hazards zone for Mt. Shasta, the intensity of these volcanic hazards will be minimized by the time they reach the City. Figure 11.3 demonstrates pyroclastic and eruptive debris flow. The City of Weed is considered to be in Zone 2 for pyroclastic and eruptive debris flow. Zone 2 describes an area of intermediate potential hazard likely to be affected less frequently by pyroclastic flows and associated ash clouds and mudflows from future eruptions. Figure 11.4 illustrates the lava flow hazard for Mt. Shasta. The City is within Zone C for lava flow. Zone C describes an area that is likely to be affected infrequently and only by lava flows originating at vents in Zones A and B.

Pyroclastic Flows

Mixtures of hot gasses, rock, and ash which travel rapidly down the flank the volcano at speeds of up to 100 miles per hour, and are capable of flowing up over low-hills.

Volcanic Debris Flows

Similar to pyroclastic flows, but generally move more slowly (from 1 to 10's of miles per hour), and are typically confined to channels. This type of debris flow is triggered by a volcanic eruption which melts snow and ice.

Lava Flows

Similar to pyroclastic flows, but generally move more slowly (from 1 to 10's of miles per hour), and are typically confined to channels. This type of debris flow is triggered by a volcanic eruption which melts snow and ice.

Domes

Masses of solid rock formed when viscous lava is erupted slowly from a vent. Dome eruptions can generate pyroclastic flows due to explosions or collapse of the sides, and as such, pose an important hazard. Shastina and Black Butte are both examples of domes which generated pyroclastic flows.

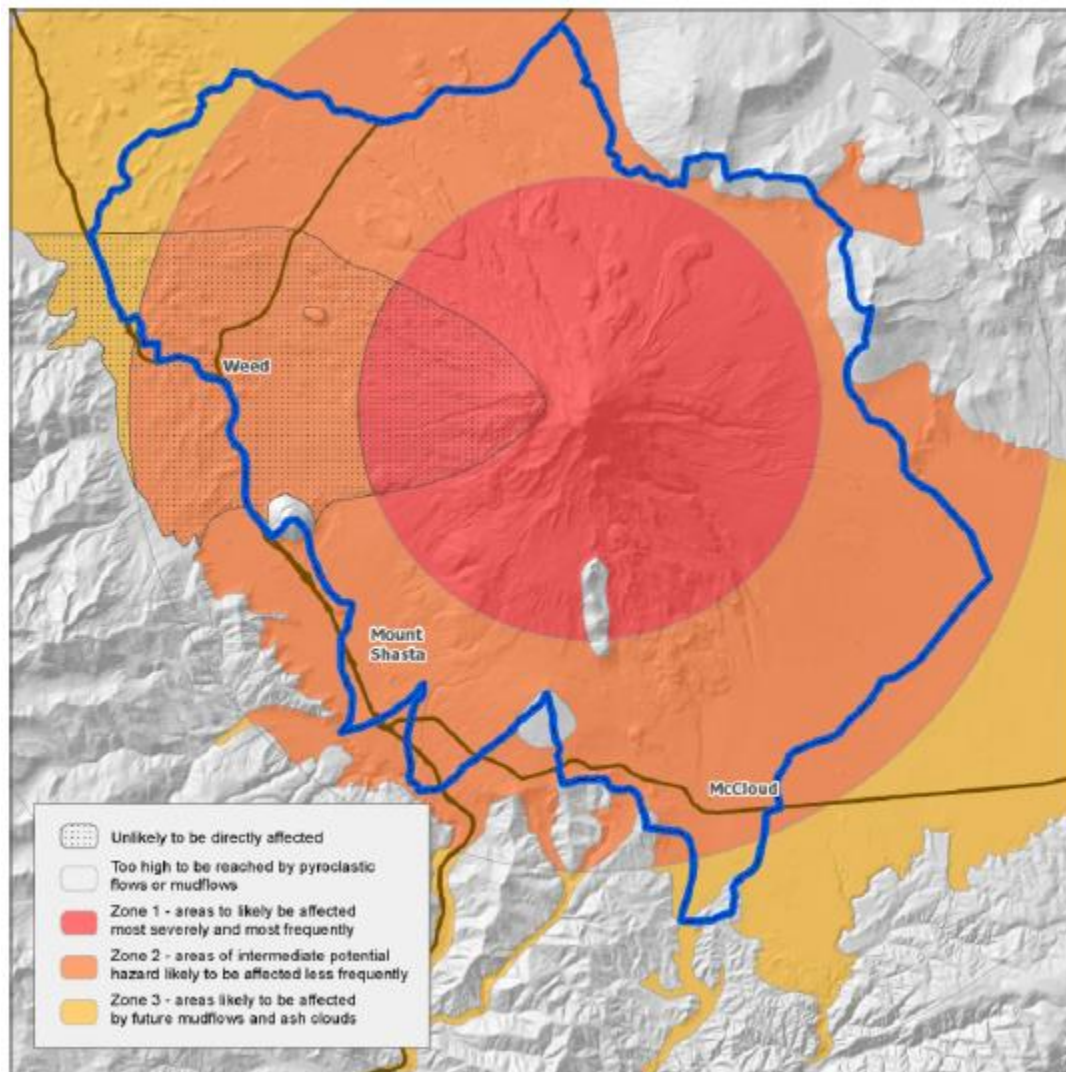
Fall Ash

This consists of rock and ash fragments erupted into the atmosphere by a variety of eruption processes, which settle back to earth by falling through the air without coalescing into a pyroclastic flow. Winds can carry such ash considerable distances.

Volcanic Gasses

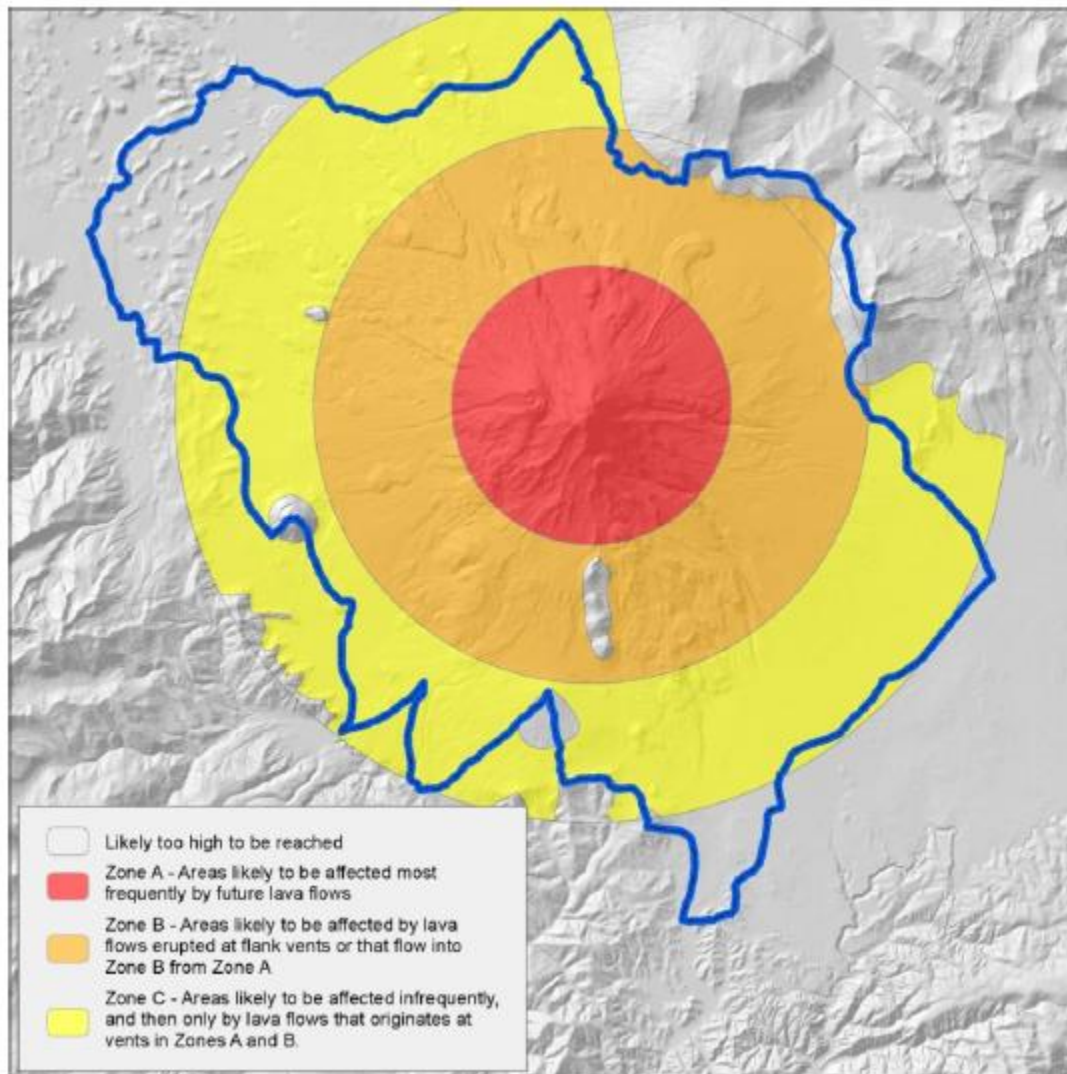
Gasses emitted from stratovolcanoes such as Mt. Shasta typically include (in decreasing order of abundance), water steam, carbon dioxide and compounds of sulfur and chlorine, along with lesser amounts of carbon monoxide, fluorine, and boron compounds, and ammonia (Miller, 1980). Gasses such as carbon dioxide are relatively dense, and can collect in low spots, where they pose a hazard to humans and animals.

Figure 11.3 Pyroclastic and Eruptive Debris Hazard Locations



Source: United States Department of Agriculture

Figure 11.4 Mt. Shasta Lava Flow Hazard



Source: United States Department of Agriculture

11.3.5 Hazardous Materials and Waste

Hazardous materials require special care to prevent potential threats they pose to public health, safety, and the environment. A hazardous material is any substance that may be explosive, flammable, poisonous, corrosive, radioactive, or reactive because of its quantity, concentration, or characteristics. Hazardous materials are transported and stored throughout the City of Weed. Potential hazards associated with these materials include fire, explosions, and leaks. The release of hazardous materials can cause significant damage when it occurs in highly populated areas or along transportation routes.

The City of Weed falls under the jurisdiction of the Siskiyou County Environmental Health Division, designated as the lead Certified Unified Program Agency (CUPA), for management and issuance of permits for all hazardous materials. Under the CUPA, site inspections of all hazardous materials programs (i.e., aboveground and underground tanks, hazardous waste treatment, hazardous waste generators, and hazardous materials management plans) are consolidated and accomplished by a single inspection by the lead agency. The program provides emergency response to chemical events to provide substance identification, health and environmental risk assessment, and air, soil, water, and waste coordination for state superfund incidents, in addition to the oversight, investigation, and remediation of unauthorized releases from underground tanks.

11.3.5.1 Transport of Hazardous Materials

I-5 and US 97 run through the City of Weed, which may be utilized for the transportation of hazardous materials. The City of Weed is prone to hazardous substance incidents due to the presence of highways. Highway incidents resulting in the release of hazardous material are of great concern, as the City is reliant on groundwater for all water supplies. The release of hazardous materials could migrate into the groundwater aquifer, compromising Weed's water supply and quality. The County of Siskiyou has recognized four Environmental Protection Agency registered hazardous waste transporters serving the area (Siskiyou County Environmental Health Division, 2015). Table 11.1 provides a list of hazardous waste transporters and the services they provide.

Table 11.1 Hazardous Waste Transporters

| Company | Location | EPA ID# | Services |
|-------------------------------|---------------|-------------------------|--|
| Asbury Environmental Services | Chico, CA | EPA ID# CAS028277036 | Collects, transports, and recycles hazardous waste: used motor oil, oily waste water, waste gasoline, used oil filters, used antifreeze, fuels, and paint-related waste. |
| Ben's Truck and Equipment | Red Bluff, CA | EPA ID# CAD055559678 | Solid and liquid hazardous waste hauling services (excluding explosives and radioactive wastes). Regular drum pick-ups. |

| Company | Location | EPA ID# | Services |
|---------------------------------|-------------------|-------------------------|--|
| | | | Spill cleanup. Field testing. |
| Oil Re-Refining Company (ORRCO) | Klamath Falls, OR | EPA ID# ORD980975692 | Collects and recycles used petroleum and related materials: used oil and fuels, gasoline, asphalt, used antifreeze, oily sludge, used oil filters, oily rags, and contaminated soils. |
| Safety-Kleen Systems | Medford, OR | EPA ID# OR0000940718 | Solid and liquid hazardous waste hauling services. Includes mercury waste, paint wastes, laboratory chemicals, universal wastes (batteries, bulbs, and electronics), automotive wastes, consumer product disposal. |

Source: Siskiyou County CUPA, 2015

Regulation of the transportation of hazardous materials and waste is under the authority of the US Department of Transportation (DOT). Under the regulations of the California Code of Regulations Title 26, the DOT establishes regulations for safe handling procedures of hazardous materials, including packaging, marking, labeling, and routing. The DOT, along with the California Highway Patrol, enforces Federal and State regulations and responds to hazardous material transportation emergencies. Response to hazardous transport emergencies is coordinated as necessary between federal, state, and local governmental authorities.

11.3.5.2 Hazardous Materials Sites

Hazardous materials are used in the production and service processes for certain businesses in the City of Weed. These hazardous material sites include a variety of businesses and facilities including gas stations, educational facilities, and industrial sites. The Siskiyou County Environmental Health Division, designated as the lead Certified Unified Program Agency (CUPA) is required to list facilities that store or generate hazardous materials or hazardous waste at or above State reporting thresholds. A complete list of listed facilities under CUPA is located in 11.7.1 Appendix A. In addition to the CUPA listed sites, the City of Weed has some contaminated sites that are contaminated from land use or underground tanks. These contaminated sites are overseen by the State Water Board. The State Water Resource Control Board is in charge of clean-up efforts. Table 11.2 provides a list of the contaminated sites located in the City of Weed for which the State Water Resource Control Board is responsible.

Of these 24 sites, 11 are considered to be completed projects, and five are permitted underground storage tanks that may not necessarily be contaminated but are of high monitoring importance. Eight sites in the area still require cleanup in some form.

11.3.5.3 Hazardous Materials Incidents

Hazardous material sites are dealing with very sensitive materials and waste. When accidents do happen (such as spills), these spills take special, emergency attention. The majority of hazardous waste incidents occur along the highways that travel through the City including US-97 and I-5. A complete list of incidents starting from the year 2000 is available in 11.7.2 Appendix B.

Table 11.2 Hazardous Materials Sites

| Site | Type | Cleanup Status |
|----------------------------------|------------------------------------|--|
| Weed SWDS | Land Disposal Site | Open |
| J.H. Baxter | Cleanup Program Site | Open-Remediation |
| Roseburg Forest Products | Cleanup Program Site | Open-Inactive |
| Morgan Products | Cleanup Program Site | Open-Remediation |
| Handy Stop | LUST Cleanup Site | Open-Remediation |
| Chevron #9-3476 | LUST Cleanup Site | Open-Remediation |
| Texaco | LUST Cleanup Site | Open- Assessment & Interim Remedial Action |
| BP #11242 | LUST Cleanup Site | Open-Remediation |
| Handy Stop Texaco AKA: Star Mart | Permitted Underground Storage Tank | |
| Erickson Shell | Permitted Underground Storage Tank | |
| Pacific Bell | Permitted Underground Storage Tank | |
| Tosco Facility | Permitted Underground Storage Tank | |
| Mountain View Chevron Station | Permitted Underground Storage Tank | |
| Weed Elementary School | LUST Cleanup Site | Completed- Case Closed |
| Weed High School | LUST Cleanup Site | Completed- Case Closed |
| Roseburg Forest Products | LUST Cleanup Site | Completed- Case Closed |
| Patton Distribution Co. | LUST Cleanup Site | Completed- Case Closed |
| City of Weed Acquisition Lot | LUST Cleanup Site | Completed- Case Closed |
| Motel 6 | Cleanup Program Site | Completed- Case Closed |
| Market Transport Limited | Cleanup Program Site | Completed- Case Closed |
| Unocal #5851 | LUST Cleanup Site | Completed- Case Closed |
| Shell, Weed | LUST Cleanup Site | Completed- Case Closed |
| Arco #0389 | LUST Cleanup Site | Completed- Case Closed |
| Crandall's Creamery | LUST Cleanup Site | Completed- Case Closed |

Source: GeoTracker, 2015

11.3.5.4 Hazardous Waste

Siskiyou County has four disposal locations for motor oil disposal. The disposal location closest to the City of Weed is the Black Butte Landfill in Mt. Shasta. They accept five gallon containers and a maximum of 20 gallons. Table 11.3 provides a complete list of oil disposal locations in Siskiyou County.

Table 11.3 Used Motor Oil Disposal Locations in Siskiyou

| Location | Maximum Oil Disposal |
|---|--------------------------------------|
| Valley Tire Hwy 3 Ft. Jones | 5 gallon containers/ 20 gallons max. |
| Happy Camp Transfer Station Happy Camp, CA | 5 gallon containers/ 20 gallons max. |
| Black Butte Landfill Mt. Shasta, CA | 5 gallon containers/ 20 gallons max. |
| The Oil Changer S. Main St. Yreka, CA | 5 gallon containers/ 20 gallons max. |

Source: Siskiyou County CUPA, 2015

11.3.6 Aircraft Hazards

Currently, the City of Weed does not have an airport facility within the city boundary. The closest airport is the Weed Airport, which is located 4 miles northwest of the City, and provides service to Siskiyou County. The Weed airport covers 344 acres and has one runway. The airport serves general aviation purposes, and functions as a base for search and rescue operations on Mt. Shasta. The Circulation Element provides additional information about the Weed Airport.

11.3.6.1 Runway Protection Zones

Runway protect zones (RPZs) are trapezoidal areas that provide protection at the end of the runway to protect people and property on the ground in the event of an aircraft lands or crashes beyond runway end. The RPZ is to meet with the Airport Reference Code (ARC B-I) criteria, which applies to small single engine planes. The RPZ dimensions apply to runways serving small aircrafts that serve a length of 1,000 feet, an inner width of 250 feet, and an outer width of 450 feet. Based on the existing types and levels of aircraft operating at Weed Airport, the 20 small aircraft planes located at the airport are representatives of the Airport Reference Code (ARC B-I) criteria. Under FAA design criteria, the airport must own the landing area. Control over the use of the RPZ areas through the acquisition of sufficient property interest (such as fee title, lease, or navigation easement) is strongly encouraged by the Federal Aviation Administration (FAA) to prohibit unsafe uses in RPZs.

11.3.6.2 Air Space Protection and Heights

The height restriction zone (HRZ) is essential to protecting airspace and structures from passing aircrafts. The HRZ is established in accordance with Federal Aviation Regulations (FAR) Part 77, which requires proposals for structures over 200 feet, or other structures near airports that would penetrate imaginary surfaces defined in Part 77, to notify the FAA of the proposed construction. The FAA reviews the proposal and issues acknowledgment stating whether the proposal: (1) will not exceed any airspace protection surfaces defined on the airport's FAR Part 77 Airspace Plan; (2) will exceed a standard of the FAR Part 77 Airspace Plan, but would not be a hazard to air navigation; or (3) would exceed a standard of the FAR Part 77 Airspace Plan, imposing a hazard on air navigation and requiring a further aeronautical study. Within 30 days, the project sponsor may request the aeronautical study. Until an aeronautical study is completed, the proposed structure is presumed to be a hazard to air navigation. There are no structures or plan developments that exceed the 200 feet in height, or penetrate imaginary surfaces

11.3.6.3 Air Traffic Incidents

It is important that the Weed Airport complies with all applicable FAA regulations to reduce the potential for aircraft crash incidents. The protection zones and height restriction zones are in place so that current and future development is not subjected to potential aircraft crash incidents. FAA operational procedures must also be adhered to for all arriving and departing aircrafts. In the event that an incident does occur, the Weed Airport has an aircraft rescue and the fire department in the City of Weed has a unit that serves as a responder to aircraft crash incidents.

11.3.7 Rail Hazards

Two main railroad lines run through the City of Weed. The Central Oregon and Pacific Railroad service line, which passes between Eugene, Oregon and Northern California. The Amtrak Pacific Coast Starlight, which passes between Seattle, Washington and San Diego, California. Both railroad services could create potential safety hazards to the City of Weed. Hazards can include the potential for train derailments and noise. For further information on rail, refer to the Circulation Element

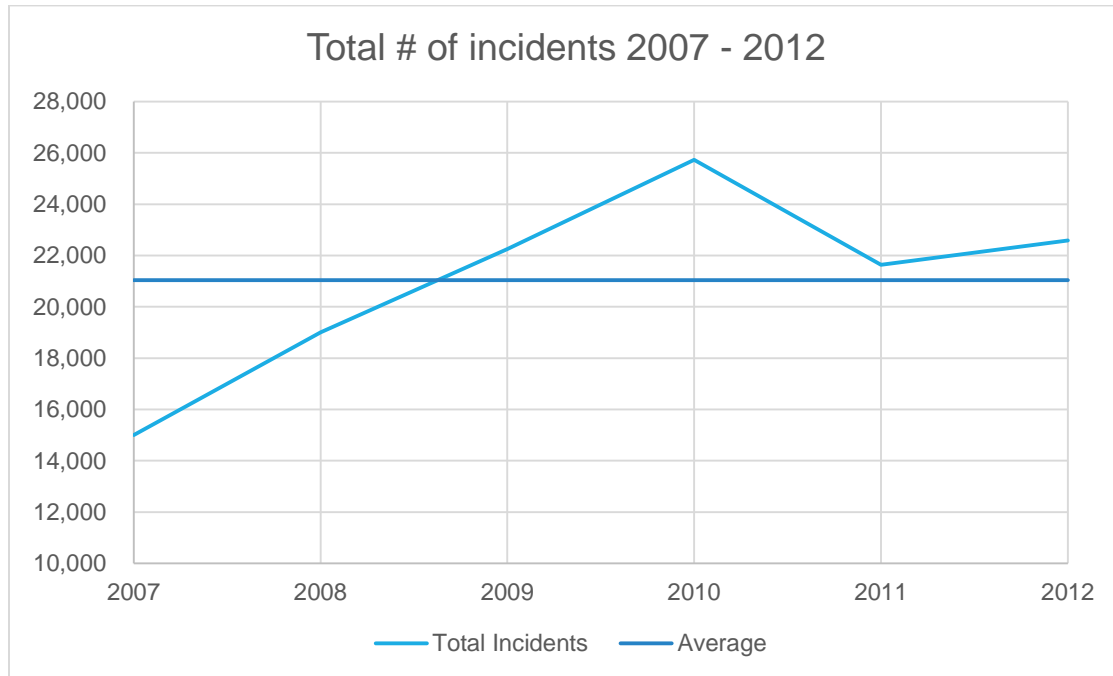
11.3.8 Crime

Crime is a major concern for any city, but has been identified as a top priority in the City of Weed. The Police Department in Weed currently has thirteen full time staff and two part-time employees (Roxanne Anzo, personal communication, November 2, 2015). The Patrol Division consists of six sworn officers, two sergeants, one corporal, and three officers. The national average for police coverage is 3.42 officers per 1,000 residents. Weed employs 4.45 officers per 1,000 residents.

Table 11.3 shows the number of incidents from 2007 to 2012, and the average number within the city limits of Weed. Incidents include calls for service by the police department, traffic stops, Bus/Building Checks, Vehicle/Pedestrians and any other event that necessitates a police officer

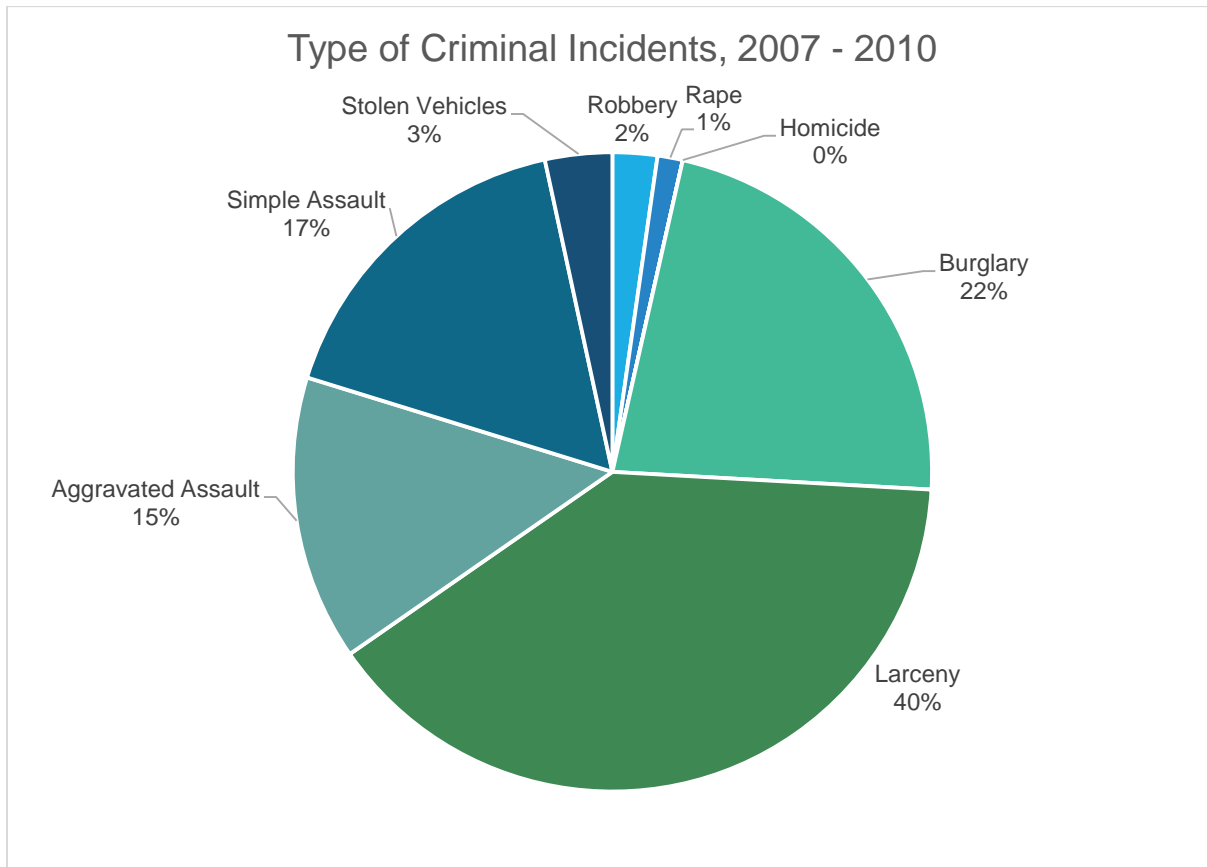
for the reporting of an alleged crime. In 2012, the number of incidents had reached its highest within the 4-year time span, with 25,732 incidents. In 2011, there was a decline in incidents, but in 2012, the number of incidents has since then increased. Table 11.3 is referred from the Annual Report from the Weed Police Department. The graph shows the average with the years 2007 - 2010. The highest crime committed in Weed is Larceny, with a 36 percentage average. The second is both tied with Simple Assault and Burglary at a 20% average. The third highest crime committed in Weed is Aggravated Assault with an average of 17%.

Figure 11.3 Total Crime Incidents from 2007-2012



Source: Weed Police Department Annual Report, 2009-2010 & 2011-2012

Figure 11.5 Breakdown of Crime Incidents from 2007-2010



Source: Weed Police Department Annual Report 2009 -2010

11.3.8.1 Emergency Services

In the event of a disaster, the Siskiyou County Office of Emergency Services (OES) is responsible for the City of Weed. The Siskiyou County OES is a division under the Health and Human Services Agency. Through planning, training and exercises, such responsibilities of Siskiyou County OES is to ensure there is a coordinated response of all levels of government. If such a large emergency emerges in Weed, OES will work closely with Siskiyou Operational Area Emergency Operations center through their assigned communications/Dispatcher Center. Other departments may include many state, county, and local government entities such as Personal Health Nursing, Environmental Health Law Enforcement, Fire Department, and Public Works.

11.3.8.2 Emergency Operations Plan

The County of Siskiyou has an emergency operations program called CodeRED. The program distributes emergency messages via telephone in case of a county or state emergency. This can include targeted areas or the entire county at the rate of 1,000 calls per minute. The service can be used in case of fires, chemical spills, evacuations, lockdowns, downed power lines, lost individuals, natural disasters, abductions, water system problems, bomb threats, or other

emergencies. If any emergencies are widespread, the entire community will be contacted within 20 to 30 minutes. Siskiyou County encourages its citizens to enlist their contact information in the program so that they can be contacted in the case of an emergency. Those who do not register their address and phone number may not be notified.

11.3.8.3 Evacuation Routes

The City's circulation network is based on a curvilinear pattern with some neighborhoods that have a grid pattern. Based on this circulation pattern, it is anticipated that the following arterial/collector roadways would be used as evacuation routes out of the City:

- College Avenue
- U.S. -97
- I-5
- South Weed Blvd.

11.4 Issues and Opportunities

Community outreach participants referred to Weed as a generally safe place with a strong involvement of public safety. The residents of Weed highest concerns were the drug-related activities that occur within the city limits. The community input received will help influence the desire opportunities that can create a better and safe environment in the City of Weed.

11.4.1 Strengths and Opportunities

The City has many strengths that are associated with safety. Its location and environmental conditions in general make Weed a safe city from natural disaster events. The City of Weed is at minimal risk for earthquake related events, landslides, flooding, and volcanic activity. The City is also at limited risk of traffic and air traffic related incidents. Out of many potential safety concerns, the city appears to be most vulnerable to fire, hazardous materials, and crime. Following are the city's strength and opportunities as related to safety.

11.4.1.1 Fire Risk

The City has a well-established volunteer fire program that works in conjunction with the College of the Siskiyous. This program allows fire fighters to earn credits at the college while taking part in fire prevention training and skill building. Furthermore, the volunteer fire department in Weed, works with the Siskiyou County fire department to aid in serving both the City and the greater county.

11.4.1.2 Hazardous Materials

The City operates under the North Coast Region of the State Water Resource Control Board, which oversees a site cleanup program. In addition, Siskiyou County has a Certified Unified Program Agency that keeps detailed records of hazardous materials incidents and clean up procedures.

11.4.1.3 Crime

The City has a well-staffed Patrol Division consisting of six sworn officers, two sergeants, one corporal, and three officers. They are interested in hiring an officer whose specific role would be to handle youth programs for the City. This officer may be able to make an impact on the drug and alcohol abuse issues in the City.

11.4.2 Threats and Constraints

There are many opportunities for the city to improve safety for its residents. Research has revealed that the most important safety concerns for the City of Weed include fire risk, hazardous materials threats, and crime.

11.4.2.1 Fire Risk

The City is surrounded by a natural green environment and is vulnerable to the dangers of fire hazards. The City is surrounded by "very high" risk zones in terms of fire severity. The Boles Fire of 2014 is a prime example of the severity and risk involved with fire in the City. Fires of this degree are greatly damaging to the City's infrastructure and resources. Weed residents recognized these factors as a significant barrier of the city.

11.4.2.2 Hazardous Materials

The City is in close proximity to major traffic-ways I-5 and US-97. Many hazardous waste spills occur on these traffic-ways. In addition, many current and past businesses are hazardous material sites as certified under Certified Unified Program Agency and overseen by the State Water Resource Control Board. Eight of these sites still require clean up and purification. The City also has a number of underground storage tanks that are at risk or exposure to hazardous materials. The City is also nearby major industry that release particulate matter and other toxins into the air that becomes a health safety concern.

11.4.2.3 Crime

City residents expressed that crime in Weed was a major barrier and area of concern. Though the City has an adequate police force, crime persists. Residents were especially concerned with drug use in the City. The City also has a high number of domestic violence cases.

11.5 Emerging Directions

Based on feedback gathered at Residents wishes for the future safety of Weed include an expanded drug and alcohol prevention programs for youth and the general population, better control of drug related activities, and the promotion of neighborhood watch programs to decrease crime. City residents also expressed interest in more and better fire preparedness. Following are the emerging directions for the City as they pertain to the city's most prominent safety issues: fire risk, hazardous material threats, and crime.

11.5.1.1 Fire Risk

The City currently has a well-staffed and established volunteer fire program. The City may take interest in furthering their fire prevention efforts through active development of fire safety zones, brush clearing, and fire safety and prevention education. The City may also be interested in developing a fire safety plan in which the City can be well informed of evacuation procedures and the City can provide emergency services to residents.

11.5.1.2 Hazardous Materials

The City may take special interest in the cleanup of the remaining eight sites that have had spill incidents or prolonged seepage of hazardous materials. In addition to these eight sites, many lots in Weed that had homes destroyed in the Boles Fire had evidence of hazardous materials including asbestos. Cleanup of those materials is a top priority and the process is underway. The city also expressed interest in incorporating and enforcing higher standards on nearby industry to ensure that toxins and particulate matter do not enter the air.

11.5.1.3 Crime

Residents have expressed interest in greater monitoring of drug-use within the City. The police department is interested and making efforts towards hiring an additional sworn officer to handle youth programming to keep the youth away from drugs and alcohol. The police force may also be interested in developing an awareness and education program surrounding domestic violence

11.5.2 Community Preferences

Based on the existing conditions and community input received from the first community meeting, the issues and opportunities in the City of Weed are as follows:

On November 7th, 2015, the city held its second public meeting for the General Plan to help assist with the emerging directions for Weed. Members of the community, stakeholders, and members of the council were the participants in the meeting that took place. The participants were asked three separate safety questions (each with multiple answer options) and were asked to vote based on preference for various options. The Safety preference questions received an overall of 187 votes. The follow are results from the preference exercise:

When asked "What safety concerns needs the most attention in Weed?", participants felt that crime were the issues that needed the most attention. When asked, "What is your preferred way to reduce crime?", participants preferred that the City should implement programs to monitor drug related activity within the city limits.

The third question posed at the meeting included a map of the city. Participants placed green dots in areas where they felt safe and red dots in areas where they felt unsafe. The trends showed that participants felt unsafe in South Weed, and felt safe in the College of Siskiyou area. Figure 11.6 – 8 provide the complete results from the meeting on safety preferences.

Figure 11.6 Safety concerns for the City, Total Votes, 80

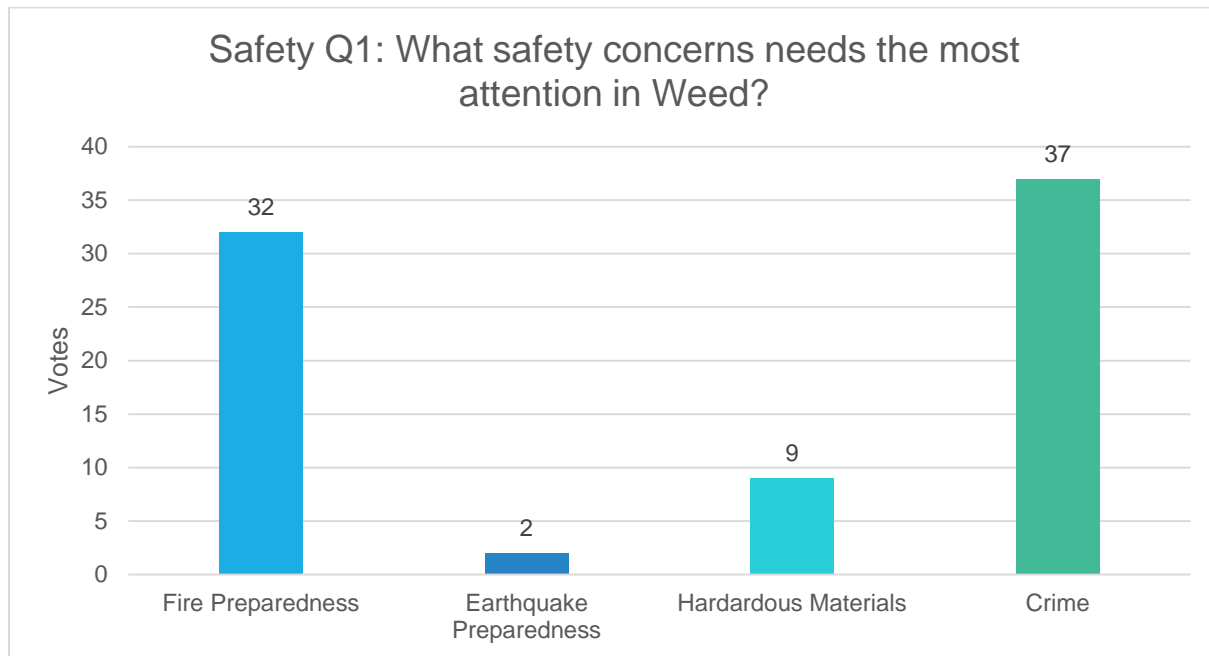


Figure 11.7 Preferred method for reducing crime, Total Votes 91

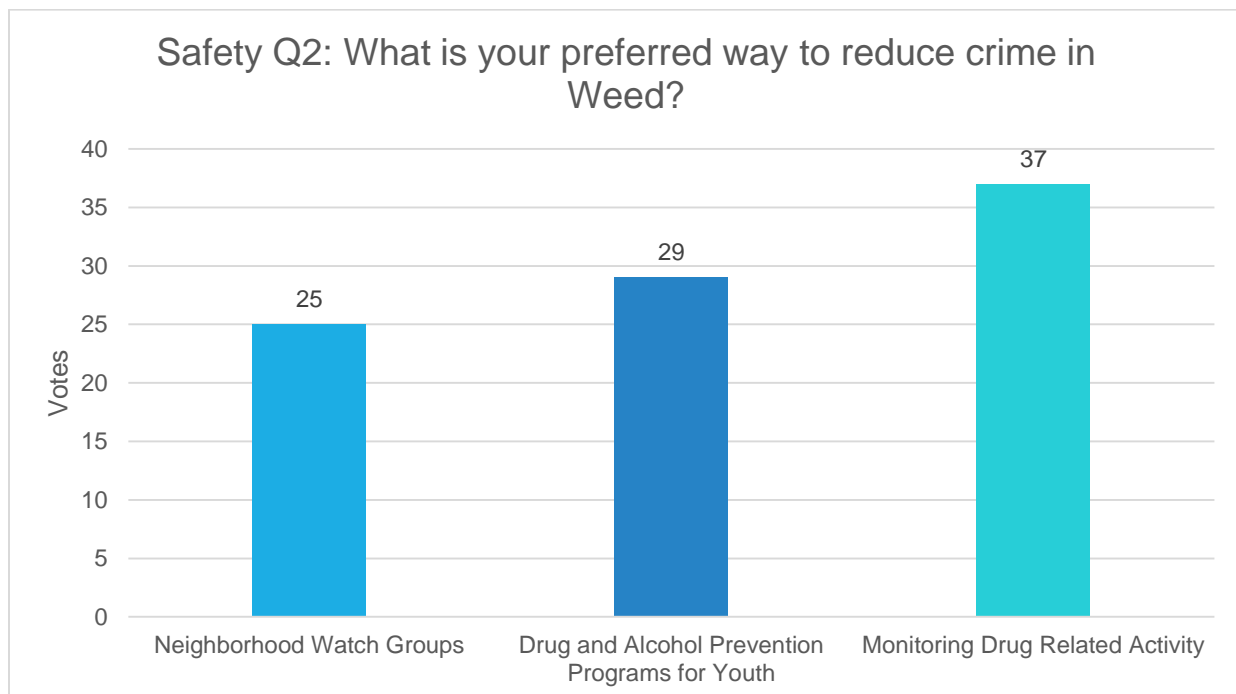
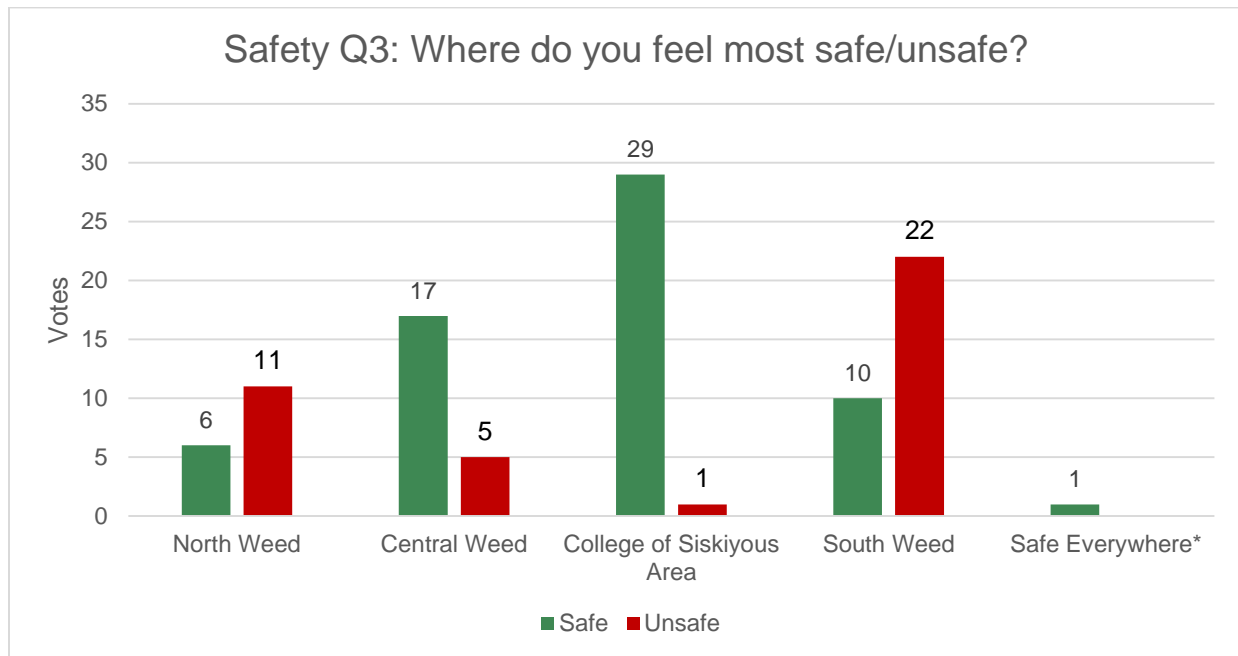


Figure 11.8 Location of where residents feel the most safe or unsafe, Total Votes 102



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11.7 Appendices

11.7.1 Appendix A: List of facilities by CUPA

| Name | Street | City | Zip Code | Facility ID |
|--|---------------------------|--------------|----------|---------------|
| 97 Mini Mart | 420 Alamo Ave | Weed | 96094 | 47-001-629555 |
| AmeriGas Weed Storage | 3 Alamo Ave | Weed | 96094 | 47-001-127575 |
| AT&T California - TA115 | 117 S Weed Blvd | Weed | 96094 | 47-001-127493 |
| AT&T MOBILITY - CA004 - SOUTH WEED (99458) | 900 SHASTINA DRIVE | WEED | 96094 | 627538 |
| AT&T Mobility - CA005 - WEED (99473) | 666 W Lincoln Ave | Weed | 96094 | 47-001-627524 |
| AT&T Mobility - CA071 HERD PEAK (99411) | 20427 SOUTH US HIGHWAY 97 | WEED | 96094 | 661455 |
| AT&T Mobility- CA075 HAMMOND (99409) | 1633 Windridge Ln | MOUNT SHASTA | 96094 | 627526 |
| Black Butte Auto Dismantler's & Towing | 800 State Highway 97 | Weed | 96094 | 47-001-608101 |
| Butteville Union Elementary School | 24512 Edgewood Rd | Edgewood | 96094 | 47-001-607755 |
| CAL FIRE Weed Station | 300 Highway 97 | Weed | 96094 | 47-001-127617 |
| Caltrans-Grass Lake | 21131 State Highway 97 | Weed | 96094 | 47-001-127598 |
| CG Roxane, LLC | 1400 Mary's Dr. | Weed | 96094 | 47-001-607455 |
| College of the Siskiyous | 800 College Ave | Weed | 96094 | 47-001-127492 |
| Eagles Nest Aviation Svc. LLC | 22501 Airport Rd | Weed | 96094 | 47-001-127840 |
| Erickson Shell | 56 S Weed Blvd | Weed | 96094 | 47-001-100630 |
| Grass Auto Repair | 60 North Weed Blvd. | Weed | 96094 | 47-001-627776 |
| Handy Stop | 25 N Weed Blvd | Weed | 96094 | 47-001-100633 |
| JB Automotive | 136 N Weed Blvd | Weed | 96094 | 47-001-127652 |
| Lake Shastina Community Services District | 16320 Everhart Dr. | Weed | 96094 | 47-001-127681 |
| Lake Shastina Golf Resort | 5925 Country Club Dr. | Weed | 96094 | 47-001-127739 |
| Mount Shasta Brewing Company | 360 College Ave | Weed | 96094 | 47-001-618918 |
| Mountain View Chevron | 85 E Vista Dr. | Weed | 96094 | 47-001-100625 |

| Name | Street | City | Zip Code | Facility ID |
|--|--|------|----------|---------------|
| Pacific States Treating, Inc. | 422 Mill St | Weed | 96094 | 47-001-127545 |
| PACIFICORP - INTERNATIONAL PAPER SUB STATION | On International Paper Property On Roseburg Avenue Behind Fire Station | WEED | 96094 | 47-001-127494 |
| PACIFICORP - SHASTINA SUB STATION | INTERSECTION BIG SPRINGS RD AND JUNIPER VALLEY DR, 1/2MI N ON RANCH RD | WEED | 96094 | 47-001-127496 |
| PACIFICORP - WEED JUNCTION SUB STATION | 2 MI E OF WEED, CA ON HWY 97 - NORTHSIDE | WEED | 96094 | 127495 |
| PACIFICORP - WEED SUB STATION | HWY 97, 3/4 MI E OF HWY 99, ACROSS FROM ALAMO ST | WEED | 96094 | 47-001-127497 |
| Pilot Travel Centers, LLC | 395 E Vista Dr. | Weed | 96094 | 47-001-609500 |
| Quality Auto and Tire | 83 Main St | Weed | 96094 | 47-001-127853 |
| Roseburg Forest Products | 98 Mill St | Weed | 96094 | 127498 |
| Shasta View Nursing Center | 445 Park St | Weed | 96094 | 47-001-127766 |
| Shastina Mini Mart | 20506 Big Springs Rd St C | Weed | 96094 | 47-001-623004 |
| SOLANO'S, INC. | 700 Shastina Dr. | Weed | 96094 | 47-001-127499 |
| South Weed Shell | 1976 Shastina Dr. | Weed | 96094 | 47-001-100636 |
| U.S. Cellular – Herd Peak – 568467 | 20427 S US Highway 97 | Weed | 96094 | 47-001-626728 |
| U.S. Cellular – Weed – 568322 | Weed Hill Off Alameda Ave | Weed | 96094 | |
| UNION PACIFIC - BLACK BUTTE SOUTH SIDING SW | Linville Drive and Black Butte Drive | WEED | 96094 | 47-001-610685 |
| UNION PACIFIC - BLACK BUTTE WYE | Black Butte Subdivision Remote Site 2 | Weed | 96094 | 47-001-610689 |
| USFS KNF Grass Lake Fire Station | 21021 State Highway 97 | Weed | 96094 | 47-001-127758 |
| Verizon Wireless Deetz | 1929 Wind Ridge Ln | Weed | 96094 | 661627 |
| Verizon Wireless Edgewood Cal Trans | Cal-Trans Rest Stop #27 | Weed | 96094 | 47-001-627542 |
| Verizon Wireless Freeway Lake | 4916 1/2 Mills Rd | Weed | 96094 | |
| Verizon Wireless Weed | 900 Shastina Dr. | Weed | 96094 | |
| Weed Chevron | 12 S Weed Blvd | Weed | 96094 | 47-001-100622 |

| Name | Street | City | Zip Code | Facility ID |
|---------------------------------------|-----------------------|------|----------|---------------|
| Weed City Corporation Yard | 750 Shastina Dr. | Weed | 96094 | 47-001-127489 |
| Weed Golf Club, Inc. | 27730 Old Edgewood Rd | Weed | 96094 | 47-001-127817 |
| Weed High School | 909 Hillside Dr. | Weed | 96094 | 47-001-127491 |
| Weed Union Elementary School | 575 White Ave | Weed | 96094 | 47-001-127500 |
| Wetzel & Assoc. | 15733 Juniper Peak Rd | Weed | 96094 | 47-001-620849 |
| Wonderland Distributing Company, Inc. | 200 Alamo Ave | Weed | 96094 | 47-001-127700 |

11.7.2 Appendix B: List of Contaminated Sites

| Site | Type | Cleanup Status |
|----------------------------------|------------------------------------|--|
| Weed SWDS | Land Disposal Site | Open |
| J.H. Baxter | Cleanup Program Site | Open-Remediation |
| Roseburg Forest Products | Cleanup Program Site | Open-Inactive |
| Morgan Products | Cleanup Program Site | Open-Remediation |
| Handy Stop | LUST Cleanup Site | Open-Remediation |
| Chevron #9-3476 | LUST Cleanup Site | Open-Remediation |
| Texaco | LUST Cleanup Site | Open- Assessment & Interim Remedial Action |
| BP #11242 | LUST Cleanup Site | Open-Remediation |
| Handy Stop Texaco AKA: Star Mart | Permitted Underground Storage Tank | |
| Erickson Shell | Permitted Underground Storage Tank | |
| Pacific Bell | Permitted Underground Storage Tank | |
| Tosco Facility | Permitted Underground Storage Tank | |
| Mountain View Chevron Station | Permitted Underground Storage Tank | |
| Weed Elementary School | LUST Cleanup Site | Completed- Case Closed |
| Weed High School | LUST Cleanup Site | Completed- Case Closed |
| Roseburg Forest Products | LUST Cleanup Site | Completed- Case Closed |
| Patton Distribution Co. | LUST Cleanup Site | Completed- Case Closed |
| City of Weed Acquisition Lot | LUST Cleanup Site | Completed- Case Closed |
| Motel 6 | Cleanup Program Site | Completed- Case Closed |
| Market Transport Limited | Cleanup Program Site | Completed- Case Closed |
| Unocal #5851 | LUST Cleanup Site | Completed- Case Closed |
| Shell, Weed | LUST Cleanup Site | Completed- Case Closed |
| Arco #0389 | LUST Cleanup Site | Completed- Case Closed |
| Crandall's Creamery | LUST Cleanup Site | Completed- Case Closed |

12 ECONOMIC DEVELOPMENT

12.1 Introduction

This chapter provides an overview of the economic conditions in the City of Weed. By understanding and analyzing key factors that drive Weed's local economy, as well as Weed's role within Siskiyou County, the City government can help guide economic development. Since land use designation in California is largely the responsibility of local jurisdictions, land use allocation strategies can help facilitate economic development and fiscal growth. Development should be balanced with an appropriate mix of diversified employment opportunities and housing types, complemented with key business strategies, which the City can promote through policies and incentive programs. For the City to remain competitive and support current and developing industries, Weed must identify its economic strengths and weaknesses.

According to the Governor's Office of Planning and Research (OPR), the structure of a city's economy plays a significant role in the physical development of the planning area and the stability of the local tax base. Consequently, economic development is an important component to maintain to optimize the economic potential of the community. OPR states that an effective economic development element should establish policies that provide general direction to local government on how the community can achieve the following:

- Focus resources to retain local business
- Attract new industry
- Support the local tax base
- Sustain the ability to provide public services for current and future residents

Economic development, while vital for creating employment opportunities and fiscal growth, is instrumental to the physical configuration and layout of a community. To balance housing needs and revenue-generating land uses, adequate land and space must be distributed and allocated for commercial and entertainment uses. This chapter analyzes and reviews employment statistics, industry trends, and performance measures from 2010 and 2013 Census data, followed by a concise examination of the City's general economic climate.

12.2 Regulatory Setting

The Economic Development Element of Weed is not regulated by Federal, state, or local guidelines.

12.3 Existing Conditions

This section provides a brief overview of the historical and current context of economic development within the City of Weed and the economic role the city plays in Siskiyou County.

The analysis highlights the history of Weed's economy, most prominent and highest performing economic sectors, as well as employment, and education data.

12.3.1 History of Economy and Industries

Historically, the economies of the City of Weed and Siskiyou County were based on the abundance of natural resources in Northern California. In 1897, Abner Weed recognized the potential of the area's strong winds for drying green lumber and founded his mill in what is today Weed proper. The City's historical connection to the lumber industry brings about a sense of pride, one that the community continues to identify with today as seen in one of the area's largest employers, Roseburg Forest Products. According to 2013 census data, the second most dominant economic sector is the Accommodation and Food Services Industry, which makes up 17 percent of Weed's 1,444 jobs. The Agriculture, Forestry, Fishing, and Hunting sector makes up only 0.35 percent of the city's available jobs. Since Roseburg is not within the city limits of Weed, its employees are not included here. The biggest employer after the College of the Siskiyous is Crystal Geyser, which is included in the Manufacturing sector. This sector employed 63 persons in 2013 compare to 82 in 2003. Despite the slight decrease in number of employees between 2003 and 2013, the Manufacturing sector has stabilized over the last few years.

Capitalizing on its geographic location, city businesses especially in South Weed are taking advantage of the steady revenue stream that is brought by I-5 and US 97 travelers. South Weed is a hub for freeway commercial and retail businesses. Significant growth in the Accommodation and Food Services, and Retail Trade sectors are evidence of the City's emphasis on a freeway commercial business model. Both have experienced significant growth in the period between 2003 and 2013; a 67 percent and 37 percent increase of jobs respectively. Table 12.1 shows the change in employment sector distribution between 2003 and 2013.

Table 12.1 Changes in Job by Sector, 2003 versus 2013

| Industry by Sector | 2003 | 2013 | Change 2003 / 2013 | |
|--|--------------|--------------|--------------------|--------------|
| | Number | Number | In volume | In percent |
| Educational Services | 384 | 436 | 52 | 13.5% |
| Accommodation and Food Services | 143 | 239 | 96 | 67.1% |
| Retail Trade | 137 | 188 | 51 | 37.2% |
| Administration & Support, Waste Management and Remediation | 159 | 164 | 5 | 3.1% |
| Health Care and Social Assistance | 125 | 116 | -9 | -7.2% |
| Public Administration | 33 | 75 | 42 | 127.3% |
| Manufacturing | 82 | 63 | -19 | -23.2% |
| Wholesale Trade | 19 | 61 | 42 | 221.1% |
| Other Services (excluding Public Administration) | 48 | 32 | -16 | -33.3% |
| Arts, Entertainment, and Recreation | 13 | 17 | 4 | 30.8% |
| Professional, Scientific, and Technical Services | 4 | 11 | 7 | 175.0% |
| Real Estate and Rental and Leasing | 7 | 10 | 3 | 42.9% |
| Finance and Insurance | 23 | 9 | -14 | -60.9% |
| Information | 1 | 7 | 6 | 600.0% |
| Agriculture, Forestry, Fishing and Hunting | 0 | 5 | 5 | NA |
| Management of Companies and Enterprises | 7 | 4 | -3 | -42.9% |
| Transportation and Warehousing | 1 | 4 | 3 | 300.0% |
| Utilities | 0 | 3 | 3 | NA |
| Construction | 19 | 0 | -19 | -100.0% |
| Mining, Quarrying, and Oil and Gas Extraction | 0 | 0 | 0 | NA |
| Total | 1,205 | 1,444 | 239 | 19.8% |

Source: US Census Bureau, Center for Economic Studies, Longitudinal Employer-Household Dynamics (LEHD), 2003 – 2013; <http://onthemap.ces.census.gov/>

12.3.2 Existing Commercial Land Use

The City of Weed has two centers of commercial economic activity. The first, the area located adjacent to and at the intersection of North/South Weed Blvd and US 97, is the core of economic activity within the city. Commercial establishments such as Ray's Food Place, the Mercantile Mall, and the Summit Inn are located in or near the center of Weed. These businesses serve the local residents and motorists traveling on US 97.

The second center in South Weed is a hub for highway commercial establishments that primarily serve motorists traveling on I-5. This area is home to fast food restaurants, a souvenir shop, and multiple gas stations, including a "Pilot" tractor-trailer rest stop. Highway Commercial

is one of Weed's most prominent and promising economic sectors, comprising roughly 85 percent of the sales tax base.

Table 12.2 provides an overview of existing commercial land use in Weed by parcel and acres. Commercial land use comprises 92 City parcels, totaling 103 acres of land.

Table 12.2 Existing Commercial Land Use in Weed, 2015

| Commercial | Parcels | Acres | Percent |
|--------------------------|-----------|------------|---------------|
| Service | 39 | 63 | 61% |
| Retail | 35 | 36 | 35% |
| Residential / Commercial | 15 | 3 | 3% |
| Office | 3 | 1 | 1% |
| Total Commercial | 92 | 103 | 100.0% |

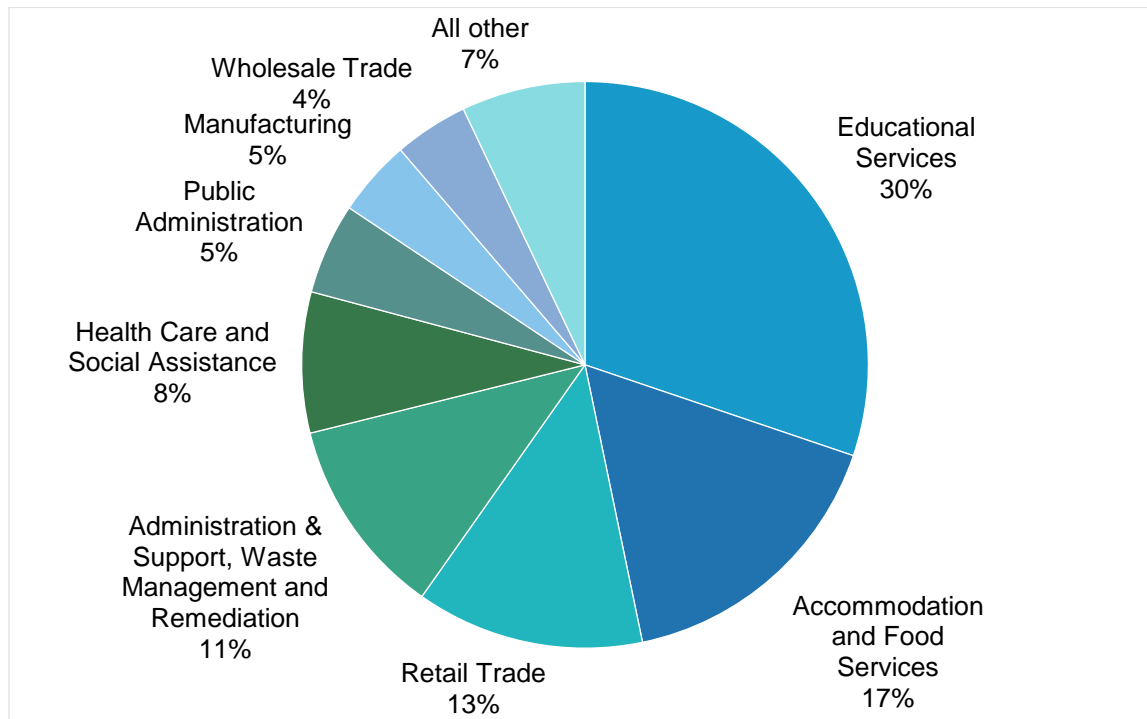
Source: Cal Poly Land Use Inventory, 2015

12.3.3 Employment Statistics

12.3.3.1 Top Employment Industries

The main employment industries in Weed are Educational Services, Accommodation and Food Services, Retail Trade, Administration & Support, Waste Management and Remediation, Health Care, and Public Administration. Figure 12.1 provides a breakdown of employment by industry in Weed in 2013. Table 12.3 shows a summary of employment by industry in the City compared to Siskiyou County.

Figure 12.1 Employment by Sector, 2013



Source: US Census Bureau, Center for Economic Studies, Longitudinal Employer-Household Dynamics (LEHD), 2013; <http://onthemap.ces.census.gov/>

In order to provide additional analysis of employment in Weed, the location quotient is calculated for each industry. The location quotient is a calculation that compares the representation of an individual sector in the local economy to that same sector on a larger, regional scale. The location quotient is calculated by dividing the share of an industry in the local economy by the share of that industry in the regional economy. The result indicates how concentrated each industry is within the specific area. Industries with location quotients greater than one are considered specialized, indicating that the City has a comparable advantage in that industry over the region as a whole. These calculations are shown in Table 12.4, which contains the location quotient for each employment sector in Weed compared to Siskiyou County. The City of Weed is considered very specialized in the administration & support, waste management and remediation sector. The City is also considered specialized in educational service (probably due to the College of the Siskiyous); wholesale trade; and accommodation and food services. As mentioned previously, the concentration of businesses in South Weed catering to motorists explains the over-representation of jobs in the accommodation and food services industries.

Table 12.3 City of Weed and Siskiyou County Employment by Industry, 2013

| Jobs by Sector | Number of Jobs | | Share in Job Market | |
|--|-----------------|--------------|---------------------|---------------|
| | Siskiyou County | Weed City | Siskiyou County | Weed City |
| Health Care and Social Assistance | 1,944 | 116 | 16.2% | 8.0% |
| Educational Services | 1,795 | 436 | 15.0% | 30.2% |
| Retail Trade | 1,462 | 188 | 12.2% | 13.0% |
| Accommodation and Food Services | 1,252 | 239 | 10.5% | 16.6% |
| Public Administration | 1,183 | 75 | 9.9% | 5.2% |
| Agriculture, Forestry, Fishing and Hunting | 786 | 5 | 6.6% | 0.3% |
| Manufacturing | 605 | 63 | 5.1% | 4.4% |
| Other Services (excluding Public Administration) | 411 | 32 | 3.4% | 2.2% |
| Administration & Support, Waste Management and Remediation | 388 | 164 | 3.2% | 11.4% |
| Construction | 375 | 0 | 3.1% | 0.0% |
| Professional, Scientific, and Technical Services | 309 | 11 | 2.6% | 0.8% |
| Arts, Entertainment, and Recreation | 273 | 17 | 2.3% | 1.2% |
| Wholesale Trade | 268 | 61 | 2.2% | 4.2% |
| Finance and Insurance | 216 | 9 | 1.8% | 0.6% |
| Transportation and Warehousing | 164 | 4 | 1.4% | 0.3% |
| Real Estate and Rental and Leasing | 150 | 10 | 1.3% | 0.7% |
| Information | 147 | 7 | 1.2% | 0.5% |
| Utilities | 147 | 3 | 1.2% | 0.2% |
| Mining, Quarrying, and Oil and Gas Extraction | 53 | 0 | 0.4% | 0.0% |
| Management of Companies and Enterprises | 49 | 4 | 0.4% | 0.3% |
| Total | 11,977 | 1,444 | 100.0% | 100.0% |

Source: US Census Bureau, Center for Economic Studies, Longitudinal Employer-Household Dynamics (LEHD), 2013; <http://onthemap.ces.census.gov/>

Table 12.4 Sector Location Quotient for the City of Weed, 2013

| Jobs by Sector | Siskiyou County | City of Weed | Location Quotient |
|--|-----------------|--------------|-------------------|
| Administration & Support, Waste Management and Remediation | 388 | 164 | 3.51 |
| Educational Services | 1,795 | 436 | 2.01 |
| Wholesale Trade | 268 | 61 | 1.89 |
| Accommodation and Food Services | 1,252 | 239 | 1.58 |
| Retail Trade | 1,462 | 188 | 1.07 |
| Manufacturing | 605 | 63 | 0.86 |
| Management of Companies and Enterprises | 49 | 4 | 0.68 |
| Other Services (excluding Public Administration) | 411 | 32 | 0.65 |
| Real Estate and Rental and Leasing | 150 | 10 | 0.55 |
| Public Administration | 1,183 | 75 | 0.53 |
| Arts, Entertainment, and Recreation | 273 | 17 | 0.52 |
| Health Care and Social Assistance | 1,944 | 116 | 0.49 |
| Information | 147 | 7 | 0.39 |
| Finance and Insurance | 216 | 9 | 0.35 |
| Professional, Scientific, and Technical Services | 309 | 11 | 0.30 |
| Transportation and Warehousing | 164 | 4 | 0.20 |
| Utilities | 147 | 3 | 0.17 |
| Agriculture, Forestry, Fishing and Hunting | 786 | 5 | 0.05 |
| Construction | 375 | 0 | 0.00 |
| Mining, Quarrying, and Oil and Gas Extraction | 53 | 0 | 0.00 |

Source: US Census Bureau, Center for Economic Studies, Longitudinal Employer-Household Dynamics (LEHD), 2013; <http://onthemap.ces.census.gov/>

12.3.3.2 Unemployment Trends

According to the 2013 American Community Survey (ACS), 2,329 Weed residents were of eligible working age. Of those residents, 62.6 percent (1,458) were in the labor force. The ACS study estimates that 53.1 percent (1,237 residents) were employed in 2013. The disparity between Weed residents of workforce age and those employed indicates some missed opportunities by businesses to utilize the available and local workforce. Yet, the unemployment rate in 2013 was at 15.2 percent compared to 17 percent in 2009, thus showing a slight improvement. Table 12.5 summarizes employment and unemployment numbers in Weed in 2013.

Table 12.5 Employment and Unemployment by Age in Weed, 2013

| | Number | In labor force | Employed | Unemployment rate |
|-------------------------------------|--------|----------------|----------|-------------------|
| Population 16 years and over | 2,329 | 62.6% | 53.1% | 15.2% |
| 16 to 19 years | 357 | 71.7% | 59.4% | 17.2% |
| 20 to 24 years | 270 | 69.6% | 50.0% | 28.2% |
| 25 to 44 years | 669 | 71.3% | 62.2% | 12.8% |
| 45 to 54 years | 428 | 82.7% | 68.0% | 17.8% |
| 55 to 64 years | 214 | 57.5% | 57.5% | 0.0% |
| 65 to 74 years | 206 | 22.8% | 22.8% | 0.0% |
| 75 and over | 185 | 7.0% | 7.0% | 0.0% |

Source: U.S. Census; 2009-2013 American Community Survey 5-Year Estimates, Table S2301, 2013

12.3.3.3 Education vs. Employment

The most common level of education attained by residents is some college or associate's degree, with or without degree. The second highest level of attainment is high school or some equivalent. 14.7 percent of the population 25 years and over in Weed does not have a high school degree or equivalent. In comparison, 4.7 percent of the population ages 18 to 24 years old did not finish high school. Thus, the younger population in Weed is more educated than residents who are 25 years and older. Table 12.6 summarizes the educational attainment of Weed residents.

It is the conventionally view that education and employment levels are correlated meaning, the lower the educational attainment, the higher the unemployment level. In 2013, approximately 15.2 percent of Weed's workforce, with various levels of education, was unemployed.

Table 12.6 Educational Attainment in Weed, 2013

| | Number | Share |
|---|--------------|---------------|
| Population 18 to 24 years | 568 | 100.0% |
| Less than high school graduate | 28 | 4.9% |
| High school graduate (includes equivalency) | 106 | 18.7% |
| Some college or associate's degree | 434 | 76.4% |
| Bachelor's degree or higher | 0 | 0.0% |
| Population 25 years and over | 1,702 | 100.0% |
| Less than 9th grade | 89 | 5.2% |
| 9th to 12th grade, no diploma | 162 | 9.5% |
| High school graduate (includes equivalency) | 550 | 32.3% |
| Some college, no degree | 540 | 31.7% |

| | Number | Share |
|---------------------------------|--------|-------|
| Associate's degree | 117 | 6.9% |
| Bachelor's degree | 165 | 9.7% |
| Graduate or professional degree | 80 | 4.7% |

Source: U.S. Census; 2009-2013 American Community Survey 5-Year Estimates; 2013

12.3.4 Standards and Employment Measures

The condition of a local economy's performance may be measured according to the following criteria:

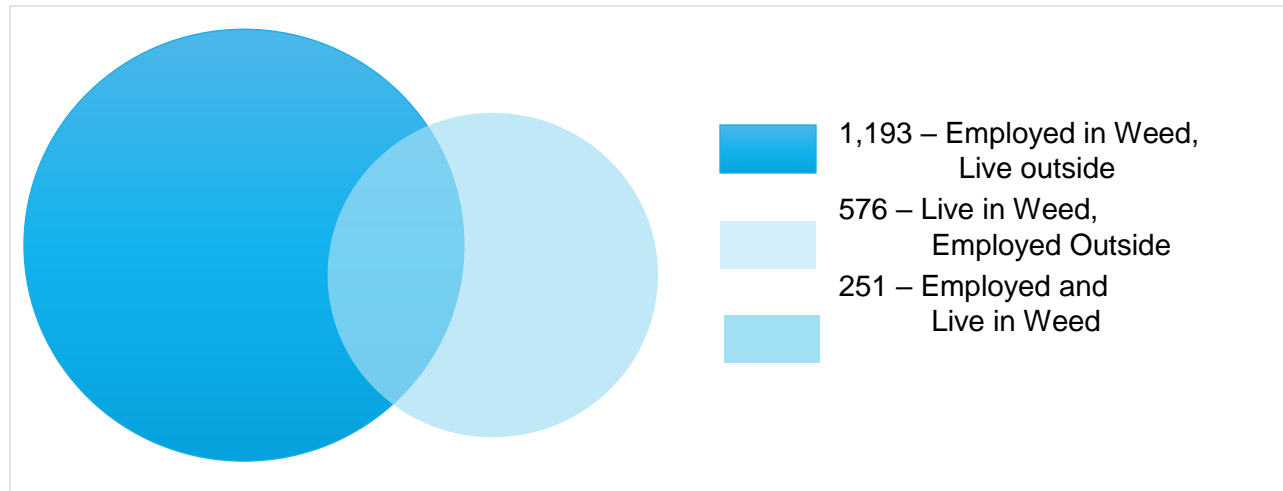
- Jobs to Resident Ratio
- Jobs to Housing Balance
- Employee Commute Patterns
- Vacant to Occupied Commercial Uses

These criteria provide indications of the economic health of the City when compared to similar data for the region, state, or nation in which the City is located.

12.3.4.1 Jobs to Resident Ratio

In 2013, there 1,444 jobs in Weed and 2,971 persons lived in the City. Thus, the City of Weed had an approximate ratio of jobs to residents of 0.49. This indicates that jobs opportunities within the City may not be available for all working age residents s there was half a job for every person of working age.

Figure 12.2 shows the inflow and outflow of jobs in Weed in 2013. In 2013, only 251 persons both lived and worked in Weed. More than two times as many or 576 working residents held jobs outside of city limits. This shows that only a small portion of Weed residents lived and worked in the City. Non-residents held 85 percent of the jobs in Weed. In addition, residents working within Weed city limits generally held jobs with lower qualifications and lower incomes compared to the City average.

Figure 12.2 Inflow and Outflow of Jobs in Weed, 2013

Source: US Census Bureau, Center for Economic Studies, Longitudinal Employer-Household Dynamics (LEHD), 2013; <http://onthemap.ces.census.gov/>

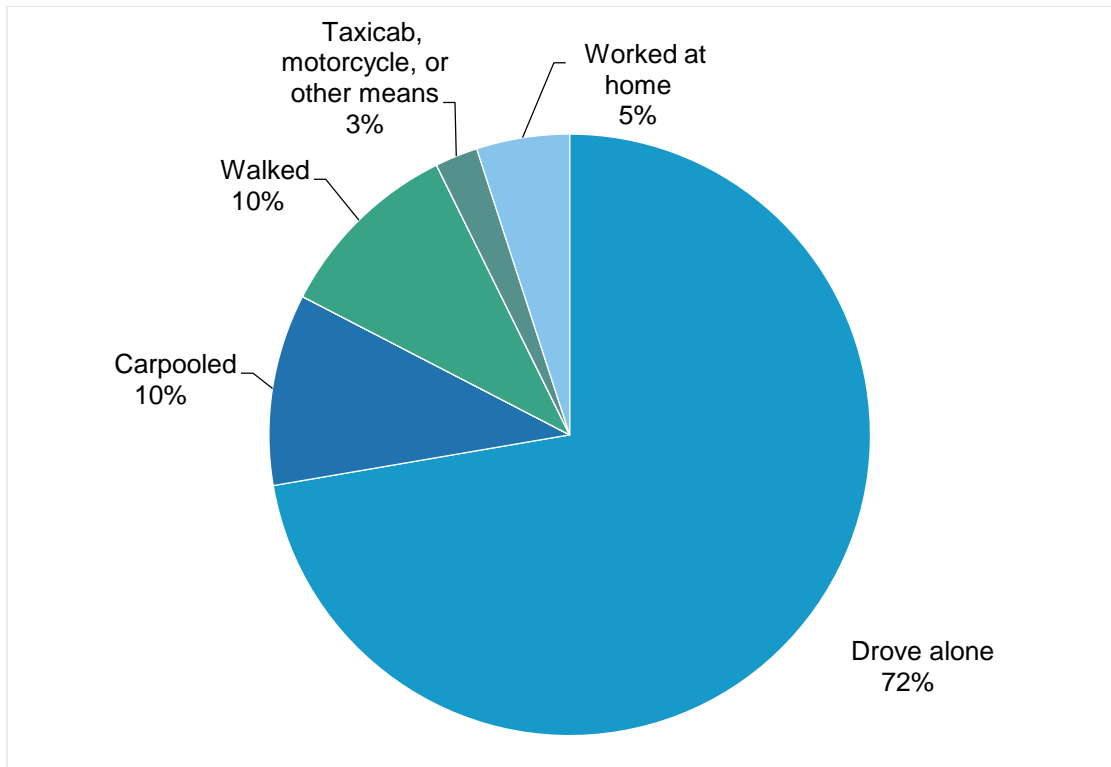
12.3.4.2 Jobs to Housing Balance

A jobs-to-housing ratio is used to assess and describe the adequacy of local housing resources and whether they meet the needs of the local workforce. The City of Weed strives for a jobs-to-housing ratio of 1:1 as an indicator that housing and job volume are a suitable match. As of 2013, there were 1,197 total housing units and 1,444 jobs, creating a jobs to housing ratio of 1.2. Although there was a good match between number of jobs and number of housing, the previous section on jobs to labor force revealed that the majority of the jobs were held by non-residents of the City. .

Achieving the appropriate jobs to housing balance within a city entails matching not only the number of housing units to the number of jobs, but also providing the appropriate types of housing that suit the needs of those working within the City. Housing size, price, and location should appeal to the local workforce and encourage workers to live within the City. For more information regarding housing, please refer to the Housing Element.

12.3.4.3 Employee Commute Patterns

According to the 2013 American Community Survey, the majority of Weed's workforce commuted to work by either truck or car. 72 percent of workers commuted to work by car alone, 10 percent carpooled, and 10 percent walked to work. 5 percent of workers worked from home. Figure 12.3 shows employee commute patterns in Weed.

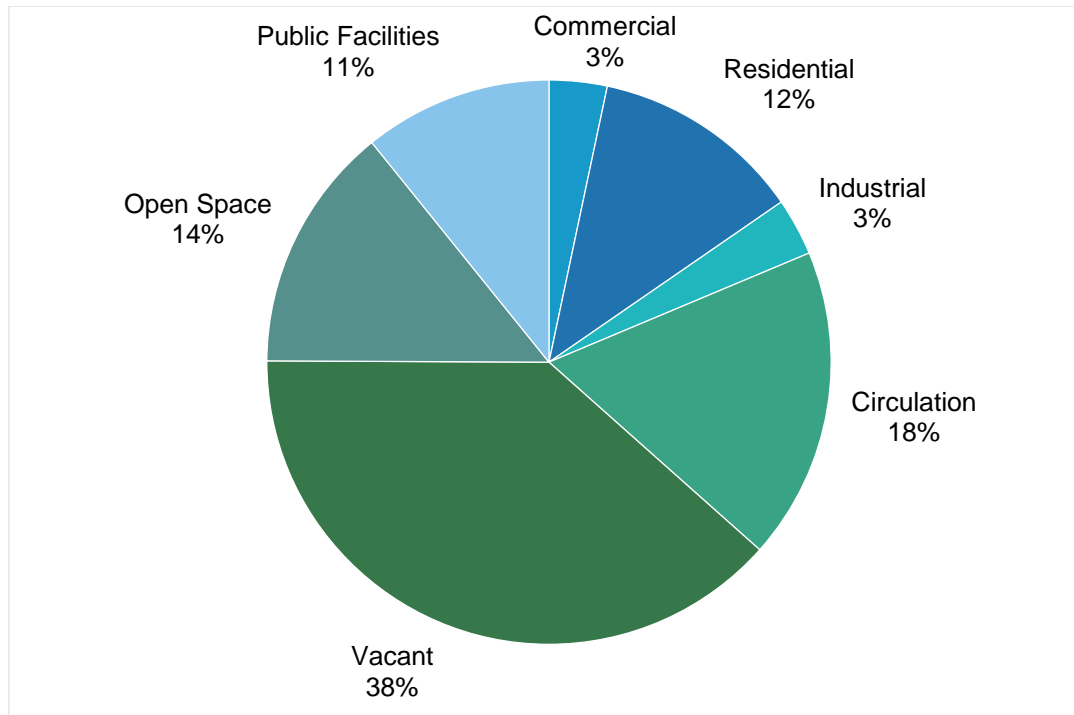
Figure 12.3 Employee Commute Pattern in Weed, 2013

Source: U.S. Census; 2009-2013 American Community Survey 5-Year Estimates; 2013

12.3.4.4 Vacant to Occupied Commercial Uses

A detailed land use inventory, completed in October of 2015, showed that the City of Weed is made up of 1,459 parcels of land on 3,077 acres of which 92 parcels or 103 acres are in commercial use. Commercial land uses include retail, service, and office spaces. As shown in Figure 12.4, commercial properties account for three percent of total acreage, while vacant land accounts for 38 percent. Demand is measured by the amount of vacant stock available; conventionally, the ideal vacancy rate is should be about five percent. Field observations during the land use inventory revealed that there were far more vacant than occupied commercial properties along Main Street, which is the downtown core of the City. This observation indicates less than ideal conditions for the commercial sector in the City. High vacancy rates can be attributed to low-market demand for commercial businesses, or unsuitable economic conditions for existing businesses. There were also several vacant parcels located within commercial areas that present opportunities for future expansion of commercial uses.

Figure 12.4 Total Acres per Land Use in Weed, 2015



Source: Cal Poly Land Use Inventory, 2015

12.3.5 General Economic Outlook

The City of Weed is working to reduce unemployment as well as provide various economic opportunities within the City. Title III and Title IV of the City of Weed's municipal code establishes a financial rubric for development within city boundaries. Title III outlines the tax structure of land uses, while Title IV outlines other business taxes, licenses, and regulations. These ordinances, as well as the City's municipal code, are adopted by City Council as a tool to implement the General Plan. Currently, the City of Weed imposes the following financial tools:

- Special gas tax street improvement fund
- Real property transfer tax
- Sales and use tax
- Transactions and use tax
- Transient occupancy tax
- Business license fees

As shown in Table 12.7, the City's budget reveals that these taxes and fees make up the majority of the City's revenue. The table also reveals a general upward trend in City revenues. Revenue growth is essential for increased ability to expand amenities and services for residents.

Table 12.7 Revenue Summary in Dollars

| | Prior Budget | | Actual | Estimate | Budget | |
|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | FY 2013-14 | FY 2014-15 | FY 2013-14 | FY 2014-15 | FY 2015-16 | FY 2016-17 |
| Taxes | 2,060,000 | 2,121,800 | 2,038,868 | 2,079,000 | 2,280,000 | 2,340,000 |
| Licenses & Fees | 22,000 | 22,000 | 23,699 | 86,000 | 85,000 | 65,000 |
| Interest | 300 | 400 | 239 | 350 | 400 | 450 |
| Franchise Taxes | 68,000 | 68,000 | 72,829 | 74,000 | 72,000 | 76,000 |
| From Other Agencies | 370,000 | 380,000 | 271,097 | 234,500 | 7,400,000 | 2,300,000 |
| Vehicle Code Fines | 8,000 | 8,000 | 9,306 | 10,000 | 10,000 | 10,000 |
| TOTAL | 2,529,100 | 2,601,000 | 2,416,038 | 2,483,850 | 9,847,400 | 4,791,450 |

Source: City of Weed, Final Budget 2015-2017

12.4 Issues and Opportunities

On October 10, 2015, the City held the first public meeting for the proposed General Plan Update. During this meeting, the public identified strengths and weaknesses of the City of Weed. The following sections identify and summarize comments pertaining to economic development from the concerns and wishes of the community.

12.4.1 Strengths and Opportunities

Based on input received in the first public meeting, the City's economic strengths include South Weed and the I-5 commercial area, local entrepreneurship, limited competition from "big box" stores, and availability of blue-collar jobs. Due to Weed's location between the major cities of San Francisco and Portland, it often serves as a stopping destination for truck drivers and travelers. A majority of the City's revenue comes from the highway oriented commercial services located along I-5 and US 97. Community members also identified a strong sense of entrepreneurship within the City, which serves as an opportunity to invest in the development of local businesses. The minimal presence of big-box retail stores in Weed was recognized as a strength that reduces competition with local businesses and maintains the quaint, small-town feel of the City. Lastly, community members noted that the blue-collar workforce in Weed is a strength and opportunity for the City. The presence of Roseburg Forest Products, Crystal Geyser, and other manufacturing industries are an asset to the City in that they provide employment opportunities that match the skill level of local residents. The City of Weed should continue to attract and invest in industries that may require higher educational attainment to meet the needs of the younger population joining the workforce. In addition, the City should work to promote economic development and employment opportunities for all skill levels within the community, while supporting those sectors that have seen steady growth since 2003.

12.4.2 Threats and Constraints

Based on community input received at the first public meeting, barriers to economic development in Weed include the limited numbers of well-paying jobs, skilled laborers, and employment opportunities for youth. Others include scarcity of investment in downtown businesses and economic competitiveness between South Weed and Downtown Weed. Although many participants identified the prevalence of blue-collar jobs as strength in Weed, many also noted that the City is lacking a variety of well-paying jobs. Some participants noted that this is related to the limited skill set of local residents as well as training and educational opportunities. Many participants expressed concern over the limited number of employment opportunities for the younger population.

The high vacancy among businesses in Downtown Weed detracts from the vibrancy and aesthetic appeal that can attract visitors to the downtown area. Many participants indicated that they are disappointed that they must travel to other towns to buy basic goods. Many community members also expressed concern about competition between economic activity in South Weed and Downtown Weed. With appropriate and complementary economic strategies, the expansion of the South Weed economy as the main highway commercial corridor should not threaten the economic resilience of the historic downtown. The two locations offer vastly different appeal and

can provide varying services to residents and visitors for successful economic development in both areas.

12.5 Emerging Directions

Based on the existing conditions and community input received, the emerging directions for economic development in the City of Weed are as follows:

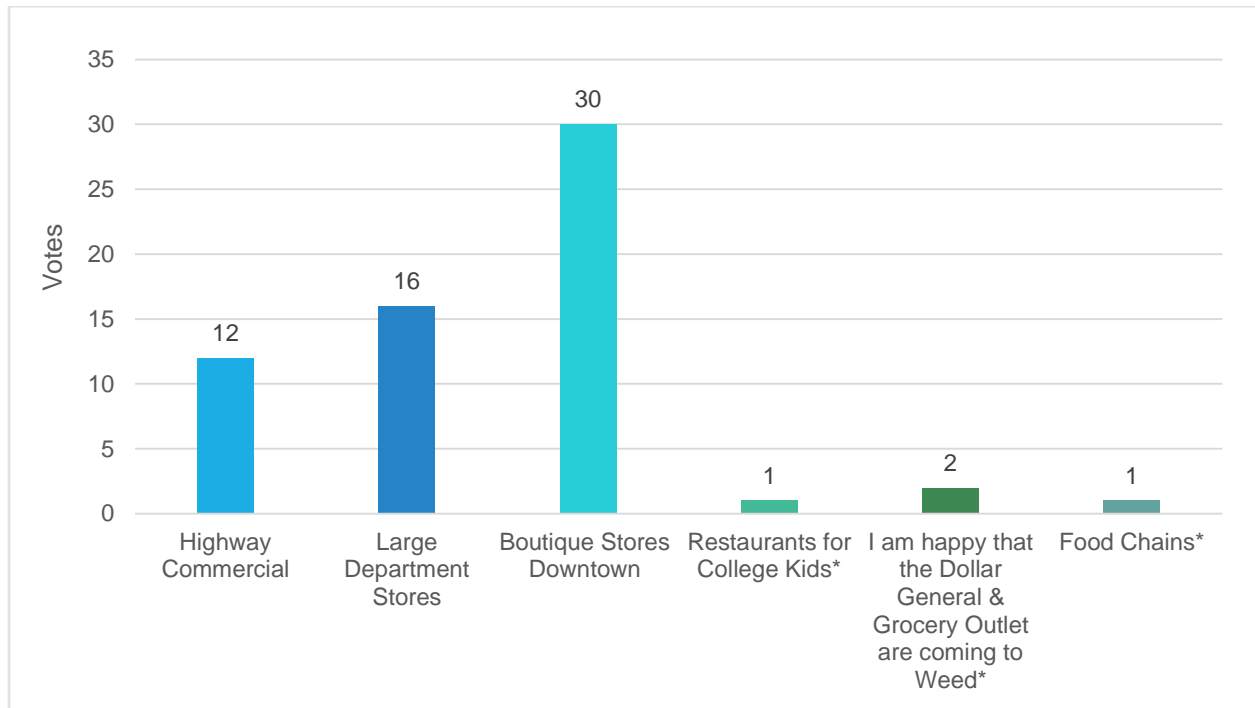
The City should continue to emphasize growth in the South Weed freeway commercial area. There are already several developments planned for South Weed due to the success of South Weed businesses and the availability of land. Residents have indicated a desire for more commercial options downtown. The existence of many vacancies in the downtown area provides opportunity for reinvestment in local businesses. Science and technology based businesses or industries are desired to make Weed a thriving economic center in Siskiyou County. Vocational training in science and technology related sectors would allow residents to find employment in newer industries and the younger population with a higher educational attainment provides a skilled labor force that may help to attract those businesses. This would offer higher quality and better paying jobs to residents, making housing more affordable.

12.5.1 Community Preferences

On November 7th, 2015, the City held its second public meeting for the General Plan Update to assist in guiding the emerging directions for the City of Weed. Participants were asked five separate economic development questions (each with multiple answer options) and were asked to vote based on preference for various options.

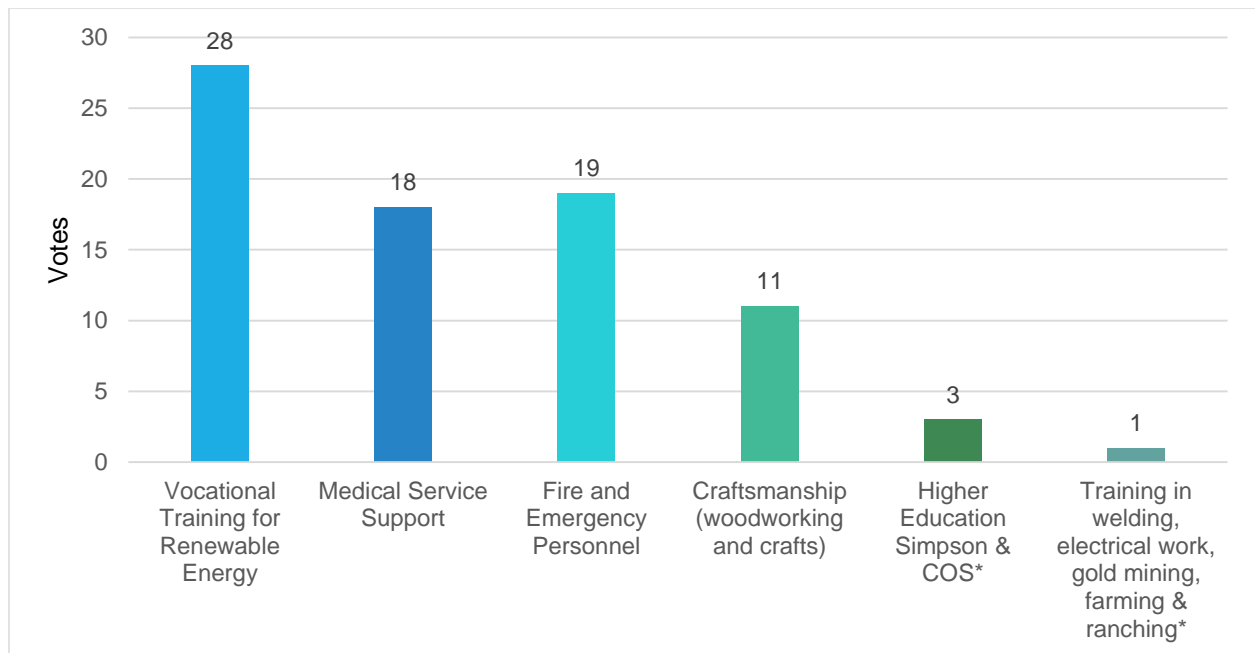
Participants felt that locally owned boutique stores were most needed in Weed to revitalize the downtown. Work force training in renewable energy was a priority for participants, followed by medical service support and fire and emergency training. Concerning new economic activity in Weed, participants desired retail and services, science and technology businesses, skilled trade, and healthcare services. According to participants, Weed should promote the many outdoor recreation options available to visitors, followed closely by its historic downtown. The outdoor opportunities and historic downtown are resources that should be utilized to Weed's economic advantage. Finally, participants want to concentrate future economic development mostly in central Weed, followed by South Weed and the area surrounding the College of the Siskiyous. Figures 12.5, 12.6, 12.7, 12.8, and 12.9 summarize preferences for residents based on voting during the second public meeting.

Figure 12.5 Type of Commercial Development Most Needed in Weed, 62 Votes



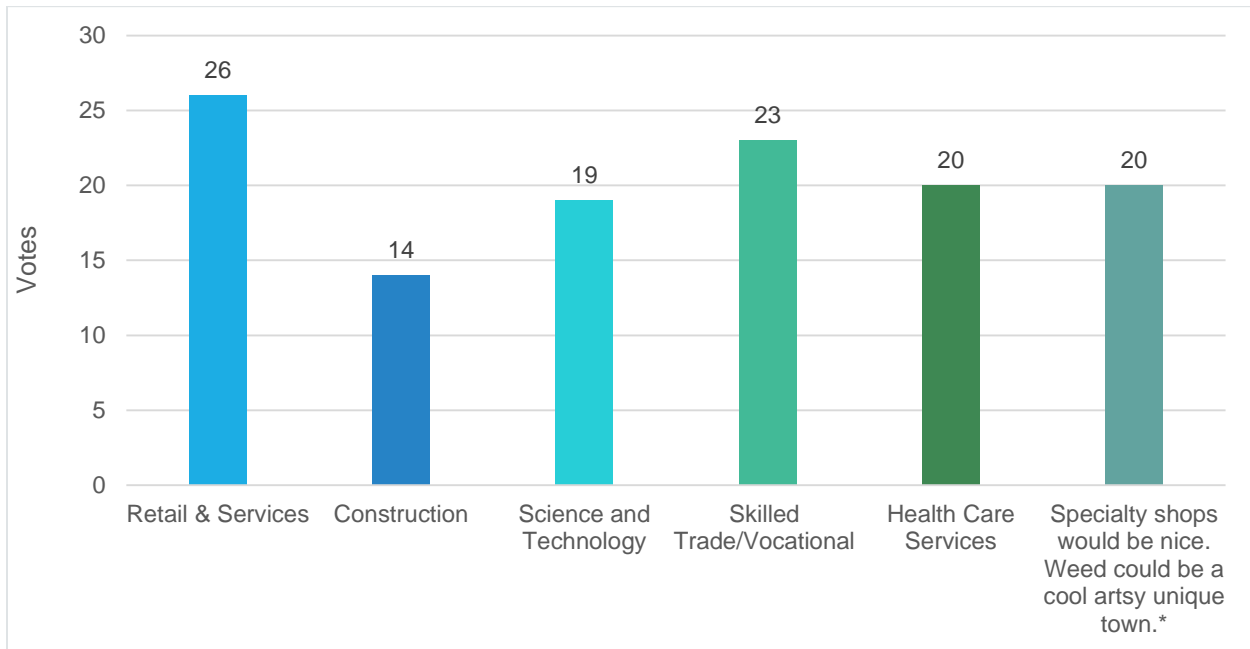
**Answer not in the original questionnaire and added by participants*

Figure 12.6 Type of Workforce Training Weed Should Prioritized, 80 Votes



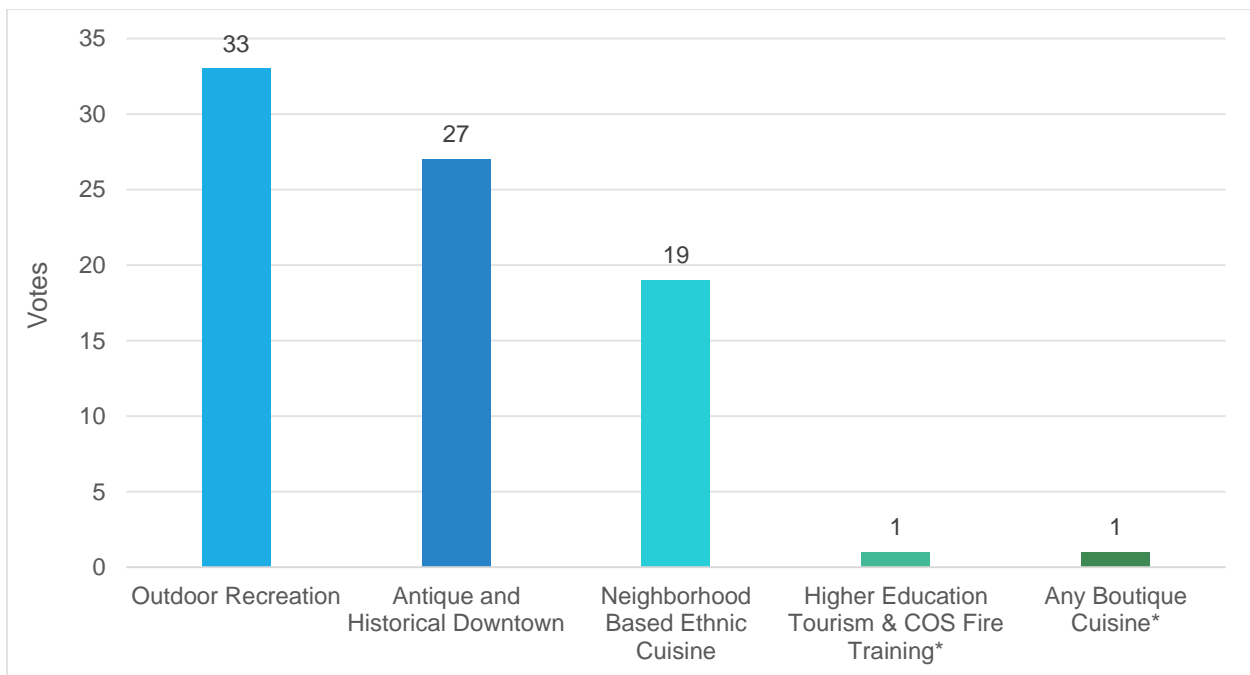
**Answer not in the original questionnaire and added by participants*

Figure 12.7 Type of Economic Activity Most Needed in Weed, 122 Votes



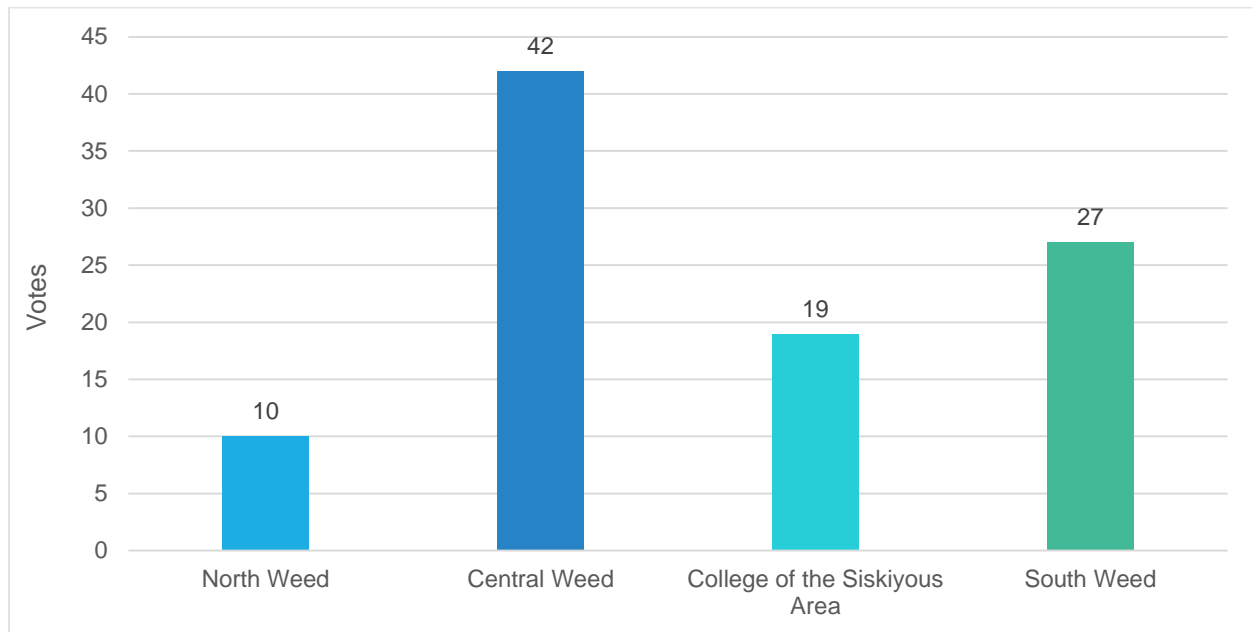
**Answer not in the original questionnaire and added by participants*

Figure 12.8 Type of Tourism Weed Should Promote, 81 Votes



**Answer not in the original questionnaire and added by participants*

Figure 12.9 Areas Weed Should Concentrate Economic Development, 98 Votes



12.6 References

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13 PUBLIC FACILITIES

13.1 Introduction

This chapter provides a comprehensive overview of existing public service infrastructure and facilities in the City of Weed. This is an optional element of the General Plan. Public services and facilities provide important services to the City and its residents that support quality of life in the community.

13.2 Regulatory Setting

Federal, state, and local regulations set the standards for the level of service provided by public facilities and infrastructure to residents. The following subsections identify the regulations and standards.

13.2.1 Federal Regulations

Water

Safe Water Drinking Act

Safe Water Drinking Act (SDWA), is administered by the US Environmental Protection Agency (EPA) in coordination with the California Department of Public Health (CDPH) to set standards for drinking water quality by overseeing state and local water suppliers who implement those standards. The EPA is responsible for developing and enforcing regulations that implement environmental laws enacted by Congress.

Clean Water Act

Clean Water Act (CWA) establishes requirements for the regulation of pollutant discharge into U.S. waters and regulating standards of surface water. Under the CWA the EPA implements pollution control programs, sets wastewater standards, and sets water quality standards for all potable water supplies.

The US Environmental Protection Agency (US EPA)

The US Environmental Protection Agency, Office of Wastewater Management (OWM) is responsible for directing the National Pollutant Discharge Elimination System (NPDES) permit, pretreatment, and municipal bio-solids management project under the Clean Water Act. This includes regulations on municipal and industrial storm water discharges.

Utilities

Federal Energy Regulatory Commission (FERC)

The Federal Energy Regulatory Commission (FERC) regulates the transmission and sale of electricity, natural gas, and oil. In addition, the FERC reviews proposals to build liquefied natural gas terminals and interstate natural gas pipelines, and licenses hydropower projects.

Federal Communications Commission (FCC)

The Federal Communications Commission (FCC) specifies standards for the appropriate siting and change in location of any telecommunications antenna and related facility, including, but not limited to antennas for wireless telecommunications facilities, and amateur radio installations. These standards are adopted to promote the FCC's objectives such as the non-ionizing electromagnetic radiation and accessory equipment standards as it relates to the placement of equipment and structures.

Public Schools

No Child Left Behind Act of 2015

The No Child Left Behind Act of 2001 (NCLB) was established to create fair and equal opportunities for all children to obtain a high quality education. The Act follows four principles: accountability of results, flexibility and local control over use of federal funds, enhanced parental choice, and effective teaching methods. The No Child Left Behind Act was reauthorized in 2015 and now gives states more flexibility for setting education standards for measuring student and school performance.

13.2.2 State Regulations

Water

California Water Code

California Water Code, a section of the California Code of Regulations, is the governing law for all aspects of water management in California.

Urban Water Management Planning Act

Urban Water Management Planning Act requires all of California's urban water suppliers to have an Urban Water Management Plan (UWMP). UWMPs encourage long-term resource planning by cities, to ensure adequate water supplies to meet existing and future water demand. The City of Weed adopted a Master Water Plan in 2003.

Senate Bill (SB) X7-7 Statewide Water Conservation

Senate Bill (SB) X7-7 Statewide Water Conservation requires all water suppliers to increase water use efficiency in both urban and agricultural water conservation. This legislation sets an overall goal of 20 percent reduction per capita urban water use by the year 2020. The Siskiyou County Flood Control and Water District establishes and monitors water conservation measures in the City of Weed.

The State Water Resources Control Board

The State Water Resources Control Board (SWRCB) performs functions related to water quality, including issuance of wastewater discharge permits, programs regulating stormwater runoff, and underground and aboveground storage tanks. The SWRCB governs nine Regional Water Quality Control Boards (RWQCB). The northwestern half of Siskiyou County and the City of Weed fall under the jurisdiction of the North Coast Regional Water Quality Control Board.

Title 22 of California Code of Regulations

Title 22 of California Code of Regulations, is governed by the Regional Water Quality Control Boards (RWQCB) and the California Department of Public Health (CDPH). The code regulates the use of reclaimed wastewater, and sets standards for specific uses. The northwestern half of Siskiyou County and the City of Weed fall under the jurisdiction of the North Coast Regional Water Quality Control Board.

California Local Agency Formation Commission

The California Local Agency Formation Commission (LAFCO) conducts municipal service review for specified public agencies under its jurisdiction. This includes evaluating an agency's ability to provide public services within the designated service area. The Siskiyou County LAFCO governs the City of Weed.

Waste Management

California Integrated Waste Management Act (AB 939)

California Integrated Waste Management Act of 1989 (AB 939) mandates cities and counties to divert at least 50% of their entire waste stream from landfills.

California Beverage Container Recycling and Litter Reduction Act

The California Beverage Container Recycling and Litter Reduction Act of 1986 is administered by the California Environmental Protection Agency (Cal/EPA) California Department of Resources Recycling and Recovery (CalRecycle). The act established the California Redemption Value (CRV) of recyclable containers.

California Environmental Protection Agency

Cal/EPA and California Resources Agency regulate hazardous and non-hazardous solid waste management within the state. Within CAL/EPA, the California Integrated Waste Management Board (CIWMB) manages non-hazardous waste collection, processing, recycling and disposal. CIWMB is responsible for monitoring cities and counties to ensure they are implementing adequate source reduction, recycling, composting, and other diversion methods to meet AB 939 mandates.

Department of Toxic Substances

The Department of Toxic Substances Control focuses on preventing exposure of hazardous chemicals to humans and ecosystems and keeping them out of the waste stream.

Utilities

California Consumer Power and Conservation Financing Authority Act

The state needs to finance, purchase, lease, own, operate, acquire, or otherwise provide financial assistance for public and private facilities for the generation and transmission of electricity and for renewable energy, energy efficiency, and conservation programs.

California Public Utilities Commission

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CPUC serves the public interest by protecting consumers and ensuring the provision of safe, reliable utility service and infrastructure at reasonable rates, with a commitment to environmental enhancement and a healthy California economy.

Fire Protection Services

State Department of Forestry and Fire Protection

The California Department of Forestry and Fire Protection enforces laws and regulates logging on all privately owned lands in California. CAL-Fire responds to all types of emergencies including wildland fires, residential/commercial structure fires, automobile accidents, heart attacks, drowning, lost hikers, hazardous material spills on highways, train wrecks, floods, and earthquakes. As a part of a mutual agreement, CAL-Fire, Siskiyou County, and the City of Weed work together to protect residents from disasters.

Emergency Medical Services

California Emergency Medical Services Authority

The California Emergency Medical Services Authority is responsible for paramedic licensure, emergency medical technician regulations, trauma center and trauma system standards, ambulance service coordination, and disaster medical response. It is also responsible for managing the state's medical response to major disasters.

Public Schools

School Accountability Report Card

The School Accountability Report Card (SARC) requires all schools receiving state funding to prepare a SARC for each academic year. This information provides communities and parents information about public schools, and allows for evaluation and comparison of schools based on a variety of indicators. Indicators include standardized test performance and facility maintenance. The SARC also acts as a progress report for the school's goal achievements. The Siskiyou Union High School District and Weed Union Elementary School District prepared SARCs for the 2013-2014 academic year.

California Standardized Tests

The State of California requires standardized tests to determine academic achievement in all public schools. Schools are rated according to the State's Academic Performance Index (API), and the results are included in the School Accountability Report Card (SARC). The Weed schools that participate in SARC provide API scores for student academic performance.

13.2.3 Local and Regional Regulations

Water

Siskiyou County Flood Control and Water District

The Siskiyou County Flood Control and Water District is responsible for securing adequate water supplies for Siskiyou County. This includes the management of water quality, flood control, and groundwater issues.

Master Water Plan Update, 2003

The City of Weed adopted a Master Water Plan Update in 2003. This Plan includes preliminary planning, staging and cost estimates for major capital as the City grew over a ten-year horizon.

Chapter 14.04 Water System - City of Weed Municipal Code

This chapter outlines the regulations concerning water use in the City of Weed. This includes service requirements, scheduling rates for water and payment for service.

Waste Management

Chapter 14.08 Sewer Service, Section 130 - Prohibited discharges – City of Weed Municipal Code

This section of the City Municipal Code controls what is discharged into any sewage facility which directly or indirectly discharges to facilities owned by the city (City of Weed, 2015).

Chapter 14.08 Sewer Service, Section 140 - Industrial wastewaters discharges – City of Weed Municipal Code

This section of the Code states that a permit is required for industrial wastewater to be discharged directly or indirectly into a trunk sewer (City of Weed, 2015).

Chapter 14.08 Sewer Service, Section 590 - Trucker's Discharge Permit discharges – City of Weed Municipal Code

This section of the Code prevents the discharge of septic tank, seepage pit, interceptor or cesspool contents, industrial liquid wastes or other liquid wastes to sewerage facilities of the city or to facilities that discharge directly or indirectly without a Trucker's Discharge Permit.

Chapter 14.12 City Landfill – City of Weed Municipal Code

Section of the Municipal Code pertaining to the city landfill that identifies the city contracted operator as having full authority to direct landfill operations as they see fit.

Utilities

Chapter 12.08 - Underground Utilities Districts – City of Weed Municipal Code

This is the section of the Code pertaining to the conversion of utilities to underground locations. It defines the responsibility of the public, utility companies, and the city when the time comes to place utilities underground.

Police Services

Siskiyou County Sheriff

The Siskiyou County Sheriff provides law enforcement for unincorporated Siskiyou County. The Department is composed of four major divisions. Each division may be subdivided to manage identified assignments. Where divisions are of sufficient complexity, they may be subdivided into units to manage specific concerns.

California Highway Patrol

The California Highway Patrol (CHP) provides law enforcement through patrol of State and County highways throughout Siskiyou County. In addition, the CHP is available to report to major accidents anywhere in the unincorporated areas and has mutual aid agreements with other agencies to assist in emergencies.

City of Weed Police Department

The City of Weed Police Department provides law enforcement for the City of Weed. The City of Weed has 15 full-time staff and three part-time employees. These employees are comprised of ten sworn officers and eight dispatcher and/or administrative personnel. The City of Weed does not have a detention facility and detains arrestees through mutual aid agreements.

Fire Protection Services

Siskiyou County Office of Emergency Services

The Siskiyou County Office of Emergency Services (OES) is a county agency dedicated to the protection of lives, health and property during times of disaster. The OES accomplishes its role by working closely with state, county, and local agencies for public services such as law enforcement, fire, and public works.

Chapter 2.16 Fire Department - City of Weed Municipal Code

This Chapter of the City of Weed Municipal code establishes the city fire department as the Weed Volunteer Fire Department (WVFD). The Code outlines the duties of and services provided by the Weed Volunteer Fire Department.

Emergency Medical Services

Chapter 2.24 Emergency Services – City of Weed Municipal Code

This Chapter of the City Municipal Code provides for the preparation and carrying out of plans for the protection of persons within the city in the event of an emergency. It outlines the membership of a disaster council, its powers, and emergency plan and expenditures.

Public Schools

Siskiyou County Board of Education

The Siskiyou County Board of Education oversees the educational system in Siskiyou County for Kindergarten through 12th grade. Eight board members meet monthly to provide the goals and policies to the Superintendent of Schools and the County School Districts. The City of Weed falls under the purview of the Siskiyou Union High School District and the Weed Union Elementary School District.

13.3 Existing Conditions

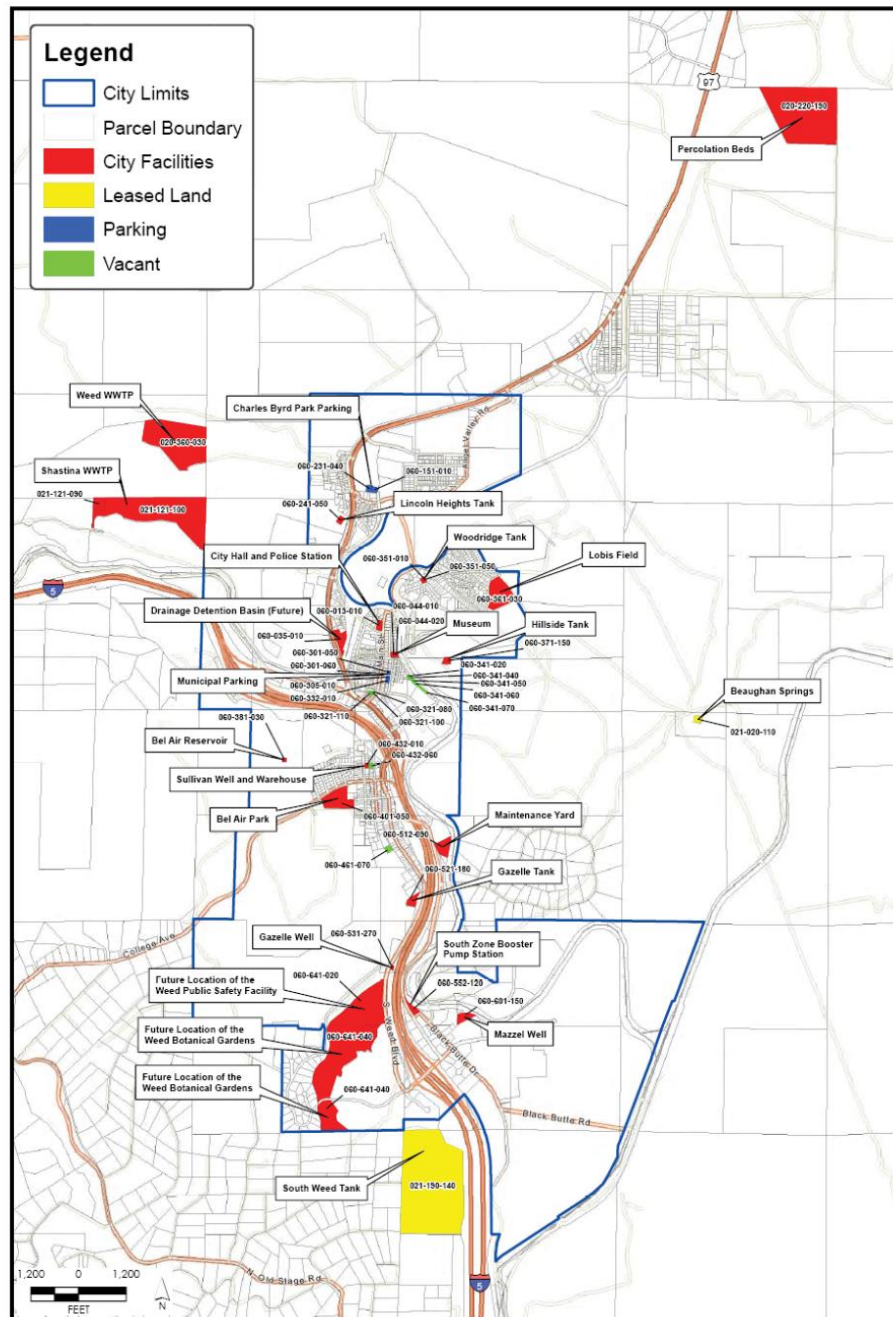
13.3.1 Water Supply and Delivery

This section provides an overview of the existing water supply and delivery systems in the City of Weed. Water supply availability and efficient delivery are vital functions of the City's water system infrastructure. Examination of current water needs provides information in forecasting future water needs, and infrastructure improvements that the City might consider as it continues to grow and develop.

13.3.1.1 Supply

The City of Weed relies on springs and wells for water supply. Water from Beaugan Spring, Mazzei Well and Gazelle Well are supplied by the Mount Shasta Watershed. Beaugan Spring is privately owned by Roseburg Forest Products. In 1966, the International Paper Company and the City of Weed entered into a 50-year contract for City access to 1.29 million gallons per day (MGD). Beaugan Springs feed the Hillside, Woodridge, and Lincoln Heights storage reservoirs. Mazzei Well is located in south Weed just northeast of south Weed Interstate 5 interchange. This well provides 0.91 MGD. The City also has an emergency water supply in Gazelle Well which provides 0.81 MGD. Gazelle well is not in primary use due to the taste and odor from sulfur-reducing bacteria. There are some private wells maintained by private citizens used within the city limits. Table 14.1, lists the location, status, and production capabilities of city water supplies. Map 14.1 shows the location of each well within the City of Weed in addition to the location of all City owned properties.

Map 13.1 Location of Water Supply Sources in Weed



City of Weed Public Facilities

Public Facilities

Source: 2011 Municipal Services Review

Table 13.1 City of Weed Water Supply Sources

| Water Source | Year Constructed | Status | Production Capability (MGD*) | Improvements |
|---|------------------|--------------------|------------------------------|---------------------|
| Beaughan Springs | 1975 | Active Supply | 1.29 | Upgrades due to age |
| Mazzei Well | Unknown | Active Supply | 0.96 | Updates due to age |
| Gazelle Well | Unknown | Emergency Use Only | 0.72 | Upgrades |
| Total Supply, excluding Emergency Supply | | | 2.25 | |
| Total Supply | | | 2.97 | |

*MGD = Million Gallons per Day

Source: 2011 Municipal Services Review

In the 2003 Master Water Plan, the City measured an estimated raw water usage of 248.2 million gallons per year (MGY) which equates to approximately 0.68 MGD. In the 2011 Municipal Services Review, the projected water usage for 2013 was 1.61 MGD. This equates to a per capita use of 542 gallons per person per day. This does not necessarily reflect the average household use which is typically 80 to 100 gallons per day.

The City of Weed also maintained six storage reservoirs at the time of the Municipal Services Review Report. The City's water supply totaled 1.55 million gallons of water (MG). Table 13.2 lists all of the water storage facilities for the City, the year constructed, volume of storage, and status.

Table 13.2 City of Weed Water Storage Supply

| Storage Facility | Year Constructed | Volume (MG*) | Improvements |
|------------------------|------------------|--------------|--|
| Hillside | 2004 | 0.30 | None |
| Woodridge | 1962 | 0.10 | Needs Replacement |
| Lincoln Heights | 1962 | 0.10 | Needs Replacement |
| Bel Air | 1960 | 0.40 | Needs Replacement with new 0.625 MG tank |
| Gazelle | 1971 | 0.30 | Recoat interior |
| South Zone | 1966 | 0.35 | None |
| Total Supply | | 1.55 | |

*MG = Million Gallons

Source: 2011 Municipal Services Review

13.3.1.1.1 Supply Reliability

The City's local water has yielded a safe and reliable water supply to meet historical water demand. The most likely deficit to the water supply is contamination from aging water system infrastructure. At the time of the 2003 Master Water Plan, neither Beaughan Springs nor Mazzei well required treatment. Depending on new federal and state water regulations, the City might need to chlorinate the water supply. Gazelle Well, the emergency supply well, is chlorinated near the wellhead to reduce the taste and odor concerns.

13.3.1.2 Distribution

The City of Weed water distribution consists of more than 135,000 feet of ¾-inch to 12-inch diameter pipeline built from a variety of materials resulting in some variability in age and condition. The vast majority of the City's network is less than 30 years old and expected to last for another 40 years or more. The 2003 Master Water Plan identified that 33.5% of the water supply was unaccounted for and was determined to be due to the age of the pipe network. The network has been updated post 2003 Master Water Plan but there is no data on the decrease in unaccounted water.

13.3.1.3 Consumption and Projections

Currently, water consumption and source projections are out of date, the last evaluation of water resources was in the 2011 Municipal Services Review created for LAFCO. Projections on water consumption extend to 2013.

13.3.2 Wastewater Collection and Disposal

This section provides an overview of the existing wastewater collection and treatment systems in the City of Weed. Wastewater treatment and disposal are vital functions of the City's wastewater system infrastructure. Examination of current wastewater flows provides information for forecasting future treatment needs and infrastructure improvements to meet future needs as the City continues to grow and develop.

13.3.2.1 Wastewater Treatment Facility

The City maintains and operates two wastewater collection and treatment facilities and a single effluent disposal facility. The northern part of the City is served by the Weed Wastewater System and the southern part of the City is served by the Shastina Wastewater System, with both wastewater treatment plants outside of and to the northwest of the City between Interstate 5 and US Highway 97. The Weed sewage collection system consists of approximately 69,000 linear-feet of 6-, 8-, and 10-inch sewer mains, which includes 8,000 linear-feet of 10-inch Boles Creek Interceptor Sewer and about 4,600 linear-feet of 8-inch Beaughan Creek Interceptor Sewer. The Shastina sewage collection system consists of approximately 43,000 linear-feet of 6-, 8-, and 10-inch sewer mains plus about 7,600 linear-feet of 12-inch interceptor sewer to the treatment plant as well as approximately 38,000 linear-feet of service laterals. The Weed Wastewater Treatment Plant was built in 1948 and the Shastina Wastewater Treatment Plant was built in 1961. Effluent from both wastewater treatment facilities is disposed of at common percolation beds and irrigation facilities at Zwanziger Ranch.

13.3.3 Stormwater and Flood Control

This section summarizes existing conditions on managing stormwater and urban stormwater flooding in the City of Weed. Proper management of stormwater in the City can prevent flooding and threats to public health and safety.

There has been a history of minor flooding in the City of Weed along Boles Creek. The area of concern for Boles Creek starts 200 feet upstream of Main Street to Grove Street in the South end of Downtown Weed. The minor flooding along Boles Creek is typically seasonal corresponding to rainy season and snow melt. No major flood has been reported in Beaughan Creek. To better handle the peak discharges of the 100-year storm, several recommendations were made in the 2007 Drainage Study for updating culverts.

13.3.4 Solid Waste Management

This section provides an overview of the existing solid waste management practices within the City of Weed. Cities generate solid waste that must be disposed of or recycled in order to provide a healthy and clean environment for residents. California has passed several progressive laws regarding diverting a large percentage of the waste stream away from landfills through recycling and reuse. The City is served by C & D Waste Removal located in Weed, CA. Black Butte Transfer Recycle Station in Mt. Shasta is the nearest dump. The City pays \$57 per ton in dump fees at Black Butte Transfer Recycle Station; C & D Waste Removal hauls roughly 219 tons per month, totaling approximately \$12,500 a month in solid waste disposal. The City also pays roughly \$5,000 in monthly garbage container fees. The City is partnered with other communities and the County in recycling efforts to divert waste away from dumps.

13.3.5 Utilities

This section summarizes existing conditions on the level of utilities provided in the County by semi public and private companies, focusing on dry utilities, electric, natural gas and communication systems. Utilities are important services that support the expansion of the region's economic base, serve developable land, and maintain and increase infrastructure capacity.

Different utility and service system facilities associated with electricity, natural gas, landfills, and telecommunications provide services to the City. These providers are Pacific Power, Blue Star Gas, Suburban Propane, and Black Butte Transfer Recycle. Telecommunications services are provided by a variety of operators.

The production of energy generates greenhouse gases depending on the method of production. Coal fired power plants generate large amounts of carbon emissions which may harm the environment and reduce air quality which may induce respiratory issues. Reducing these emissions has been an ongoing focus of the State of California, which has been a global leader in energy efficiency policy. Becoming more energy efficient should be the goal of every city as at the very least, reducing energy usage saves cities and residences money.

13.3.5.1 Dry Utilities

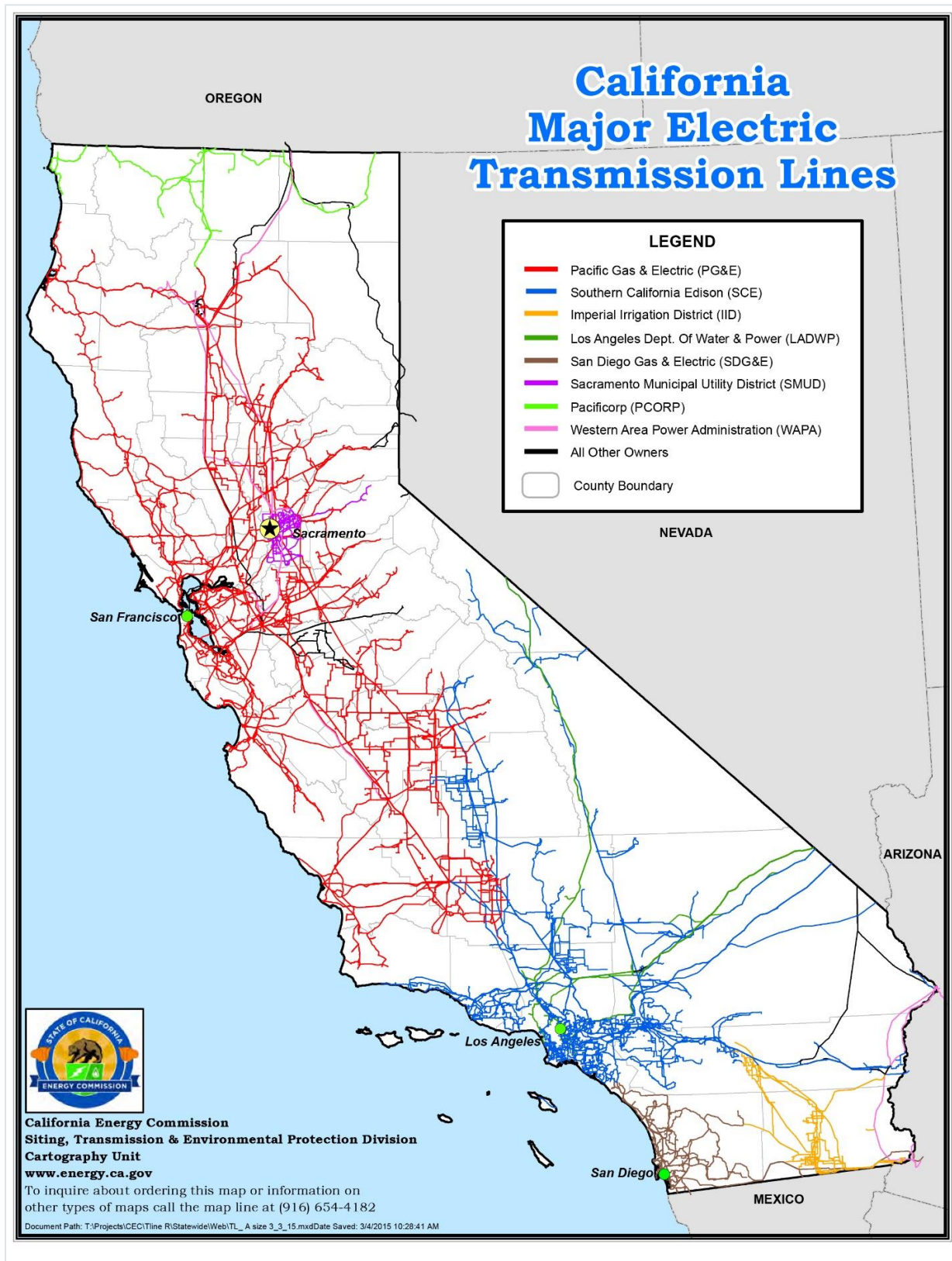
The City's electricity needs are provided by Pacific Power. Map 13.1 shows power transmission lines and ownership in California. This section summarizes the amount and type of use by type of land use. Pacific Power owns and operates three power substations in the City of Weed's sphere of influence, as shown in map 2. The International Paper Co. and Weed substations are near the Weed Volunteer Fire Department, while the Weed Junction substation is just north of Carrick within the City's Sphere of Influence. Changes to Weed's energy portfolio to more renewable sources can help Weed reach state emissions goals. This section summarizes the amount and type of use by type of land use. The following is a table of electricity use in the city in kilowatt hours for the years 2013, 2014, and 2015 (through November).

Table 13.3 City of Weed Average Daily Energy Use

| | Energy Use (kWh) | Number of Customers | Industry Type |
|------------------------|-------------------|---------------------|-----------------------|
| 2013 | 19,980,626 | 231 | Commercial |
| | 22,401,120 | 5 | Industrial |
| | 120,327 | 4 | Public Street/Highway |
| | 12,248,222 | 1,307 | Residential |
| Total | 54,750,295 | 1547 | |
| 2014 | 13,103,830 | 225 | Commercial |
| | 30,405,152 | 5 | Industrial |
| | 120,326 | 4 | Public Street/Highway |
| | 11,466,305 | 1,267 | Residential |
| Total | 55,095,613 | 1,501 | |
| 2015 (Year-to-Date) | 9,318,931 | 221 | Commercial |
| | 25,092,545 | 5 | Industrial |
| | 90,245 | 4 | Public Street/Highway |
| | 7,514,880 | 1,200 | Residential |
| Total | 42,016,601 | 1,430 | |

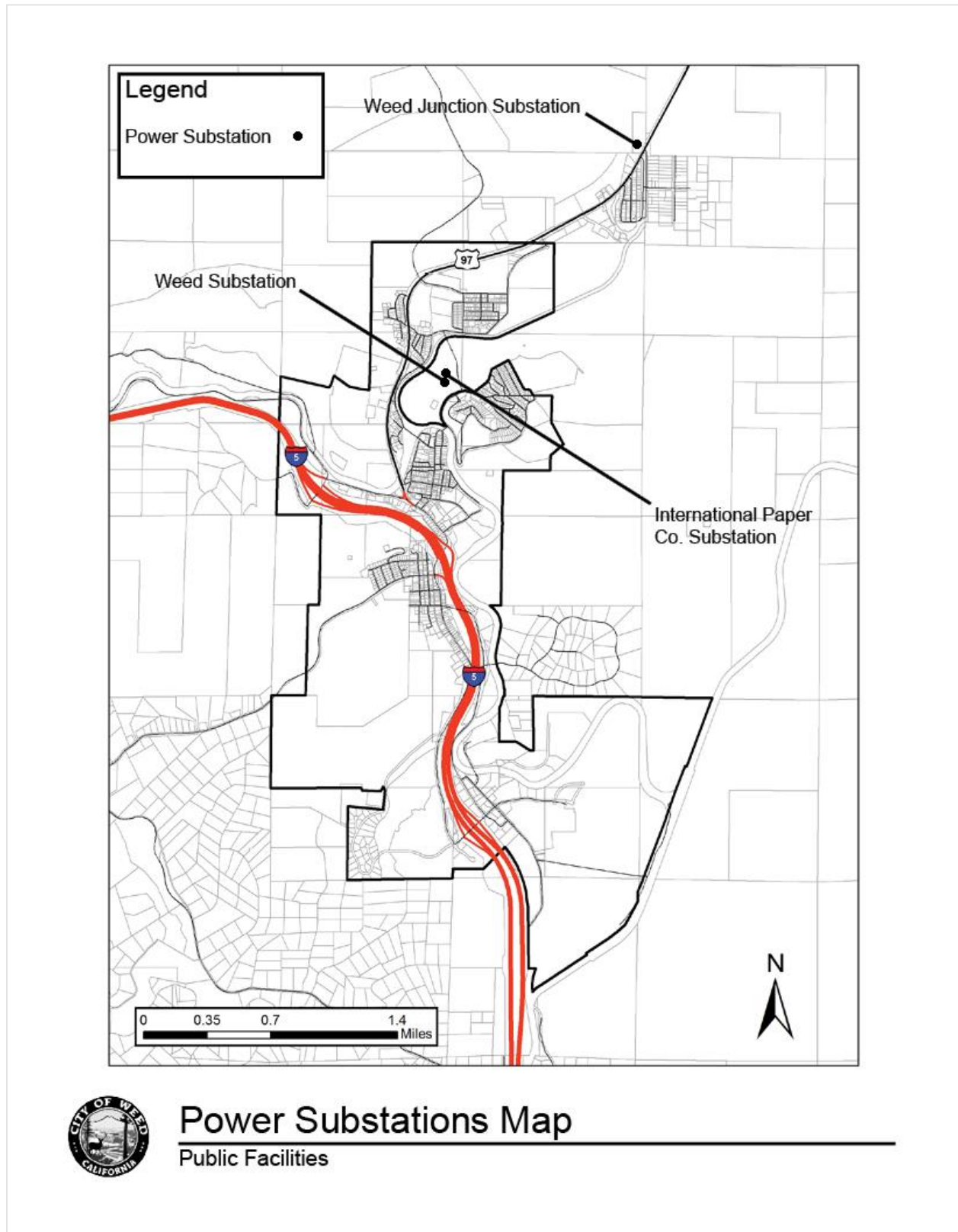
Source: Correspondence with Pacific Power, December, 2015

Figure 13.1 California Major Electric Transmission Lines



Source: California Energy Commission, 2014

Map 13.2 Location of Power Substations which serve Weed



Source: California Energy Commission, 2014

13.3.5.2 Energy Facilities

Natural gas is not available in Siskiyou County, while propane and gas are shipped into the County by rail and truck as there are no local refineries for either. Propane and gas are shipped in bulk to local distributors by truck. Suburban Propane and Blue Star Gas are the local distributors of propane and gas in Weed. The nearest natural gas pipeline is outside of Siskiyou County and none is shipped into Weed.

13.3.5.3 Communications

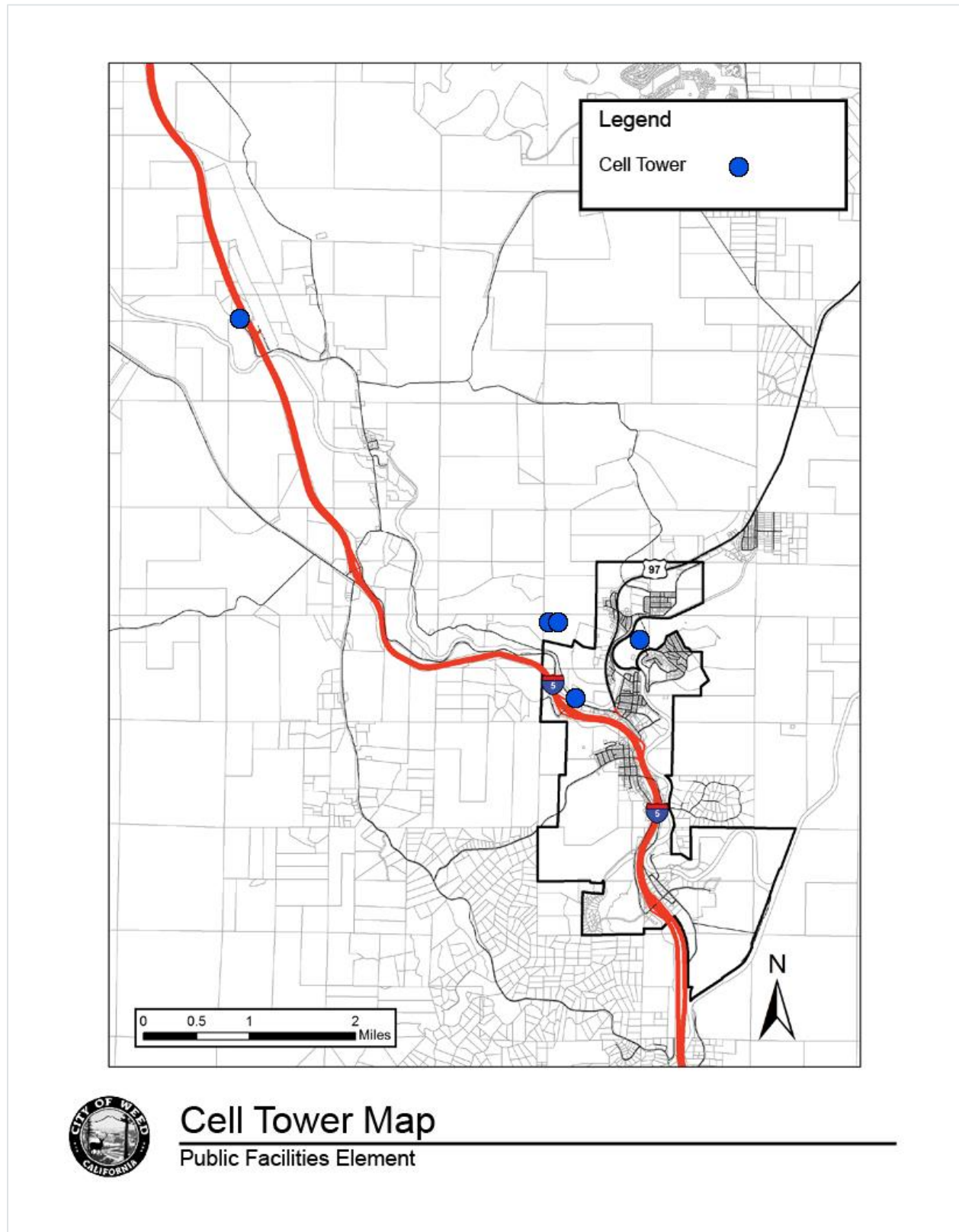
Communications services are an integral part of modern life. The provision of phone, cable and internet capabilities is important for general communications and business, encouraging economic development and providing a quality standard of living for residents. The Federal Communications Commission's (FCC) registered antenna and cell towers near Weed are summarized in Table 13.4. Map 13.3 shows their locations.

Table 13.4 Registered Cell Towers serving Weed

| Registration Number | Owner | Height (meters) |
|----------------------------|--|------------------------|
| #1013704 | United States Cellular Corporation | 35.1 |
| #1231480 | SpectraSite Communications, LLC through American Towers, LLC | 20.2 |
| #1256366 | PacifiCorp | 15.2 |
| #1235589 | T-Mobile West Tower LLC | 13.1 |
| Unknown | State of California | |

Source: Cell Reception, 2015

Map 13.3 Location of Cell Tower Maps



Source: Cell Reception, 2015

13.3.5.4 Landfill Facilities

Solid waste is sent to landfills or diverted through recycling programs. The nearest landfill facilities are Dry Creek and Klamath County Landfills in Oregon. Weed's garbage is sent to Black Butte Transfer Recycle in Mt. Shasta. Black Butte Transfer Recycle is a garbage collection site.

13.3.6 Police Services

Police protection is integral in maintaining safety within a community. Police services enforce regulations of the city, the state, and federal government as well as respond to medical emergencies. Proper facilities for these services are required to support both the staffing needs of the City as well as to store specialized equipment and resources. For a discussion of police services as it related to public safety, refer to Chapter 11, Safety.

The Weed Police Department provides police protection services in the City of Weed. The Department is located at 550 Main Street at City Hall. Weed is staffed by one Chief, two Sergeants, two Corporals, one Investigator, one Administrative Clerk, four Officers, and four dispatchers. This equates to eight sworn officers and five support staff. With the 2010 Population at 2,967, the City of Weed exceeds the FBI Standard of 1 sworn officer per 1,000 persons. According to the Weed Police Department 2013-2014 Incident Response Times, the Weed Police Department had an average of 17 calls for service that were responded to of the calls that were responded to the police officer took approximately 5 minutes to respond to calls for service. Overall, the City of Weed has an average of 52 recorded incidents per day. Besides the City of Weed Police Department, the nearest police protection facility is in Mount Shasta.

13.3.7 Fire Protection

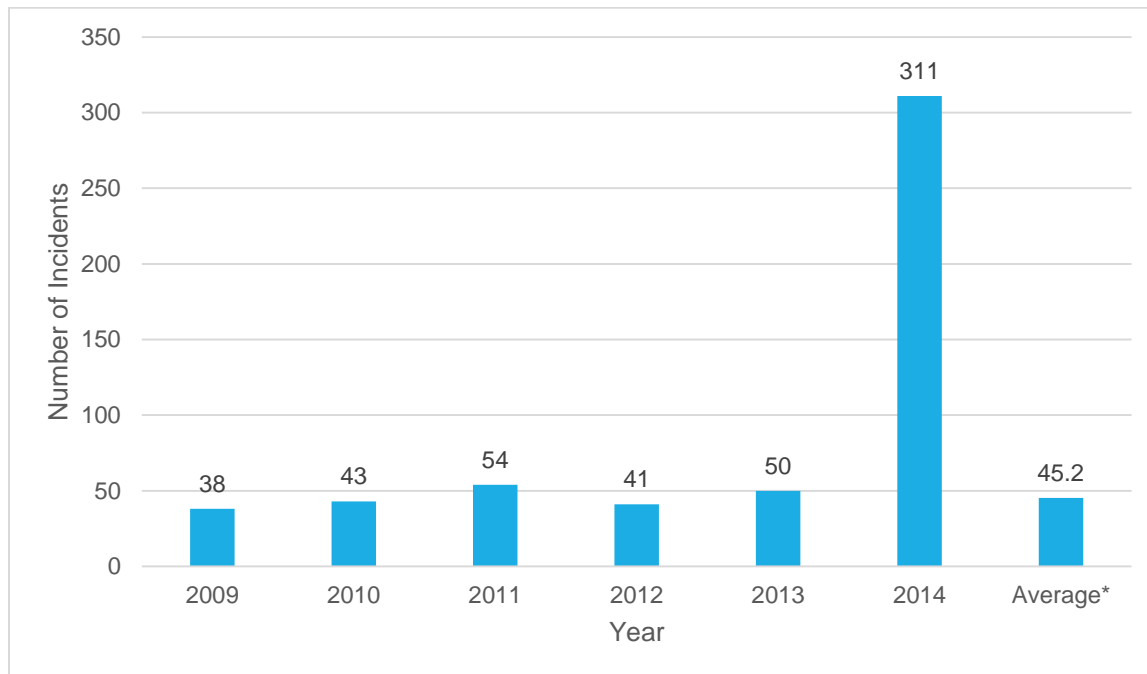
Weed is located in a valley at the base of Mount Shasta at the interface between urban and natural areas. More information regarding the potential damage to property and human life and air quality is also addressed in the Safety and Conservation chapters of this report.

The City of Weed is served by the Weed Volunteer Fire Department (WVFD) located at 128 Roseburg Pkwy. The Long-Bell Fire Department Station is home to the Weed Volunteer Fire Department. It was first built in 1923. The WVFD has a response area of approximately 20 miles and has an average response time of 4.8 minutes. While there is no set standard by the City of Weed, the recommended number of staff to respond is 15 and response time of nine minutes is recommended by the National Fire Protection Agency (NFPA) for urban areas. Currently the WVFD is staffed with less than ten personnel including: volunteer chief, paid administrative captain, a volunteer lieutenant, and volunteer firefighters. The City currently exceeds the NFPA standards.

The Weed Volunteer Fire Department provides fire suppression services, emergency medical response, and hazardous materials response. The WVFD also maintains mutual and automatic aid agreements with CAL Fire, Siskiyou County Fire Warden, Hammond Ranch Hose Company, Mt. Shasta Fire Department and Lake Shastina Fire Department.

Figure 13.1 shows the number of fire incidents responded to by the Weed Volunteer Fire Department. There were 537 incidents from 2009 to 2014. The total number of incidents is slightly higher than normal due to the Boles Fire, which occurred in September 2014. The average number of incidents, which excludes year 2014, is 45.2 incidents per year.

Figure 13.2 Recorded Fire Incidents in Weed, California, 2009 – 2014



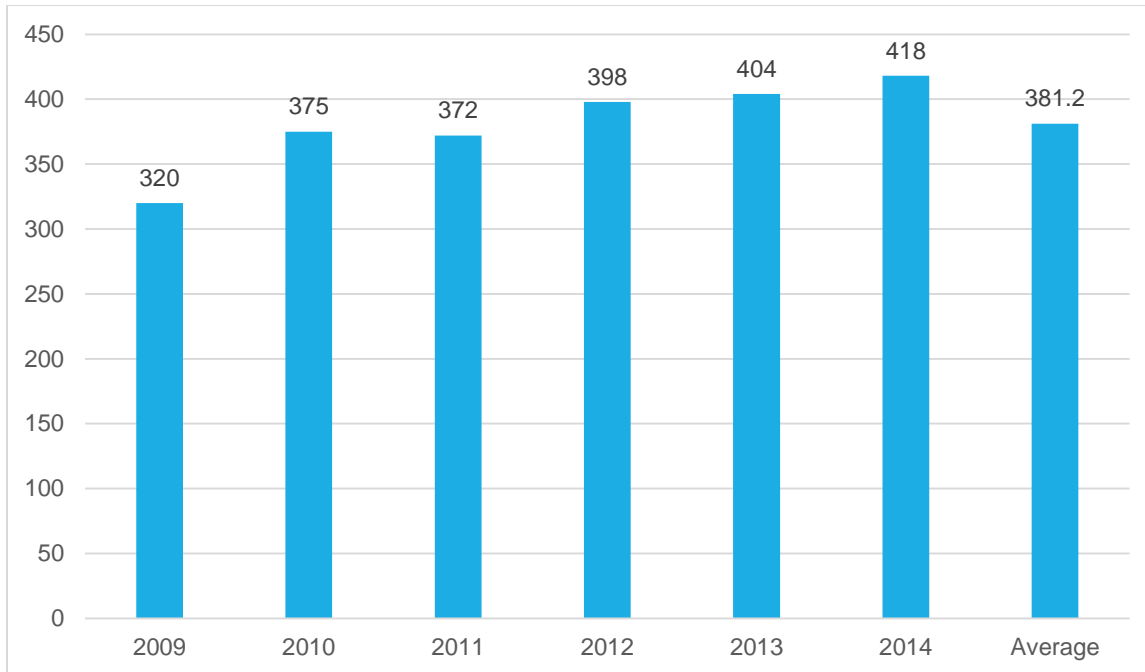
Source: Weed Volunteer Fire Department, Basic/Fire Data Standard Report, 2009 -2013

13.3.8 Emergency Medical Service

WVFD provides emergency medical services for the City and responds to a high volume of medical calls; nearly 70 percent of calls for service are medical calls. All personnel are, at minimum, trained to the level of either Emergency Medical Responder or Emergency Medical Technician 1A. All necessary life support equipment, such as heart defibrillators, are carried on all five of the WVFD's vehicles. The department fills the need for basic life support and the advanced life support need is fulfilled with the local ambulance company, Mt. Shasta Ambulance Service, Inc.

Figure 13.2 shows the number emergency medical service incidents responded to by the Weed Volunteer Fire Department. There were 2,287 incidents from 2009 to 2014. There was an average number of 381.2 incidents per year. The graph shows a slight upward trend in incidents from 2009 to 2014.

Figure 13.3 Recorded Emergency Service Incidents in Weed, California, 2009-2014



Source: Weed Volunteer Fire Department, Basic/Fire Data Standard Report, 2009 -2013

13.3.9 Public Schools

The City of Weed has two public schools and one public university. The Weed Union Elementary School District includes one Kindergarten through 8th grade elementary school in the City of Weed. The Siskiyou Union High School District includes four high schools of which one high school is located in the City of Weed. The City of Weed schools serve approximately 420 students. The public schools in Weed are as follows:

- Weed Elementary School of the Weed Union Elementary School District
- Weed High School of the Siskiyou Union High School District

Weed Elementary School had 238 Students and 13 fully credentialed teachers as of the 2013 - 2014 School Year. The average student to teacher ratio was 18.3 which was lower than the state average of 24.9. The average class size for the elementary school was 26.4. The Elementary school had access to a school counselor, library media services staff, and a resource specialist.

Weed High School had 179 Students and 14 fully credentialed teachers as of the 2013-2014 School Year. The average student to teacher ratio was 12.8 which was lower than the state average of 24.9. The average class size for the high school was 44.8. The high school had a library media services staff and a resources specialist as well as an academic counselor for the district, and a school nurse for the district. Map 13.2 shows the locations of public school and other public facilities in Weed.

13.3.9.1 Facility Standards

The School Accountability Report Card (SARC) is published annually to provide information about the conditions and performance of California Public Schools. The Weed Union

Elementary and Siskiyou Union High School Districts participate in the State School Deferred Maintenance Program which provides matching funds from State funding to assist the district with expenditures related to major repair or replacement of school facility components. In the 2013-2014 SARC, both schools in the Weed were rated as good in facility condition.

13.3.9.2 Academic Achievement

The Academic Performance Index (API) is the annual measure of the academic performance and progress of schools in California. The school API score ranges from 200 to 1,000, with a statewide goal of 800. Table 13.4 shows the API score for each of the Weed public schools for the most recent reporting year, 2013 - 2014. The available API scores range from 712-729.

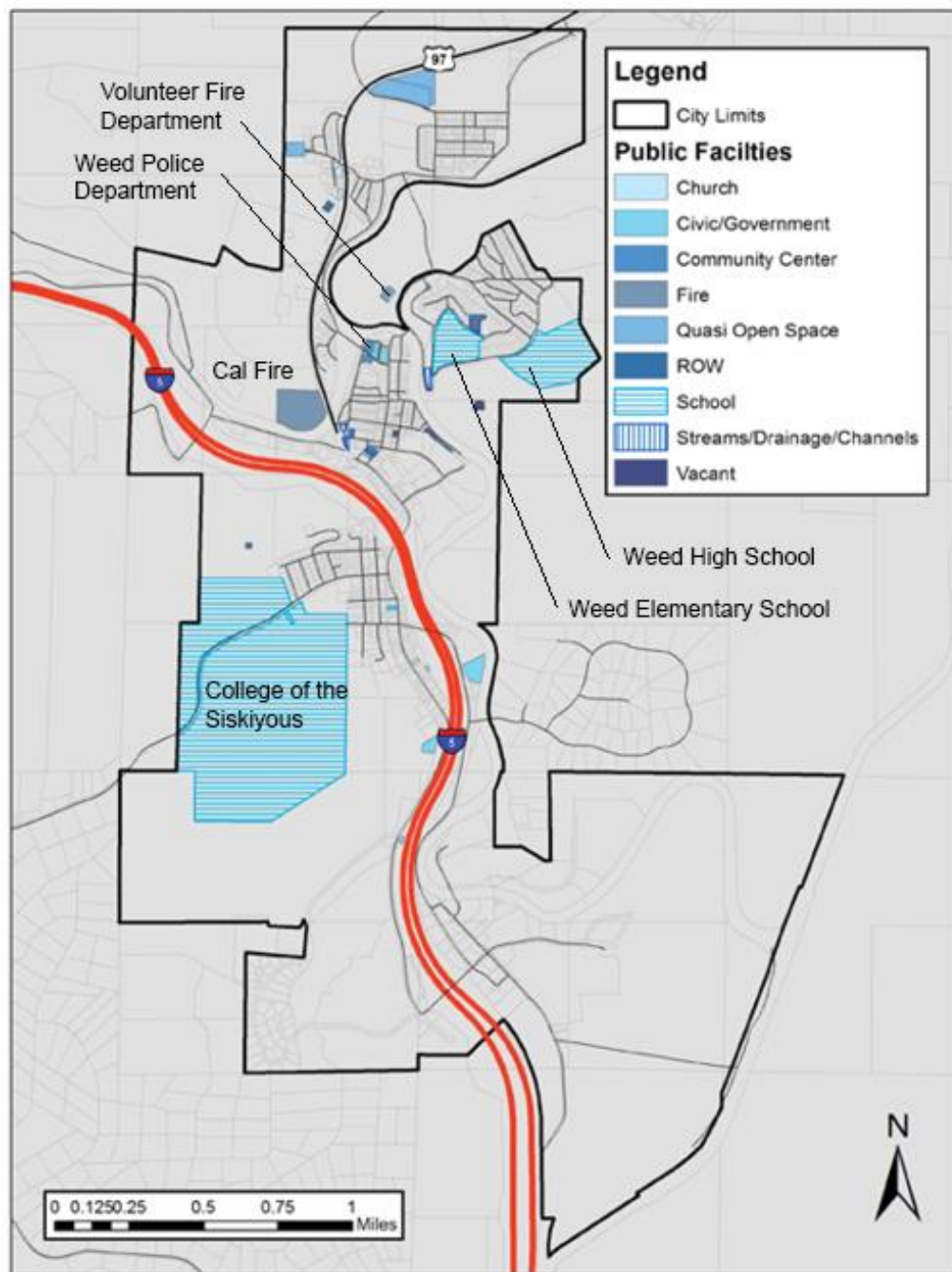
Table 13.3 Academic Performance Index Scores for schools in Weed

| School | 2011-2013 Three-Year Average API Score |
|------------------------|--|
| Weed Elementary School | 729 |
| Weed High School | 712 |

13.3.9.3 Other Public Schools

The City of Weed also has a local community college, the College of the Siskiyous, which serves approximately 2,400 students. The College has over 40 programs for students to choose from including Emergency Medical Services and Fire/Emergency Response Technology. Students from these two programs have the opportunity to work with Weed Volunteer Fire Department for practical experience.

Map 13.3 Locations of Schools and Other Public Facilities in Weed



Public Facilities Land Use Map

Public Facilities Element

Source: Cal Poly Land Use Inventory. 2015

13.3.10 Other Public Facilities

Other public facilities in the city of Weed are public libraries and community centers. These facilities provide crucial opportunities for the community. Libraries are necessary to assist in the education of a city's youth as well as provide a quiet location for work and relaxation. Community centers are necessary for hosting community events, services, and programs.

13.3.10.1 Hospitals and Medical Facilities

There are two nearby hospitals located outside of the City. Certain medical facilities are located within the City of Weed. For further discussion on the types of Medical Services available in Weed, see the Health Element (Chapter 14).

13.3.10.2 Public Libraries

The Weed Library was one of 12 branch libraries of the Siskiyou County Library and contained nearly 8% of the library's books. It was previously located at 780 South Davis Avenue before it burned down in the 2014 Boles Fire.

The Weed Library is currently located at 150 Alamo Avenue under lease from American West Bank in the former Premier West Bank building. The city is paying \$1 a year and is covering the cost of utilities, taxes and upkeep. The city has the option of purchasing the building at the end of the lease.

13.4 Issues and Opportunities

On October 10, 2015, the City held its first public meeting for the General Plan Update to discuss the strengths and barriers of Weed as well as wishes for the future. The following strengths, opportunities, threats, and constraints were identified based on feedback from participants and existing conditions.

13.4.1 Strengths and Opportunities

Public Feedback from the first community meeting showed that residents saw strengths concerning public facilities as good schools including the College of the Siskiyous, an attentive local government, the Historic Lumber Town Museum, the Library, and medical facilities. The schools, despite limited funding, are able to provide fully credential teachers with some additional services such as a school nurse or library staff. The schools also have relatively good student to teacher ratios.

13.4.2 Threats and Constraints

The first meeting also provided feedback on barriers to Public Facilities. One of the barriers listed was inadequate funding for improvements. Due to financial constraint the City has had limited opportunity to expand services or repair older facilities. In many Municipal Service Reviews, there has been a number of recommended improvements for the general maintenance and expansion of public facilities to meet future needs. Additional feedback showed that citizens felt there were declining enrollment and performance in local schools. Currently, the City is just below the state goal on the academic performance index. Both the Elementary School and High School have limited funding, the elementary school and high school spent approximately \$8,574 and \$9,519 per pupil respectively in the 2012-2013 school year. In comparison, the average spending per pupil in elementary and secondary education is \$10,702 in California and \$12,379 in the US.

13.5 Emerging Directions

On November 7, 2015, the City held its second public meeting for the General Plan Update to assist in guiding the emerging directions for Weed. Participants were asked four separate public facilities questions (each with multiple answer options) and were asked to vote based on preference for various options.

Figure 13.3 through Figure 13.6 provide summaries of the results from the meeting on public facilities preferences. Participants preferred more collaborative use of facilities at the College of the Siskiyous when asked what recreational or community facilities they would like to see in Weed. This was followed by rebuilding the community center. Participants would also like to see a teen activity center for youth activities and improvement in youth recreation programs. Participants thought education and homelessness were equally important public issues that needed attention. Based on the existing conditions and community input received, the emerging directions for public facilities in the City of Weed suggest that as the City of Weed continues to grow, public facilities will need expansion or improvement to meet standard levels of service.

13.5.1 Community Preferences

Figure 13.4 Type of recreational or community facility, Total Votes 78

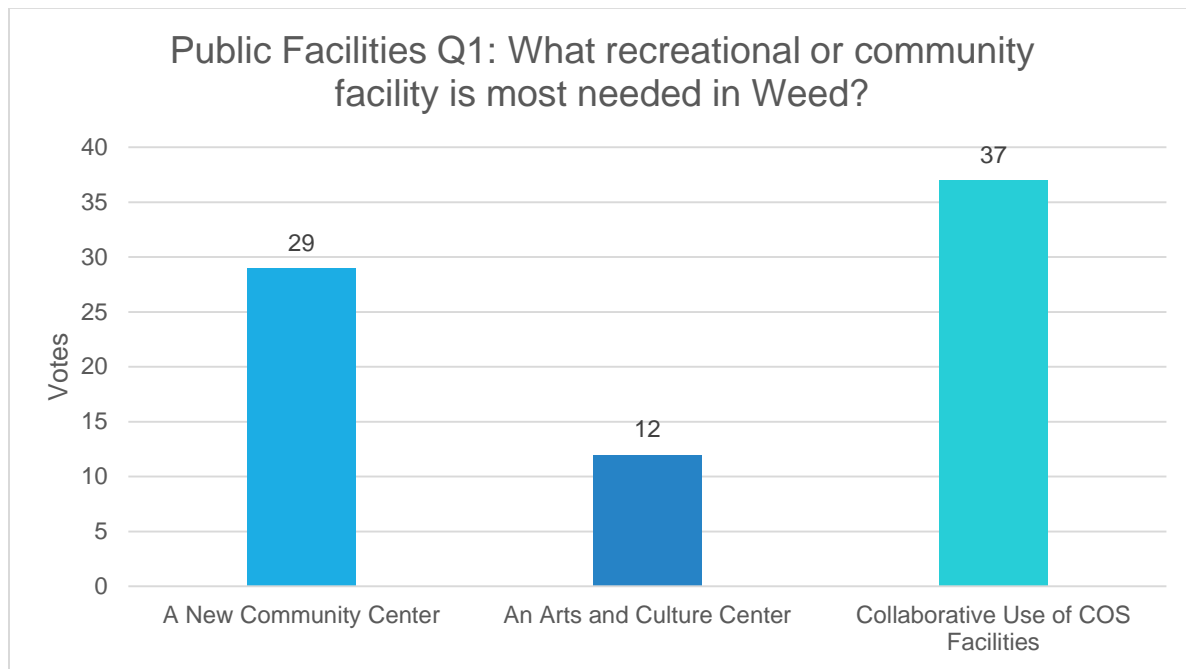


Figure 13.5 Public issues that need attention, Total Votes 99

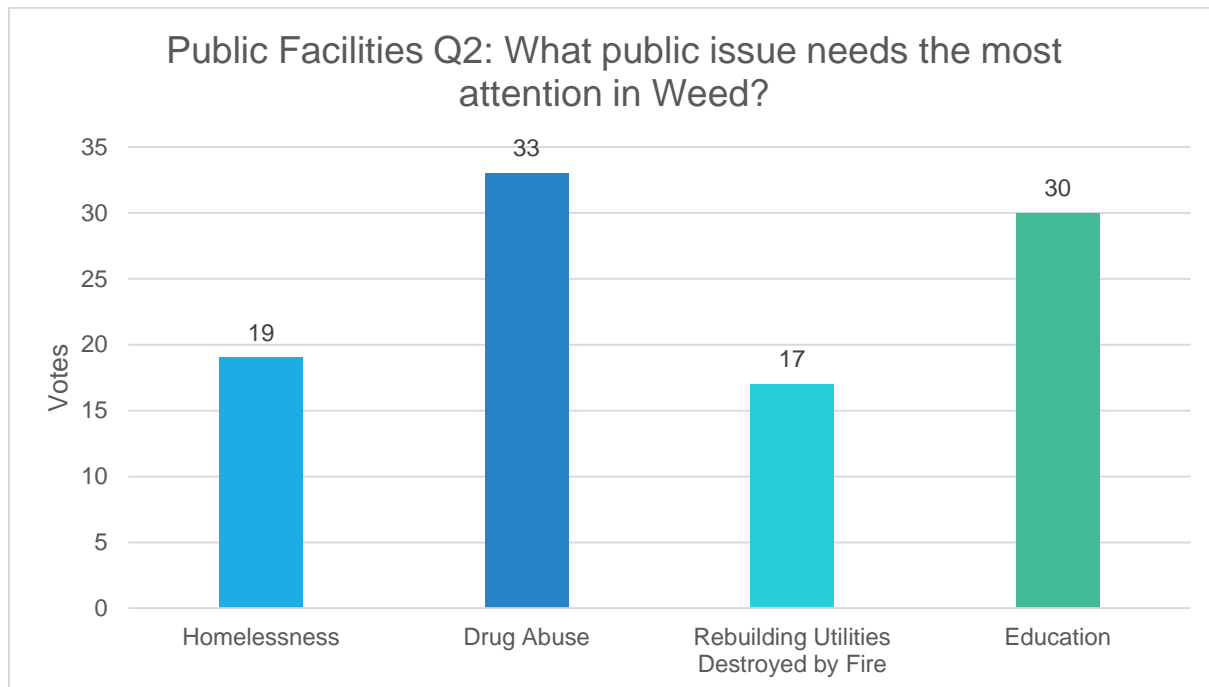


Figure 13.6 Preferred youth activities, Total Votes 79

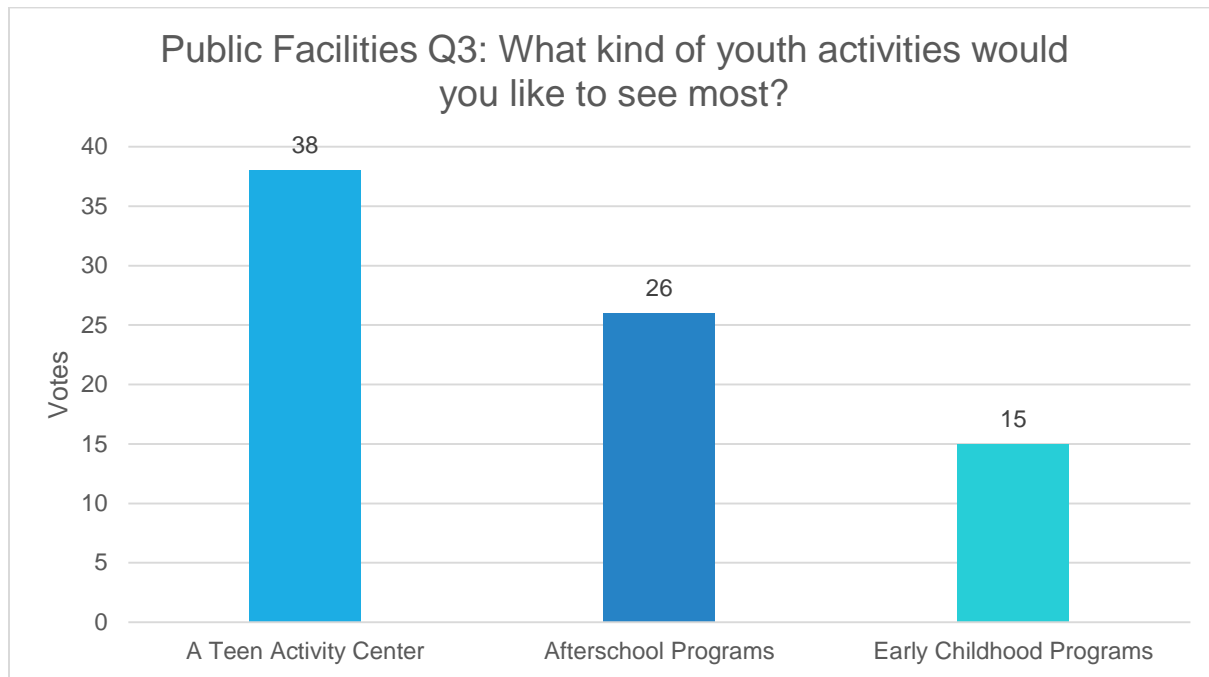
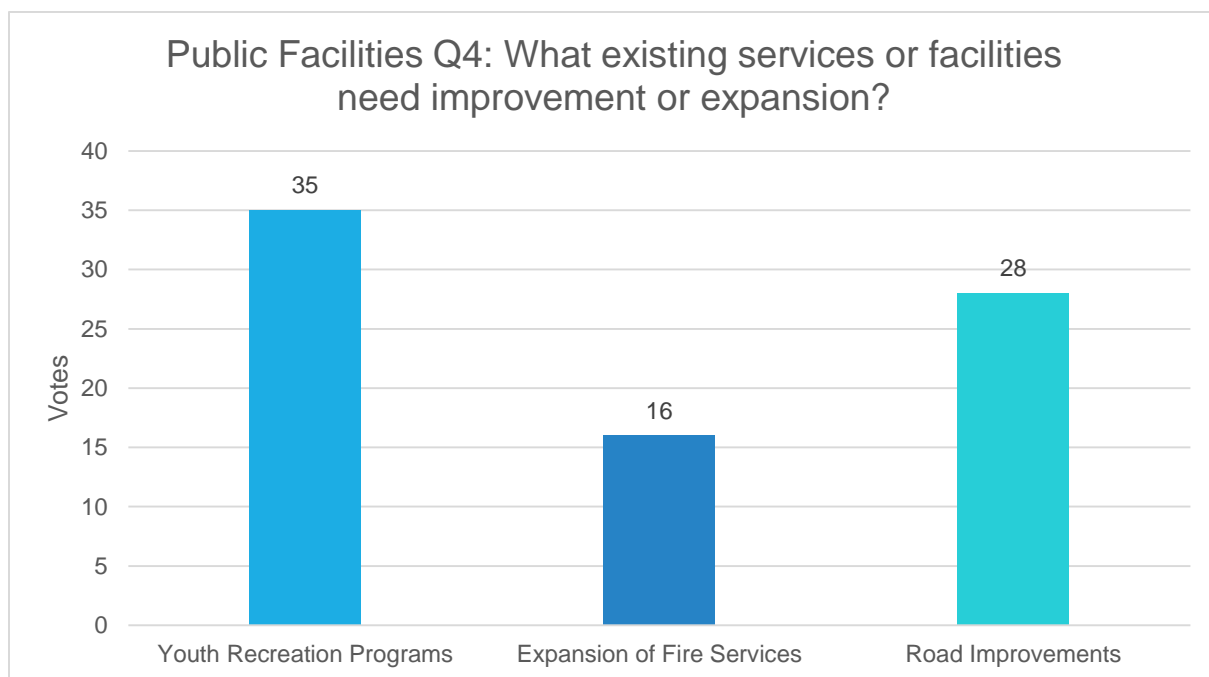


Figure 13.7 Improvement or expansion of public facilities and services, Total Votes 79



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14 HEALTH

14.1 Introduction

The Health Element is an optional element for a general plan. Section 65303 of the State Government Code allows cities and counties to add optional elements in addition to the seven required elements when they relate to the physical development of the City. The Health Element overlaps with other elements of the General Plan such as land use, open space, and economic development, with the goal of enhancing individual and public health and well-being within a city.

The Health Element addresses health disparities, promotes healthy living, and uses the General Plan to encourage sound public health and land use policy. This chapter provides the existing health and wellness conditions in the City of Weed. It also includes the various indicators and standards used to measure health and wellness conditions established by federal, state, and local agencies.

The Health Element contains information and policies that pertain to the following subject matters:

- Physical and mental health
- Recreation and physical activity
- Healthy eating, food access, and sustainable food systems
- Access to medical services and help

14.2 Regulatory Setting

14.2.1 Federal Regulations

United States Department of Agriculture

The United States Department of Agriculture (USDA) is the primary federal agency that provides oversight on food, agriculture, natural resources, rural development, nutrition, and related issues based on sound public policy, science, and efficient management. The USDA has created food access measures to help communities identify low-access areas and food deserts (USDA, 2014). The following USDA standard is used to evaluate food accessibility in the City of Weed “The USDA defines “low-access” communities as those where at least 500 residents or one-third of the area’s population live more than one mile in urban areas or ten miles in rural areas to the nearest supermarket or large grocery store” (USDA, 2014).

Centers for Disease Control and Prevention (CDC)

The Centers for Disease Controls and Prevention (CDC) is the national public health institute of the United States under the Department of Health and Human Services. The CDC works to protect Americans from health, safety, and security threats. CDC policies provide the foundation

for recommendations on preventative measures in terms of health, safety, and security in the City of Weed.

United States Department of Health and Human Services-Health Resources and Service Administration (HRSA)

The Federal Health Resources and Service Administration (HRSA) maintains a number of designations that classify certain areas as having a shortage of medical facilities and/or medical personnel. One of these designations includes Medical Service Study Areas (MSSA), which are sub-city geographical units used to organize and display population, demographic, and physician data. MSSAs are used to determine areas of unmet priority need for primary care family physicians and medical services. This information is then used to designate Health Professional Shortage Areas (HPSAs) and Medically Underserved Areas and Populations (MUAs/MUPs).

HPSAs are designated by the HRSA as geographic areas having shortages of primary medical care, dental or mental health providers, and may be related to demographics (low income population) or institutional conditions (comprehensive health centers, federally qualified health centers, or other public facilities). Medically Underserved Areas/Populations are areas or populations designated by the HRSA as having “too few primary care providers, high infant mortality, high poverty and/or high elderly population.” (HRSA). The designations provided by the HRSA are used to assess access to medical services in the City of Weed.

14.2.2 State Regulations

Office of Statewide Health Planning and Development

In addition to the designations maintained at the federal level by HRSA, the State of California Office of Statewide Health Planning and Development is the state leader in collecting and maintaining databases regarding California’s health infrastructure. Most states use the federal health shortage designations; however, some states, including California, create their own designations that are designed to meet the needs of the specific state. The state designations are also used to determine eligibility for state-level workforce programs. For the purpose of this background report, the State’s information and database are used to characterize access to medical facilities in Weed.

The designations used by the State of California include Health Professional Shortage Areas (for primary, mental, and dental care), Medically Underserved Areas and Populations, and Primary Care Shortage Areas. Places that are designated under any of these categories can qualify for federal or state benefit programs.

14.2.3 Local Regulations

There are no local regulations pertaining to health in Weed.

14.3 Existing Conditions

The Health Element addresses the correlation between the natural and built environment as it relates to the health and wellness of a community. The following section discusses the existing conditions of health in Weed and access to programs and services that promote a healthy lifestyle including access to healthy food, health services, parks and recreation, active transportation, and the general quality of environmental health.

14.3.1 General Health of Weed

The City of Weed has limited data on the health conditions of residents due to its small size. Therefore, data from Siskiyou County is used to assess the general needs of Weed and its surrounding Area. At various community outreach events, residents provided useful information regarding health concerns. The Emerging Directions section provides information on the major concerns that residents mentioned.

Dignity Health provided a health needs assessment in 2014 for Siskiyou County. The assessment was conducted by Mercy Medical Center Mount Shasta for the approximately 17,000 residents of Siskiyou County who resided in the Hospital's primary service area. Primary sources (surveys) and secondary data research (vital statistics and other existing health-related data) were used to conduct the health needs assessments. The surveys and secondary data were combined to identify top health needs in the County.

The top seven individual health concerns identified in the survey include:

1. Heart Disease and Stroke
2. Diabetes
3. Obesity (lack of exercise and poor eating habits)
4. Substance Abuse
5. Tobacco Use
6. Cancer
7. Dental Issues

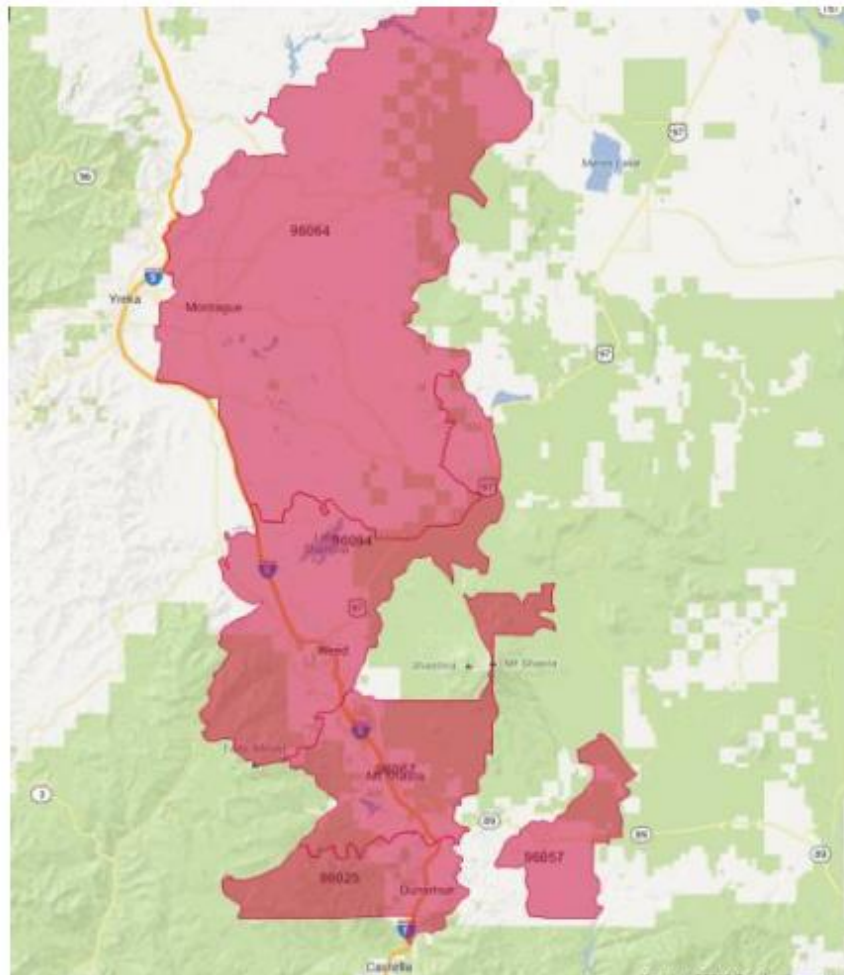
The perceived top seven behavioral health risks include:

1. Drug Abuse
2. Alcohol Abuse
3. Being Overweight
4. Poor Eating Habits
5. Lack of Exercise
6. Tobacco Use
7. All of the above

Dignity Health also identified a Community Needs Index (CNI) score during the health assessment. The CNI score is strongly linked to variations in community healthcare needs and is a strong indicator of a community's demand for various healthcare services. The CNI score scaled from 1.0 to 5.0. A score of 1.0 indicates a ZIP code with the least health needs and a score of 5.0 indicates the most need. Figure 14.1 shows that Weed has one of the highest CNI

scores in Siskiyou County at 4.0. This indicates that the City and its surrounding area are in greater need than other parts of the County since growth of the City area has outpaced development of health services. This score is based on questions selected specifically for the County, therefore it must be viewed from that perspective since community members have identified certain health needs through community outreach (Dignity Health, 2014).

Figure 14.1 Siskiyou County CNI Scores



| | Zip Code | CNI Score | Population | City | County | State |
|---|----------|-----------|------------|------------|----------|------------|
| ■ | 96025 | 3.8 | 2,357 | Dunsmuir | Siskiyou | California |
| ■ | 96057 | 4 | 1,418 | McCloud | Siskiyou | California |
| ■ | 96064 | 3.6 | 4,694 | Montague | Siskiyou | California |
| ■ | 96067 | 3.6 | 7,404 | Mt. Shasta | Siskiyou | California |
| ■ | 96094 | 4 | 6,579 | Weed | Siskiyou | California |

CNI MEDIAN SCORE: 3.8

Source: Community Health Needs Assessment and Implementation Strategy Summaries, 2014

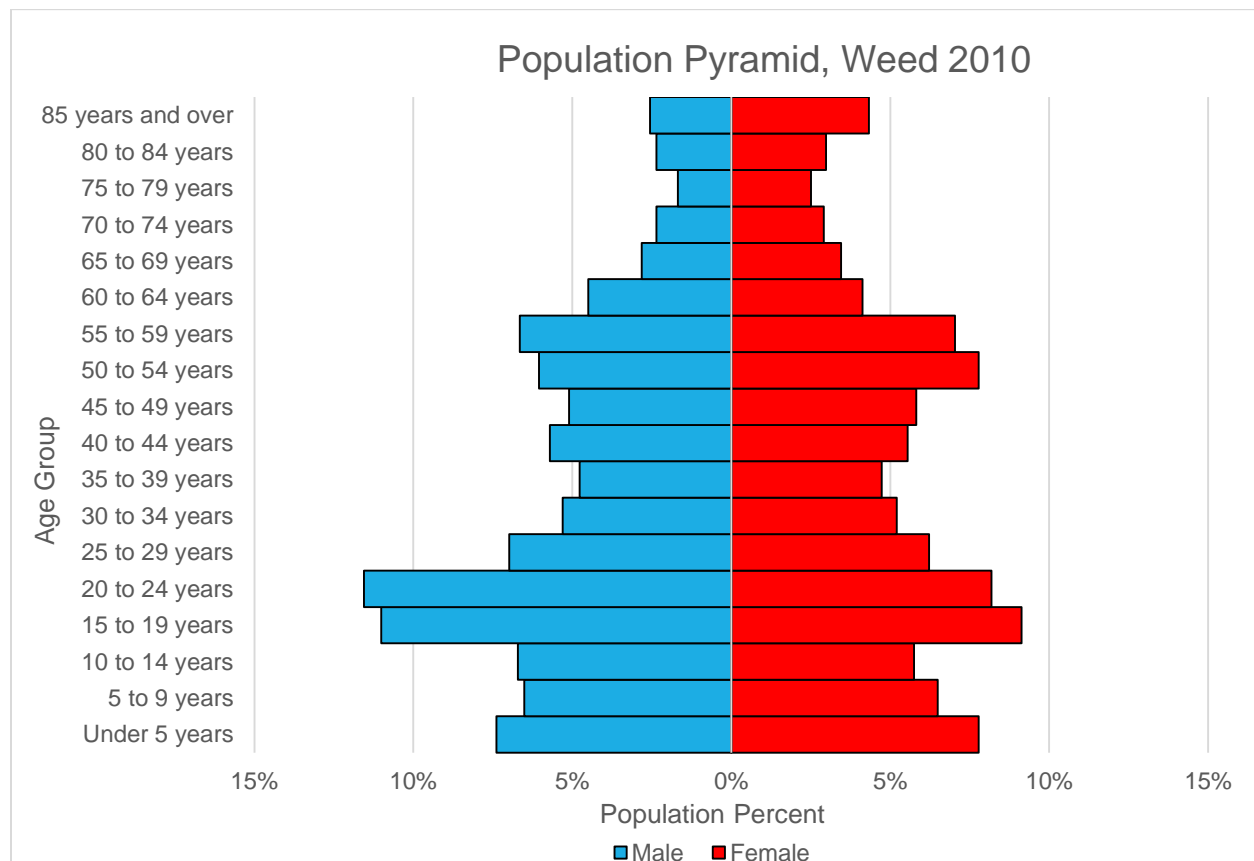
14.3.1.1 Vulnerable Populations

Infants, children, elderly, and low-income populations are especially susceptible to health problems within a community. In addition, these groups may be underrepresented, and addressing their needs and concerns can aid in ensuring a healthy built environment for all community members.

14.3.1.1.1 Age

The City of Weed has a large proportion of young and middle aged residents compared to Siskiyou County. The median age for Weed is 32.7, with a large percentage of residents below 34. Figure 14.2 shows cohorts of residents by age and sex. With a large population of people in the middle-aged range, Weed's population will continue growing older in the years to come. Additional senior health services will be necessary to accommodate the aging population.

Figure 14.2 Age Distribution of Males and Females in Weed



Source: U.S. Census Bureau Table DP-1 City 2010

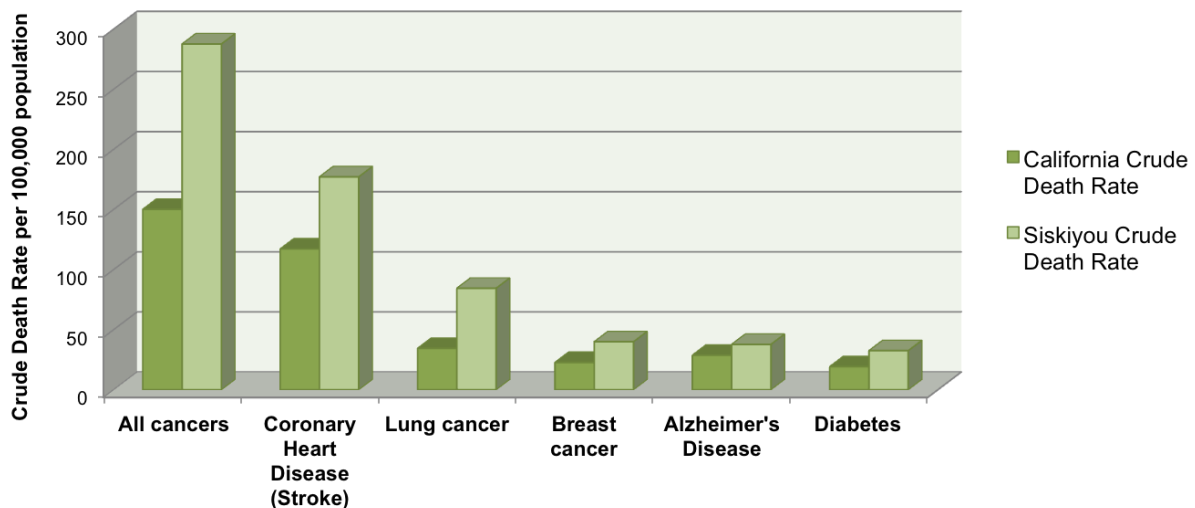
14.3.1.1.2 Income and Employment

In 2013, the median household income in Weed was \$28,170, significantly lower than Siskiyou County and California, which had median incomes of \$37,709 and \$61,094 respectively. Comparisons within the City of Weed revealed a large proportion of residents earning lower than \$15,000 per year, especially when compared to the County and State. In addition, 5-year estimates between 2009-2013 indicate that 23% of residents of working age or older lived under the poverty line (U.S. Census Bureau ACS, 2009-2013). These statistics indicate that many residents in the City of Weed may have limited ability to afford health care. In addition, residents that live under the poverty line are susceptible to the poor living conditions which may greatly affect their health.

14.3.2 Siskiyou County Cancer Indicators

Out of 58 counties in California, Siskiyou County is ranked 51 for lung cancer, 47 for breast cancer, 44 for diabetes, 49 for strokes, and 53 for all deaths due to cancer. It has the highest reliable crude death rate for lung cancer in the state and it ranks below the Healthy People 2020 National Objective in each case. This is a benchmark set by the U.S. Department of Health and Human Services for the 10-year target to guide National Health. Figure 14.3 shows a 3-year average health profile for Siskiyou County from 2009 to 2011. Each bar represents the crude death rate per 100,000 people, with dark green representing California and light green representing Siskiyou County. Although this data does not specifically reflect health conditions in Weed, understanding health at the County level provides an important perspective into the health of the City. Since the crude death rate in Siskiyou County exceeds the rate in California in every category, it is clear that improved public health conditions should be a priority for the City.

Figure 14.3 Crude Death Rate by Disease in California and Siskiyou County



Source: CA Department of Public Health, County Health Status Profiles 2009-2011

14.3.3 Access to Healthy Food

A healthy community needs healthy food options including access to fresh produce. Sources included food markets, farmers' markets, co-operative food distribution, and design of the built environment to facilitate access.

14.3.3.1 Community Health Indicators

The presence of food markets in neighborhoods affects healthy food consumption, which reduces the prevalence of health complications that arise from obesity and hunger. This is especially important for under-served neighborhoods that lack the information and resources to maintain a healthy lifestyle.

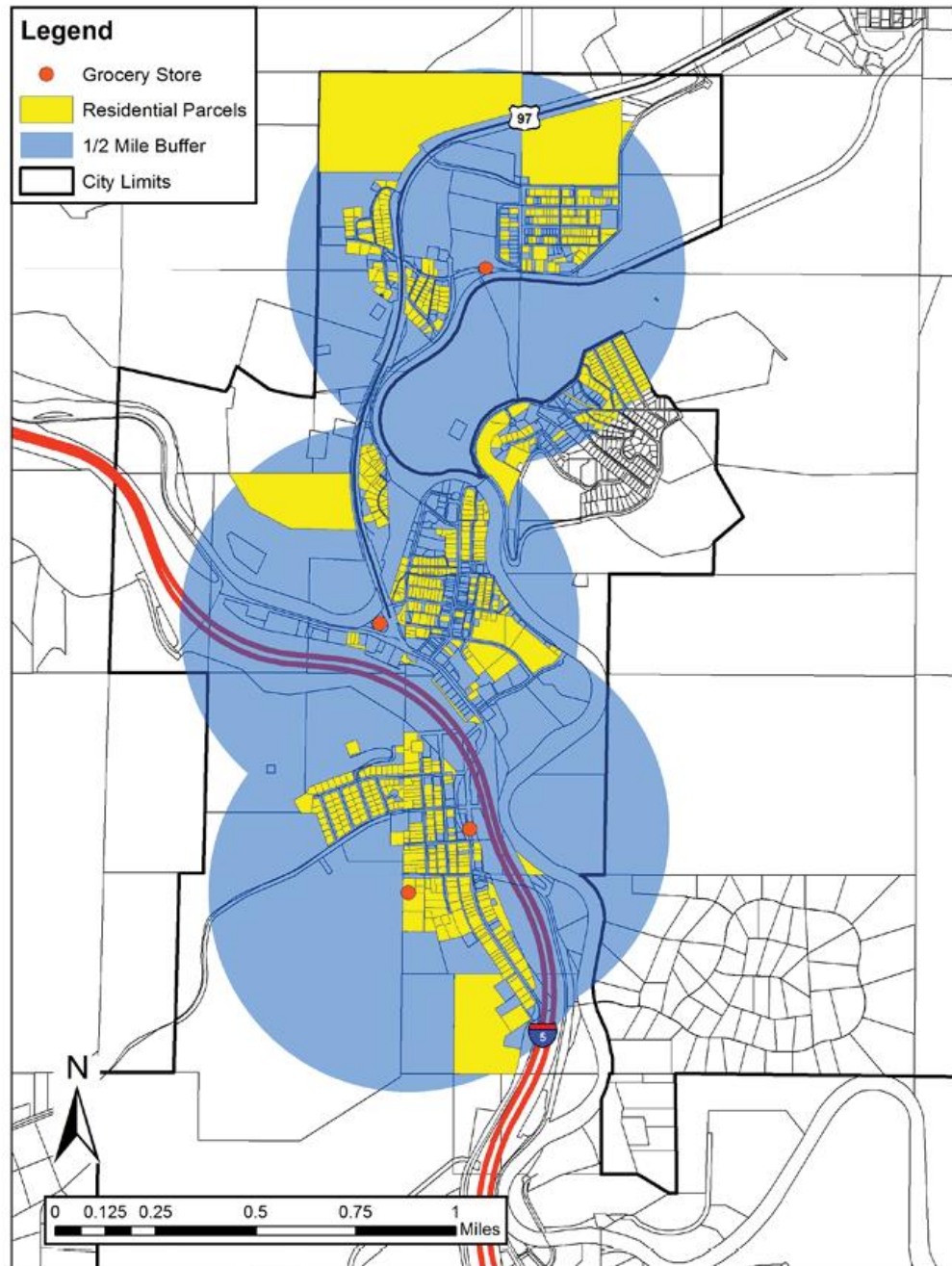
Farmers' markets provide another source of fresh and locally produced fruits, vegetables, and other food products, which can be used to support recommended daily consumption of fruits and vegetables. Farmers markets are often complementary to areas that are poorly served by full service supermarkets and require less physical space and investment than a supermarket. They also foster community building by providing a local gathering space and facilitate connection between residents and local food purveyors.

Community gardens can provide a source of fresh fruits and vegetables for local residents, increase physical activity, and provide opportunities for community building. Locally produced foods help sustain the local economy, and reduce long-distance shipping, thereby reducing vehicle emissions associated with chronic diseases and global warming.

14.3.3.2 Key Findings

Map 14.1 shows the proximity of grocery stores to residential parcels. 85 percent of residential parcels are located within the buffers, and therefore may have access to healthy food. There are currently no farmer's markets or community gardens in the City of Weed. The closest farmer's markets include the Mount Shasta Farmer's Market, 9 miles outside the city limits, and the Dunsmuir Growers' Market which is 17.5 miles away from Weed.

Map 14.1 Grocery Stores with 1/2-Mile Buffers in Weed, CA



Grocery Stores Access Map

Health Element

Source: Cal Poly Land Use Inventory, 2015

14.3.4 Access to Health Services

Access to quality, comprehensive health care services is vital for the achievement of health equity and for increasing the quality of a healthy life for everyone. Health service access means that people have opportunity to receive timely personal health services for both preventative and treatment purposes. Limited access to health care can negatively affect resident's quality of life. The four components of health services include insurance coverage, services, timeliness, and workforce supply. Location of medical services should be easily accessible not only for those using vehicles, but for those who rely on alternative means of transportation.

14.3.4.1 Community Conditions Indicators

The following indicators have direct impacts on community health according to Healthy People 2020 goals:

- Proportion of adult population with and without health insurance
- Proportion of minors with and without health insurance
- Medical facilities within half mile of residential parcels

14.3.4.2 Key Findings

Compared to the State, Weed has lower proportions of health insured minors and adults. Table 14.1 shows the comparison of health coverage types over a five-year estimate from 2009 to 2013.

Table 14.1 Proportion of Uninsured Residents in California versus Weed

| | California % Uninsured | Weed % Uninsured |
|------------------------------------|------------------------|------------------|
| Minors (under 18 years old) | 8.3% | 3.1% |
| Adults (over 18 years old) | 26.2% | 22.4% |

Source: American Community Survey, Table B27001, 2009-2011

Many specialized services exist in the City of Weed and residents have access to major hospitals that are in the City's vicinity. The nearest major hospital is Mercy Medical Center in Mount Shasta, which is 9.5 miles to the south of Weed, and Fairchild Medical Center in Yreka, which is 28.2 miles north of Weed. Map 14.2 displays the locations of specialized services showing 432 residential parcels (52 percent) are located within a half mile of medical or specialized services in the City of Weed.

Map 14.2 Map of Medical Services within 1/2 Mile of Residential Parcels



Medical Services Access Map

Health Element

Source: Cal Poly Planning Team, 2015

14.3.4.2.1 Medical Service Study Area

The State of California Office of Statewide Health Planning and Development uses MSSA maps to designate Medically Underserved Areas (MUAs). MUAs are areas of populations that have too few primary care providers, high infant mortality, high poverty, or a high elderly population. Table 14.2 shows basic statistical information on medical services for MSSA 197, which includes Weed, Carrick, Edgewood, and Mount Shasta. According to the data, MSSA 197, which includes Weed, is not designated as a Primary Care Shortage Area. The table shows a lack in psychiatric services as of 2010. Map 14.3 further demonstrates that Weed is not designated as a Primary Care Shortage Area. However, its surrounding areas in Siskiyou County are designated as Primary Care Shortage Areas (CHHS Open Data Medical Service Study Areas, 2010).

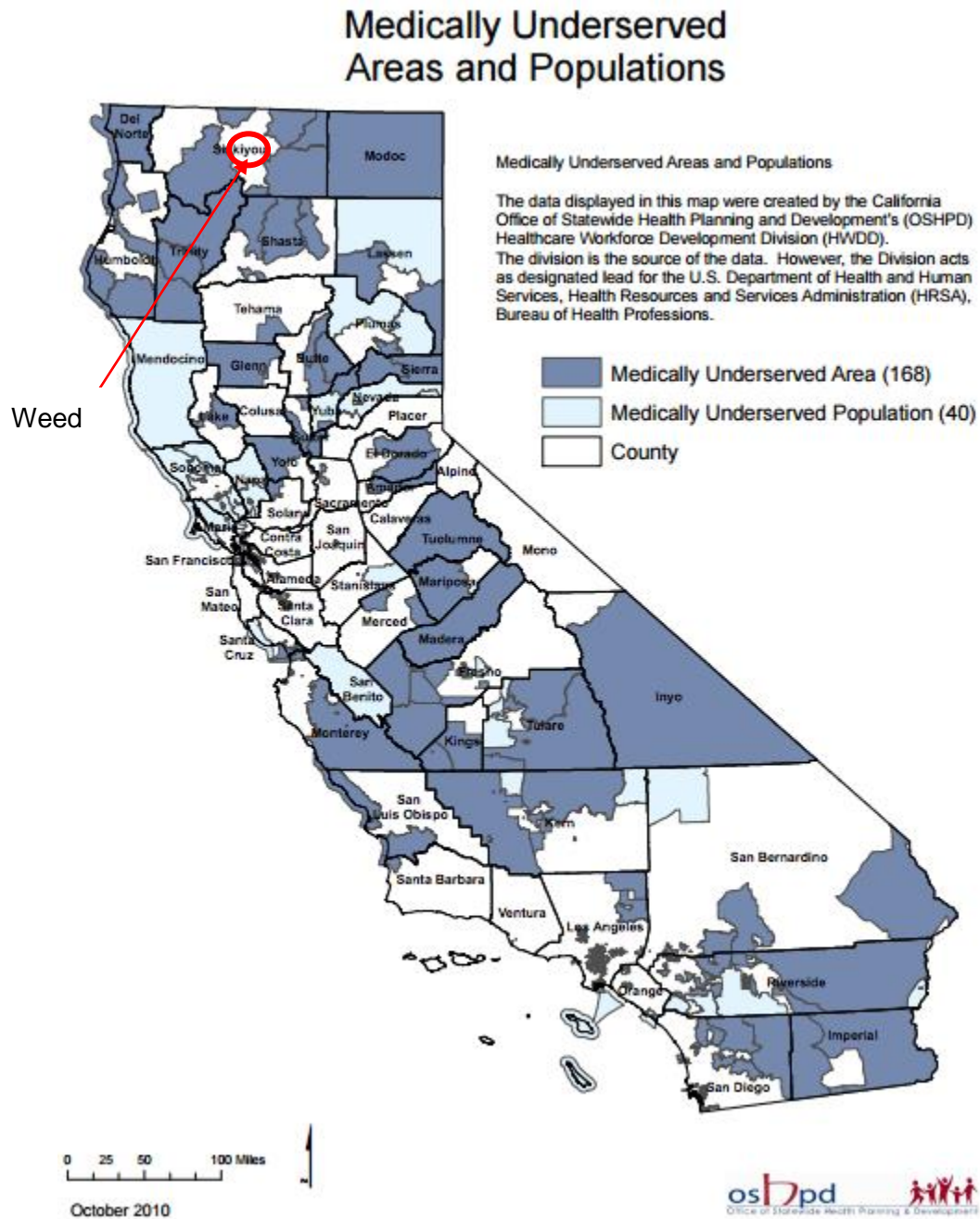
Table 14.2 Medical Service Study Area Information

| Carrick/Edgewood/Mount Shasta/Weed Medical Service Study Area Data, 2010 | |
|---|---------|
| MSSA_ID | 197 |
| PCSA | 0 |
| PCSA_Score | 0 |
| PC-PHYS | 8 |
| PC_PHYS_R | 1760.5 |
| DENTIST | 3 |
| DENTIST_R | 4694.67 |
| PSYCH | 0 |
| PSYCH_R | 0 |

| Definitions | |
|-------------------|---|
| MSSA_ID | Medical Service Study Area Identification number |
| PCSA | Primary Care Shortage Area designation 1 = designated |
| PCSA_Score | Primary Care Shortage Area designation 1 = designated |
| PC-PHYS | Primary Care physician count |
| PC_PHYS_R | Primary Care population to provider ratio |
| DENTIST | Dentist count |
| DENTIST_R | Dentist population to provider ratio |
| PSYCH | Psychiatrist count |
| PSYCH_R | Psychiatrist population to provider ratio |

Source: CHHS Open Data Medical Service Study Areas, 2010

Figure 14.4 Medically Underserved Areas and Populations by California Counties



Source: OSHPD, 2010

14.3.4.2.2 Facilities in Weed

This section identifies specific health services that are located in the City of Weed. They include the following:

Shasta View Nursing Center

The Shasta View Nursing Center is a 59-bed Medicare and Medi-Cal facility, which offers special services for senior citizens. This facility has healthcare professionals including physicians, physical, occupational, and speech therapists, licensed nurses and certified nursing assistants, social services, dietitians and nutritional services, and an activity director.

Siskiyou Medical Group

Siskiyou Medical Group provides health care services for ear, nose, and throat, family medicine, and preventative medicine. The office has three main medical doctors. This location is a main center for general health care for the surrounding community.

Mercy Physical Therapy

Mercy Physical Therapy is a physical rehabilitation center for outpatient services operated by Mercy Medical Center in Mount Shasta. Hospital patients may receive extended care here with physical therapists.

In addition to these specialized services, residents of Weed are served by Dignity Health's Mercy Medical Center in Mount Shasta (MMCMS). MMCMS is a critical access hospital that serves primarily Southern Siskiyou County. This facility has 25 licensed beds and a 14-acre campus. MMCMS has 270 staff members, an active medical staff of 44 local professionals, and over 80 volunteers (Dignity Health, 2014).

14.3.4.2.3 Medical Aid

In the City of Weed, 85 percent of residents have some form of health insurance coverage (American Community Survey, 2013). In 2013, 41.7 percent of residents held private health insurance. The percentage of the total population of the City dependent on Medicare alone is 2.8 percent, whereas Medicaid residents comprise 25.5 percent of the population. Public coverage is provided for 28.3 percent of the people.

In 2008, the Supplemental Nutrition Assistance Program (SNAP) officially replaced the Food Stamp Program, which is administered by the United States Department of Agriculture. SNAP is a federal program that targets hunger by providing federal aid to citizens who cannot meet their own or their family's food needs. SNAP eligibility is based on household income, property value, and household size, and is intended to subsidize the purchase of food for the household. Table 14.3 shows the number of SNAP recipients in Siskiyou County from 2010 to 2014. After a decline from 2010, the number of recipients has been on an upward trend since 2011, getting back to 2010 levels by 2014.

Table 14.3 SNAP Recipients in Siskiyou County

| July 2010 | July 2011 | July 2012 | July 2013 | July 2014 |
|-----------|-----------|-----------|-----------|-----------|
| 3,119 | 2,357 | 2,613 | 2,825 | 3,122 |

Source: Siskiyou County Health & Human Services Agency, Social Services Division

14.3.5 Access to Parks and Recreation

A key feature of a healthy community is whether there are adequate spaces for people to engage in physical activity and have access to recreational opportunities. Due to rising obesity rates in the nation and the State of California, it is crucial that communities maintain and increase park access, have equal distribution of open space, and ensure the quality of these essential community resources (National Recreation and Park Association).

14.3.5.1 Community Health Impacts

Park access can provide community members with opportunities for physical activity, sporting games, social events, and contact with nature. Numerous studies have shown that the availability of park and recreation resources, and easy, safe access to them encourages increased levels of physical activity (NRPA, 2013). In addition to park access, communities also need a variety of parks, which offer different health benefits to people of varying ages, ethnic backgrounds, and socioeconomic groups. Health studies have also demonstrated that contact with the outdoors and nature can provide benefits such as lowered blood pressure and cholesterol, enhanced survival after a heart attack, fewer minor medical complaints, and lower self-reported stress (American Planning Association, 2003).

14.3.5.2 Community Condition Indicators

The following indicators were used to determine the existing park conditions in Weed as they relate to public health. Factors include the number of parks, the condition of each park, and how accessible they are to Weed residents.

- Park acres per capita
- Quality of park
- Proportion of residential parcels within a ½ mile of a park

14.3.5.3 Key Findings

The City of Weed is currently home to four parks: three within the city limits, and one in Carrick, just outside the city limits. These include Bel Air Park, Charlie Byrd Park, Sons Park and Lobis Field, and Carrick Park. Table 14.4 displays the acreage associated with each park along with its amenities. The total population in Weed as of 2014 was 2,865, and the total park acreage was 33.4. Based on this information, there were 0.009947 acres of park space per capita (or 9.95 acres per thousand people), which is about the national average of 10 acres per 1,000 persons recommended by the National Recreation and Park Association (NRPA, 2015).

Table 14.4 Acreages of Parks within Weed Parks and Recreation District

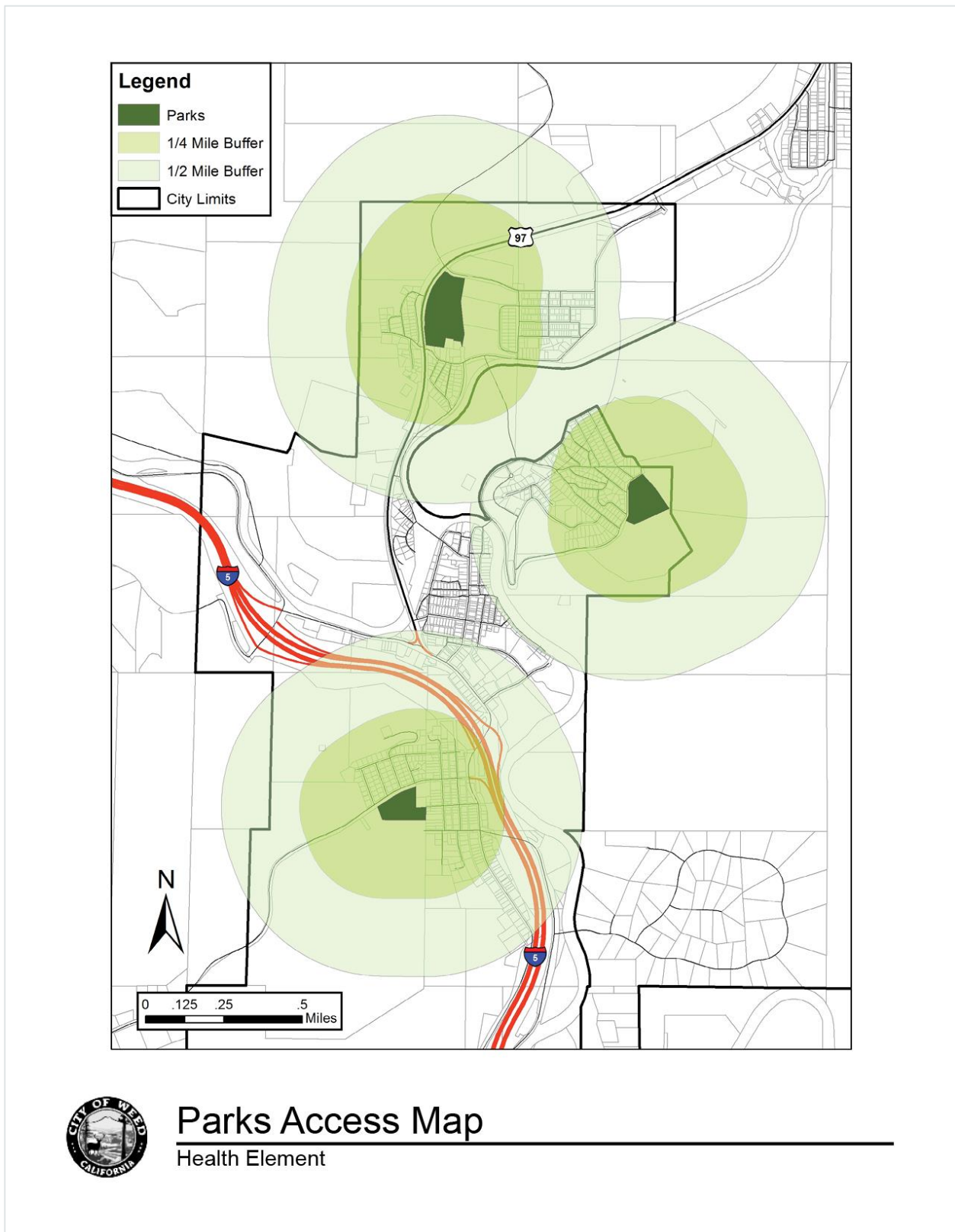
| Weed Parks and Specifications | | |
|--------------------------------------|--------------|---|
| Park | Acres | Amenities |
| Bel Air Park | 6.8 | playground, ball field, bocce courts, horseshoe pits, gazebo, picnic areas, swimming pool |
| Charlie Byrd Park | 15.3 | basketball courts, multipurpose field, restrooms, picnic areas, playground, skate park |
| Sons Park & Lobis Field | 8.3 | ball fiend |
| Carrick Park | 3 | basketball courts, playground, picnic areas, year-round creek |
| Total | 33.4 | |
| Acres per 1000 persons | 12.3 | |

**Total number of parks space acreage differs slightly from Table 4.5 in the Land Use Element due to the fact that Carrick Park is located outside City Limits*

Source: Weed Recreation and Parks District, 2015

Map 14.4 identifies the distances of residential parcels from public parks in the City of Weed. The majority of residents are within 1/2 a mile of a park, which is considered a reasonable walking distance. Slightly over half of residential parcels are within 0.25 miles of a park, which is the optimal walking distance. This demonstrates that there is generally very good access to parks in Weed. Access to parks greatly increases community health through outdoor physical activity and recreational opportunities.

Map 14.3 Access to Parks in Weed



Source: Cal Poly Land Use Inventory, 2015

14.3.6 Environmental Quality and Health

Environmental quality is a key component to reducing and preventing disease, disability and injury as people interact with their surrounding environment. A healthy environment can increase quality of life.

14.3.6.1 Community Health Impacts

Elements of environmental health include outdoor air quality, water quality, hazardous waste sites, and toxic substances. Environmental health factors are diverse and complex and include elements of the built environment in which people conduct their daily lives.

The Environmental Protection Agency (EPA) states that living near major roadways increases people's exposure to toxic air contaminants. Health impacts include higher rates of asthma, impaired lung development in children, and cardiovascular disease.

Research findings indicate that roadways generally influence air quality within 500 feet downwind from the vicinity of heavily traveled corridors (EPA, 2014). The presence of contaminated sites and hazardous materials due to poor environmental management practices or industrial operations causes environmental health issues. Efforts to reduce exposure to toxic substances and hazardous waste materials should be continued.

14.3.6.2 Community Conditions Indicators

Community conditions indicators are based on information provided in "How to Create and Implement Healthy General Plans" (Changelab Solutions, 2012). The following indicators were identified as key determinants of existing environmental health conditions for the City of Weed.

- Proportion of residential and commercial development within 500 feet of freeways
- Proportion of homes within 300 feet of an industrial site
- Violations of air quality standards

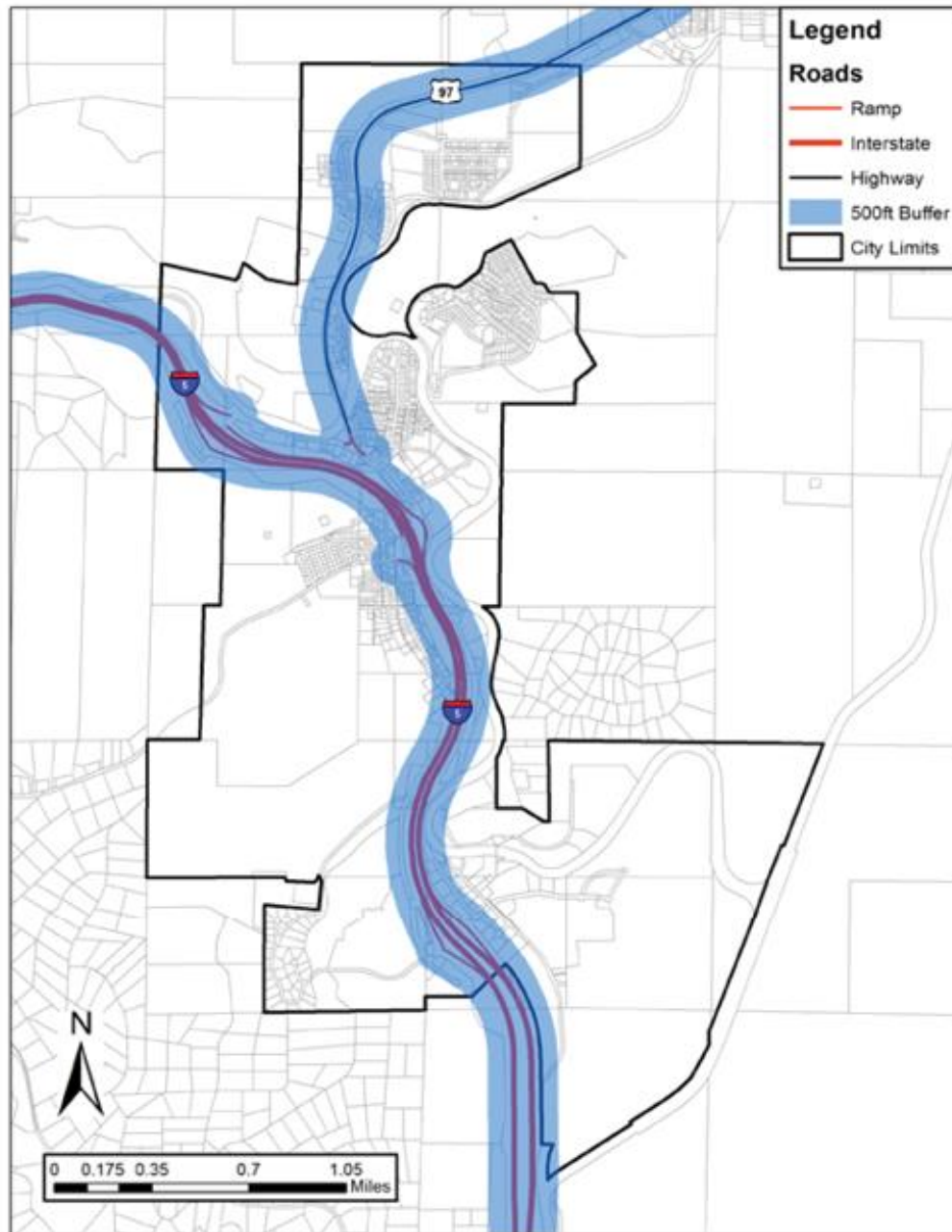
14.3.6.3 Key Findings

14.3.6.3.1 Proximity of Incompatible Uses

Localized air pollution impacts from incompatible land use can occur when pollution sources such as heavily trafficked roadways, warehousing facilities, or industrial or commercial facilities, are located near sensitive land uses, such as homes and schools (CARB Air Quality and Land Use Handbook, 2005).

Pollutants directly emitted from cars, trucks, and other motor vehicles are found in higher concentrations near major roads (EPA, 2014). Pollutants such as particulate matter, carbon monoxide, and nitrogen oxides can have detrimental health effects. Map 14.5 shows that approximately 181 of the 831 residential parcels (22 percent) in Weed are within the 500-foot impact area of major roadways

Map 14.4 Major Roadways with 500-Foot Buffers in Weed



500ft Interstate and Highway Buffer Map

Health Element

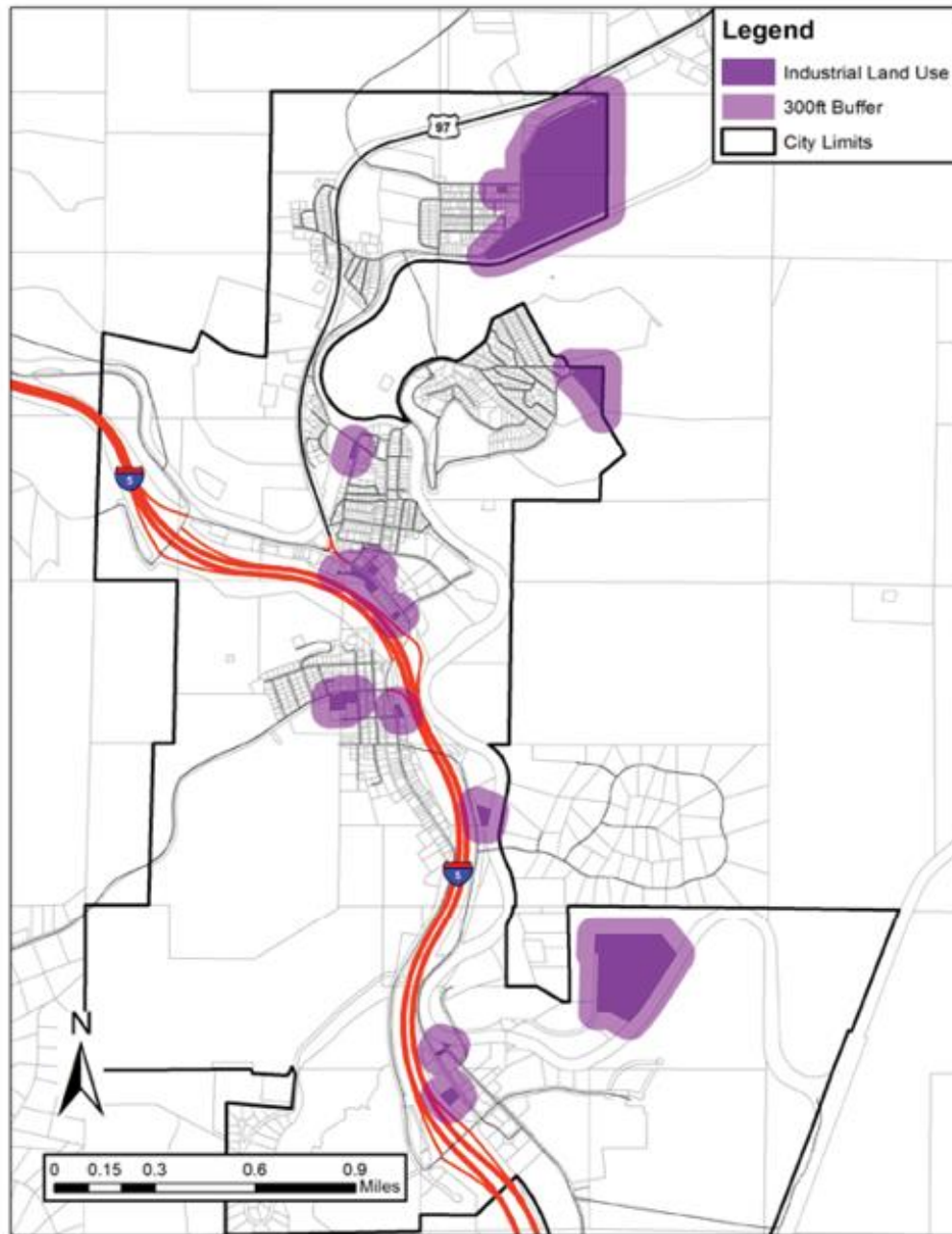
Source: City of Weed, 2015

Public health research also shows that the pollutants emitted by industrial facilities through combustion of fossil fuel have implications on individual and community health (Hendricks, 2014). Cardiovascular and respiratory illness can be exacerbated by particulate matter and carbon monoxide emissions from these processes.

Large and small industrial sites contribute to significant negative health impacts if land use design does not provide adequate setback buffers. The California Air Resources Board (CARB) defines low impact industries as automotive repair, dry cleaners, gasoline service stations, and wholesale traders. High impact industries include construction, electric, gas and sanitary services, manufacturing, and transportation. Land uses such as warehousing facilities and processing plants can also contribute to air pollution.

Siskiyou County is listed as an attainment region for particulate matter, of which transportation and fuel combustion are major contributors. This shows that the City of Weed is generally in acceptable condition in terms of its air quality. Map 14.6 shows industrial land uses within Weed and the corresponding 300-foot impact buffer. There are 86 (10 percent) residential parcels within the impact areas.

Map 14.5 Industrial Land Use with 300-Foot Buffers in Weed



300ft Industrial Use Buffer Map

Health Element

Source: Cal Poly Land Use Inventory, 2015

14.3.7 Access to Active Transportation

A healthy community promotes walking, biking, and public transit through the design of its built environment.

14.3.7.1 Community Health Impacts

Streets that are designed for multiple users including pedestrians of all ages, bicyclists, public transit riders, persons with disabilities, and motorists reduce the risk of pedestrian and bicycle injuries. Furthermore, walking or biking to school, work, daily errands, or recreation increases physical activity.

Health benefits of physical activity include reduced illness and death from heart disease, stroke, some forms of cancer, and diabetes. Regular participation in physical activity can reduce depression and anxiety, improve mood, and enhance ability to perform daily tasks.

Using public transit and active transportation options such as walking and biking reduces vehicle miles traveled, vehicle emissions, respiratory disease, hypertension, and exposure to environmental contamination due to pollution and runoff drainage. Proximity to transit is associated with reduced vehicle trips and improved access to social, medical, employment, and recreational activity. Air pollution and greenhouse gas emissions increase with vehicle miles traveled. Air pollutants, including ozone and particulate matter, pose risks for cardiovascular mortality and respiratory disease and illness.

14.3.7.2 Community Conditions Indicators

Indicators of active transportation systems include safe and accessible bike routes, spacious and consistently paved sidewalks, and frequent and accessible transit. Currently, the city of Weed has limited opportunities in terms of these indicators. Improvements in these areas may increase modes of active transportation.

14.3.7.3 Key Findings

There are currently no bike paths, bike lanes, or bike routes that exist in the City of Weed. U.S. Census from 2013 indicates that 0 percent of Weed's population commutes to work by bicycle. The lack of bicycle facilities and bicycle ridership reflect on the limited access to safe and accessible bicycle transportation options in Weed. Table 14.5 shows the commuter mode split in Weed, Siskiyou County, and California.

Walking accounts for 10 percent of Weed's commuter mode split, which is greater than the pedestrian mode split in California and twice as great as Siskiyou County's mode split. Although a relatively large share of commuters walk to work in Weed, data collected during the land use inventory shows that there is a lack of sidewalks within the City limits. The presence of sidewalks can greatly increase safety for pedestrians and encourage more people

to walk for transportation and recreational purposes. For more detail information on sidewalk conditions, see Chapter 5, Circulation.

Table 14.5 also shows the severe lack of transit use as a means to work in Weed. This may indicate that public transit is not accessible or is inconvenient.

Table 14.5 Means of Transportation to Work for Weed, Siskiyou County, and California

| Mode | Weed | Siskiyou County | California |
|--------------------------------------|------|-----------------|------------|
| Drove Alone | 72% | 71.3% | 73.2% |
| Carpooled | 10% | 12.0% | 11.3% |
| Public Transportation | 0 | 0.7% | 5.2% |
| Walked | 10% | 5.2% | 2.7% |
| Bicycle | 0 | 0.3% | 1.1% |
| Taxicab, motorcycle, or other | 0 | 0.3% | 0.3% |
| Worked at home | 5% | 9.2% | 5.2% |

Source: American Community Survey 5-Year Estimates, 2009-2013

14.4 Issues and Opportunities

14.4.1 Strengths and Opportunities

Based on community feedback from the first public meeting on October 10, 2015, residents of Weed expressed that the City's strengths pertaining to health are access to decent health care in the City, and proximity to agricultural land that makes fresh fruits and vegetables accessible. The Existing Conditions section of the Health Element further shows that the City of Weed has many assets. As mentioned, the city's CNI score is relatively high, indicating its adequacy of community needs. Weed also does not fall within a Medically Underserved Area as indicated by the State of California's Office of Statewide Health Planning and Development. Furthermore, the Access to Parks and Recreation section shows that there is near-sufficient recreational space for Weed's population and residents have relatively easy access to parks.

The current state of active transportation in the City of Weed shows that there are opportunities to increase transportation modes toward walking and introduce biking. Implementation and improvements such as adding more bike lanes and fixing sidewalks can promote these modes and lead to healthier behaviors.

14.4.2 Issues and Constraints

Residents identified issues associated with the City of Weed during the first community meeting on October 10, 2015. Community feedback is complimented by research conducted for this report. The health indicator that shows high death rates due to cancer in Siskiyou County is a critical issue for Weed. Community members expressed concern over high substance abuse among residents, particularly the youth. In addition, residents were concerned about the lack of psychiatric services in Weed. Lastly, the lack of active transportation infrastructure is an issue that inhibits opportunities for residents to bike or walk as means of transportation in Weed.

14.5 Emerging Directions

During the first community meeting on October 10, 2015, community members expressed a desire for expanded medical specialties, policies to promote and support urban agriculture, expanded anti-smoking education among youth, and better access to healthy food.

The barriers identified included the limited range of accessible medical services. Participants also noted the limited healthy food options.

The following are the emerging directions identified for health for the City of Weed based on existing conditions and community input:

Access to healthy food is an emerging direction for the City of Weed based on existing conditions and community input. This includes expansion of grocery store options, encouragement of healthier options, and coordination of community gardens on vacant parcels.

Increasing access to health services and medical facilities offers another emerging direction. The community strongly indicated a need to provide education and rehabilitation services for substance abuse.

Access to parks and recreation can be increased through encouraging more recreational activities for the youth and elderly, and offering more youth and adult sports leagues.

Lastly, active transportation can be improved by providing more bicycle and pedestrian connections, encouraging bicycling and walking as a viable transportation mode, and providing more transit options.

14.5.1 Community Preferences

On November 7th, 2015, the City held its second public meeting for the General Plan Update to assist in guiding the emerging directions for Weed. Participants were asked five separate health questions (each with multiple answer options) and were asked to vote based on preference for various options. The Health Element received 405 votes. The following are the results from the preference exercise:

- Participants voted overwhelmingly for senior care, rehabilitation programs and mental health, and health education as the most pressing health needs in the City of Weed.
- Social recreation was also overwhelmingly voted as the most needed activity for seniors.
- Career tutoring, sports programs, and volunteer programs were chosen, as the most needed activities for the youth.
- The community also indicated that healthy supermarkets would most likely encourage healthier food choices.
- Nature trails and paths also received the most votes as an option for encouraging more activity that is physical.

Figures 14.5 through 14.10 represent the distribution of votes for various preference questions.

Figure 14.5 Pressing Health Needs, Total Votes 92

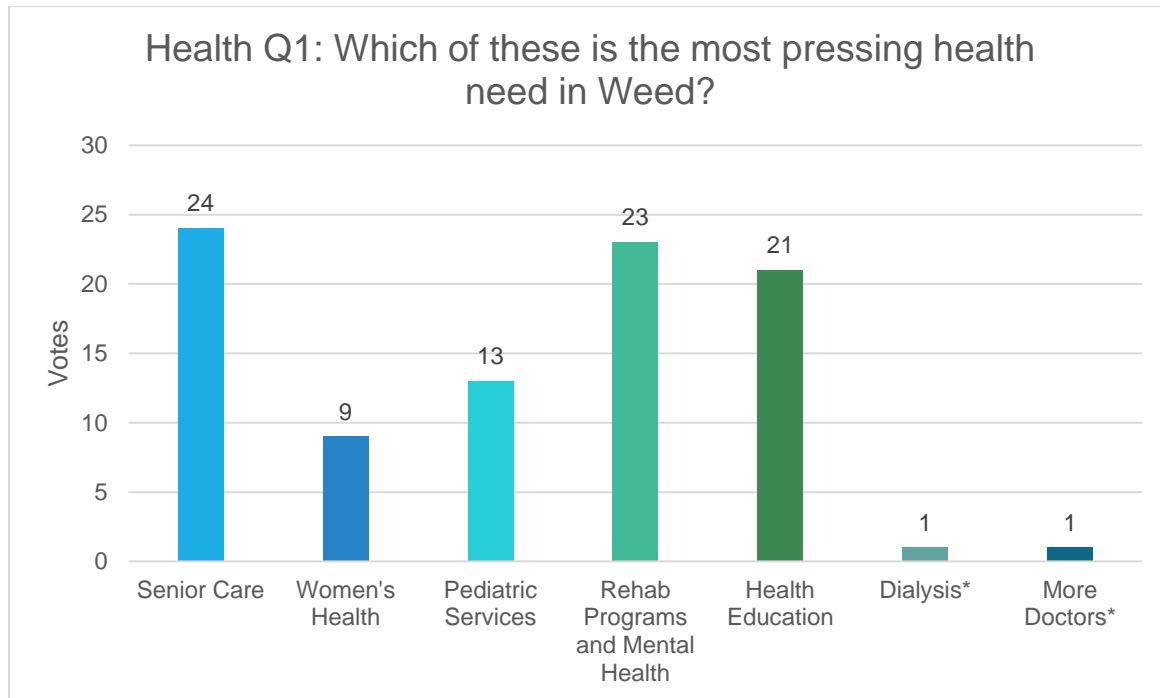


Figure 14.6 Senior Activities and Services, Total Votes 72

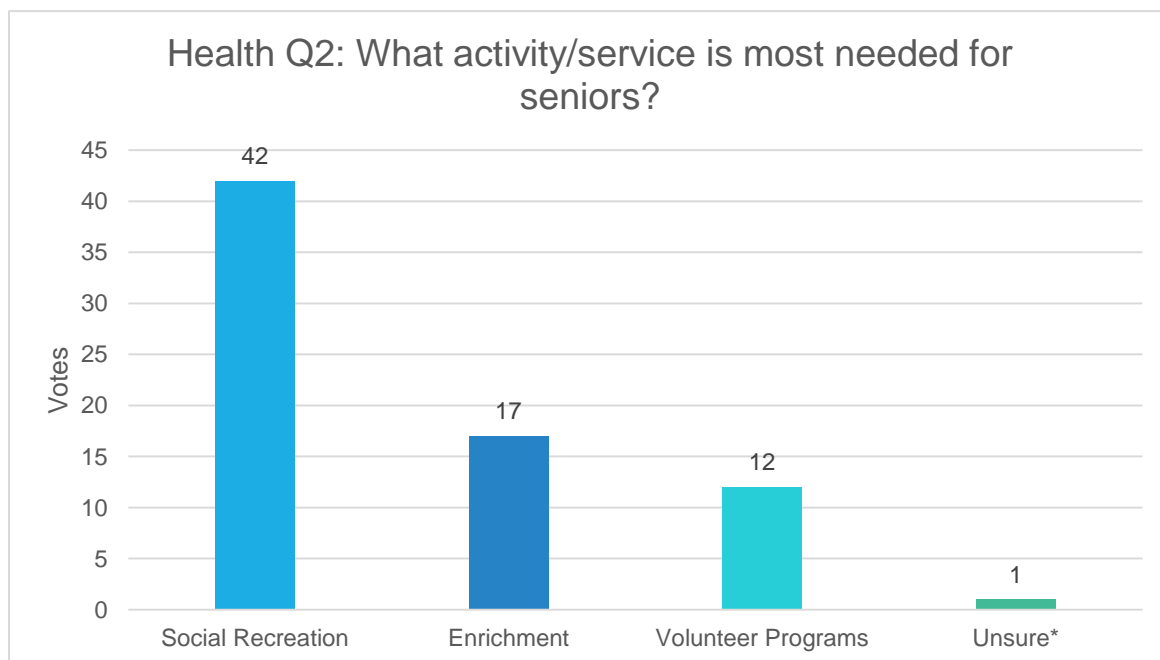


Figure 14.7 Youth Activities and Needs, Total Votes 142

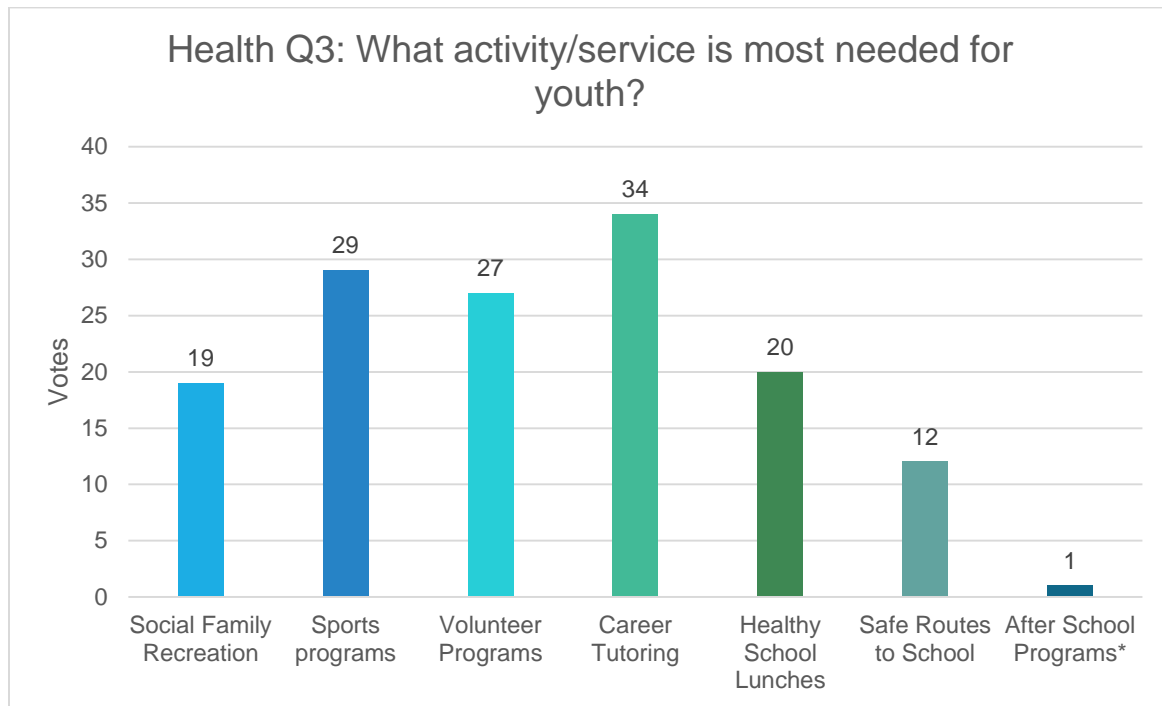


Figure 14.8 Healthy Food Options, Total Votes 78

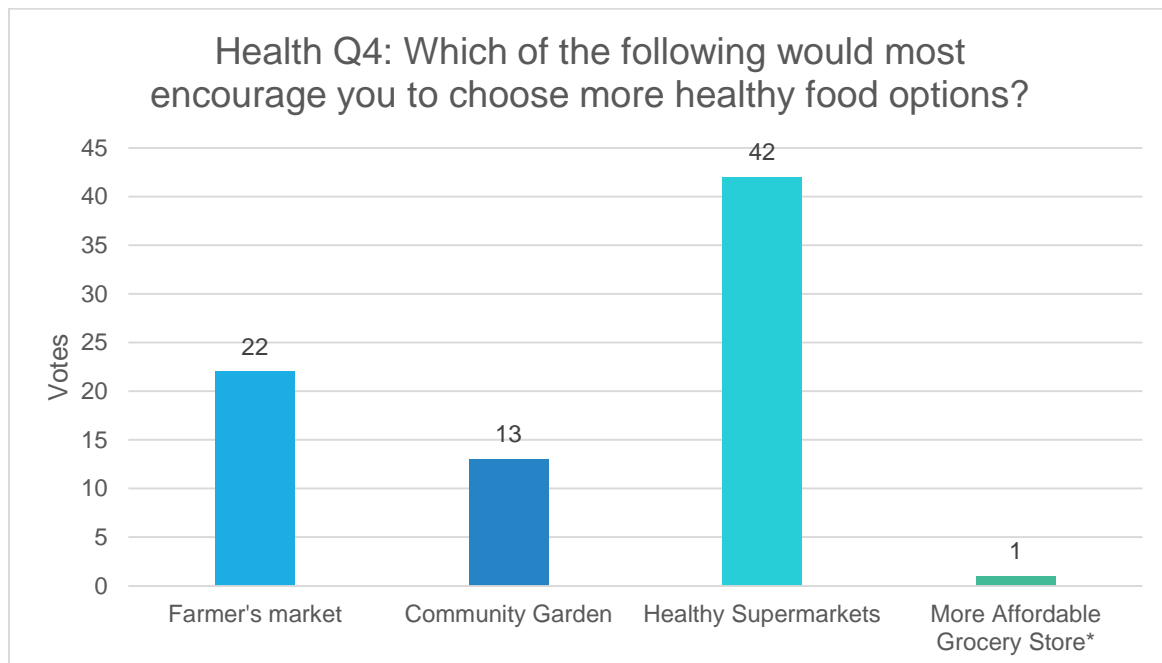
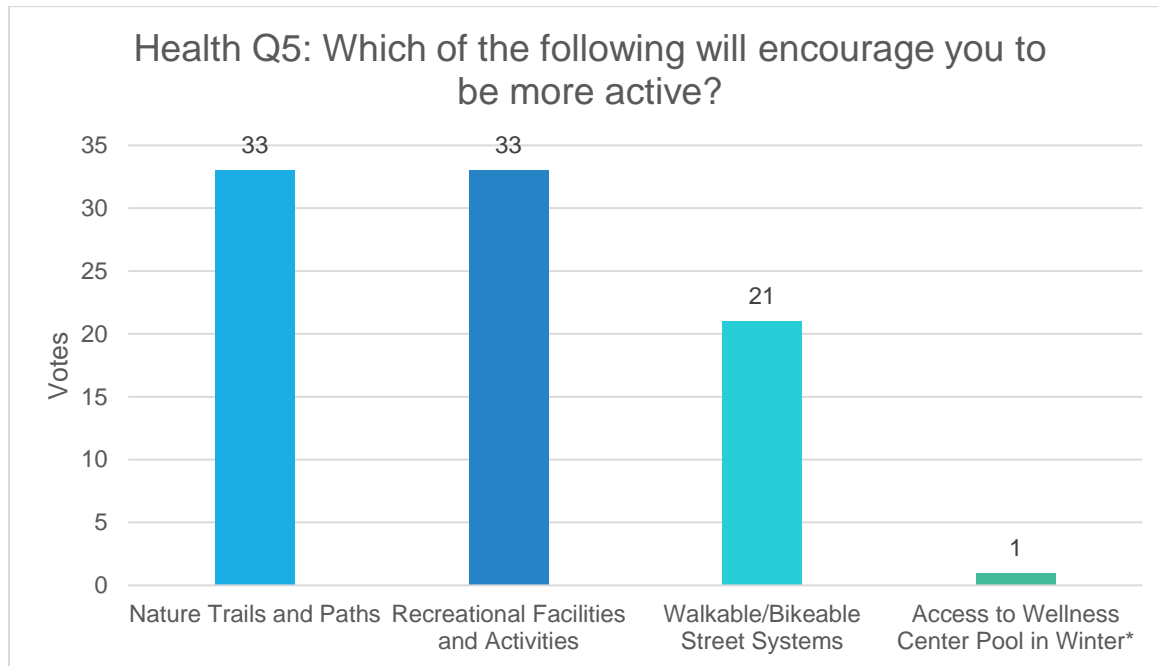


Figure 14.9 Physical Activity, Total Votes 88



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15 COMMUNITY DESIGN

15.1 Introduction

The Community Design Element is an optional element of the General Plan. The purpose of the Element is to identify unique aesthetic qualities of the built environment that contribute to livability and resident's quality of life. The Element guides the form and appearance of neighborhoods, streets, parks, public facilities and new development. By establishing goals, policies, and actions, the Community Design Element can help create a strong visual character and sense of place within the City. The element addresses the following topics:

- **Community Form:** Elements that define character of the community such as, view sheds, parks, and open space.
- **Neighborhood Structure:** Features that characterize the neighborhoods in the planning area such as, street types, landscaping and lot sizes.
- **Community Conservation:** Patterns of open space, circulation, and landmarks that provide identity to the planning area and neighborhoods to make them livable.
- **Connectivity:** Signage and gateways that may include patterns and features that could enhance the existing community or the general plan vision for the feature.

| Community Form | Neighborhood Structure | Community Conservation | Connectivity |
|--|---|--|---|
| Architectural Style Street Furniture Lighting Building Conditions | Street types/ Street Design Parks Landscaping and Trees Boundary Elements Lot Sizes | Open Space Circulation Landmarks | Street Industrial Parks Transition Areas Signage Gateways |

15.2 Regulatory Setting

The following section describes the state and local regulations that are applicable to community design. The regulatory setting for the Community Design Element exists primarily at the local level; however, there is state legislation that is relevant to the element. There are no federal regulations.

15.2.1 State Regulations

State Government Code; Section 65303

This section of the State Government Code allows the adoption of optional elements such as the Community Design Element into the General Plan. This element is developed closely with

the Land Use, Circulation, and Health, and Housing Elements (California Office of Planning and Research, General Plan Guidelines, 2003)

The Complete Streets Act, 2008

The Complete Streets Act of 2008 requires that cities and counties in California plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roadways, and highways in a way that considers the rural, suburban, and urban context when updating the circulation element of a general plan (California Administrative Code, 2008).

15.2.2 Local and Regional Regulations

Weed Municipal Code; Chapter 18.24 – Minor Development Procedures

Chapter 18.24.040 of the Weed Municipal Code requires that proposals for buildings or structures be accompanied by architectural drawings or sketches. The Code requires that drawings, sketches, and site plans be reviewed by the Planning Commission to ensure that the architectural and general appearance of the proposed buildings or structures and associated grounds be kept within the desired character of the neighborhood and City.

City of Weed Downtown Revitalization Plan, 2006

In 2006, an active Image Committee of the Mayor, local citizens, business owners, and other officials made the effort to develop, and implement a Downtown Revitalization Plan for the City of Weed. The City secured a Technical Assistance Grant under the Community Development Block Grant (CDBG) program to develop the revitalization plan. The purpose of the Downtown Revitalization Plan was to provide a comprehensive set of recommendations to address economic development as well as improvements to streetscape, park and open space, land use and transportation for the downtown area. The plan is a tool to guide decision-making by elected officials, city staff, and community stakeholders toward future public and private investments in downtown Weed. The Downtown Revitalization Plan has three sections: an Economic Market Study; A Conceptual Design Plan; and an Improvement Financing Plan.

City of Weed Architectural Design Guidelines, 1992

The City of Weed adopted design guidelines in 1992. The purpose of the guidelines is to establish a framework for maintaining and developing the visual character and aesthetic quality in Weed. The guidelines were adopted to help guide the design of capital improvements projects in the central business district and to serve as an evaluation tool for the design of projects within the City (City of Weed, 1992).

The following topics are addressed in the architectural design guidelines:

- Architectural Style
- Building Design
- Height of Structures
- Building Materials
- Windows, Doors, Awnings and Overhangs
- Building Dimensions

- Color
- Business Signage
- Storefront
- Lighting

15.3 Existing Conditions

The City of Weed is located at the base of the scenic Mount Shasta, which contributes to a unique aesthetic character. Mount Shasta is a major landmark that defines the mountain western theme identified in the City's design guidelines. Weed has a small-town feel and close-knit community that contributes to its strong sense of place. The following sections discuss the current state of community design in Weed according to the City's Architectural Guidelines and traditional components of community design such as landmarks, gateways, and signage.



Mountain Western Theme

Based on Weed's history as a lumber town and its location near Mt. Shasta, a mountain western theme is encouraged in the downtown guidelines. Mountain western theme is defined as follows:

Mountain Western Theme: A pleasant, concentrated commercial environment that is intended to be natural, informal, relaxed, subtle, and display the beautiful setting of Weed. The style enlightens the heritage of ranching, railroad, and lumbering influences to the scene and projects the feeling of being modern but also has a rural 'country' influences. The Mountain Western Theme can attract tourists and encourages residents to shop locally by providing the enjoyable and convenient atmosphere in the downtown area.

Table 15.1 provides a multi-page summary of the existing conditions expressed in terms of the Architectural Guidelines as observed during the land use inventory performed by Cal Poly in October, 2015.

Table 15.1 Existing Conditions

| Aesthetics | |
|--|---|
| <p>Guideline: Mechanical equipment, storage areas, utilities, and trash collection should be screened from view.</p> <p>Current Condition: The majority of the City's parcels complies with the guidelines for mechanical equipment, storage areas, utilities, and trash receptacles. Most unpleasant sights are hidden from view, with the exception of a few locations along South Weed Boulevard.</p> | <p>Example:</p>  |
| Landscaping | |
| <p>Guideline: All areas not used for structure(s) should be paved or landscaped.</p> <p>Current Condition: Most properties along Weed's commercial corridors are paved or landscaped. Many properties; however, have large expanses of hard-packed dirt. In residential areas, most residences have landscaped yards, some of which are better kept than others are.</p> | <p>Example:</p>  |

Public Space

Guideline: Incorporate 'people places' into the site design that take advantage of views of Mt. Shasta and incorporate street furniture

Current Condition:

There is a general lack of open public spaces along Main Street, aside from the plaza adjacent to City Hall. There are benches located along Main Street which provide sufficient seating to residents and visitors..

Example:



Building Façade

Guideline: Use of wood, log, rock, moss rock, red brick, and stucco is encouraged.

Guideline: Establish a pedestrian oriented storefront format.



Guideline: Limit the height of buildings to two stories in keeping with the general character of the old western towns.

Current Condition:

Most commercial buildings in downtown Weed have brick or stucco facades, which comply with the architectural design guidelines. Most residential buildings in Weed are built of wood.

Example:



| Lighting | |
|--|--|
| <p>Current Condition: The light posts in downtown Weed are unique and contribute to the strong sense of place along Main Street. These lights provide an important aesthetic character to downtown and enhance walkability within the area.</p> | <p>Example:</p>  |
| Paving | |
| <p>Current Condition: The paving throughout Downtown is decorative and maximizes the areas adjacent to enrich the pedestrian experience.</p> | <p>Example:</p>  |

15.3.1 Other Important Design Considerations

This section discusses gateways, signage, and landmarks within the City of Weed. These important components of community design contribute to the City's sense of place and unique character.

15.3.1.1 Citywide Signage

15.3.1.1.1 Public Buildings

Many public and government buildings in the City of Weed include signage but do not contain an emblem. Figure 5.1 shows an example. Public facilities have a wooden sign with the building name in their front lawn. The photo below exemplifies the signage in front of public facilities in Weed. Smaller signs in the Downtown district are also placed to direct visitors to other zones such as parking areas.

Figure 15.1 City of Weed City Hall building



Source: Cal Poly Land Use Inventory, 2015

15.3.1.1.2 Informational Signage

Most signs around the City are also wooden and represent the mountain western theme. These important navigational components of the City direct residents and visitors to the downtown. Figures 15.2, 15.3, and 15.4 show examples.

Figure 15.2 Downtown Signage



Source: Cal Poly Land Use Inventory, 2015

Figure 15.3 Event Program Calendar



Source: Cal Poly Land Use Inventory, 2015

Figure 15.4 Public Parking Signage



Source: Cal Poly Land Use Inventory, 2015

15.3.1.2 Gateways

Gateway signage is an important consideration for community character and design. Gateway signage designates the entrances into town, often serving as a "welcome" into a city or a specific part of a city. Additionally, these signs contribute to the City's setting and identity. In 2015, the City of Weed had two gateway signs on US 97 at the I-5 exit and on Main Street off US 97. Both are different but represent the mountain western style of the City. Figures 15.5 and 15.6 identify the two gateway signs.

Figure 15.5 Gateway signage along US Route 97



Source: Cal Poly Land Use Inventory, 2015

Figure 15.6 Gateway signage on entrance to Downtown on Main Street



Source: Cal Poly Land Use Inventory, 2015

15.3.1.3 Landmarks

Mt. Shasta is the most prolific and iconic landmark for the City. Its natural views have brought many outside visitors into the City. The City Hall building, which once served as the main administrative center of the old lumber company, remains an iconic building along Weed's Main Street. There is a plaza in front of City Hall with a statue of the City's founder, Abner Weed shown in Figure 15.7. This statue serves as an iconic landmark within the City. Figure 15.8 identifies Weed's City Hall. The Weed Mercantile Mall is also an important landmark. Built in 1901, it is one of the City's oldest and most prolific buildings. It is important to preserve these landmarks because they share the story of the rich history of the City of Weed.

Figure 15.7 Statue of Founder Abner Weed



Source: Cal Poly Land Use Inventory, 2015

Figure 15.8 Weed City Hall



Source: Cal Poly Land Use Inventory, 2015

15.3.1.4 Streetscape

Aside from the downtown, street conditions in Weed are generally fair. Many street corners in residential neighborhoods do not have sidewalks, marked crossings for pedestrians, or bicycle lane markings. Weed's unique scenery of Mount Shasta and rich history has a high potential for tourism in the City. However, a significant number of vacant buildings on the Main Street corridor takes away from the street's aesthetic value and does not promote pedestrian activity. The majority of new businesses are located away from Main Street near the US 97 exit and the freeway interchange area in South Weed. The City heavily depends on tourism traffic that arrives via I-5. The name of the City, its stunning scenery and natural environment attracts many visitors. The connectivity between Main Street and South Weed has high potential for an improved streetscape that would create a more attractive environment. The streetscape on Main Street is quaint and appealing, but does not catch the attention of visitors due to its location off US 97. Many of the businesses are local thrift stores and other buildings are vacant, as shown in Figure 15.9, which does not encourage walking in Downtown.

Figure 15.9 Vacant Building on Main Street



Source: Cal Poly Land Use Inventory, 2015

15.3.1.5 Wayfinding

Wayfinding is an important component of a city's design because it provides orientation and navigation for residents and visitors. Wayfinding can also contribute to a community's sense of place. Gateway signage designates entrances into Weed, serving as a "welcome" into the City. In 2015, the City of Weed had two distinct gateways that served as wayfinding for both residents and visitors alike. The first is the "welcome" sign off the U.S. 97 and the "Weed" gateway arch that frames Main Street and marks the entrance into Downtown. Other wayfinding amenities include small scale signage that directs residents and visitors towards downtown and other scenic destinations in the area. Figure 15.10 shows a wayfinding signage on South Weed Boulevard.

Figure 15.10 Wayfinding on South Weed Boulevard



Source: Cal Poly Land Use Inventory, 2015

15.3.2 Building Conditions

Overall, the housing conditions in Weed were adequate in 2015. Approximately 85 percent were in good condition, 13 percent were in fair condition, and only two percent were considered to be in poor condition. There were only two homes (0.3 percent) in the City of Weed to be categorized as poor or dilapidated. While the housing stock was in good condition, many businesses along Main Street were vacant and began to deteriorate due to lack of upkeep, which detracts from the street's character.

15.4 Issues and Opportunities

On October 10, 2015, the City held its first public meeting for the General Plan update in order to gather information on the strengths, barriers, and wishes for the future of Weed from community members. These are discussed in the following paragraphs.

15.4.1 Strengths and Opportunities

Residents of Weed expressed their attachment to the small-town, rich history, and friendly atmosphere of the City. Community members identified the strengths of the City in terms of community design as close-knit, friendly, and intimate community. They also described Weed as a generally safe and clean place that had diverse neighborhoods and a strong sense of place. Lastly, community members expressed that a strength of Weed was the charming Main Street. The scenic backdrop of Mount Shasta and quaint city streets provide an opportunity for the City to develop its unique character and attract more visitors to the area.

15.4.2 Threats and Constraints

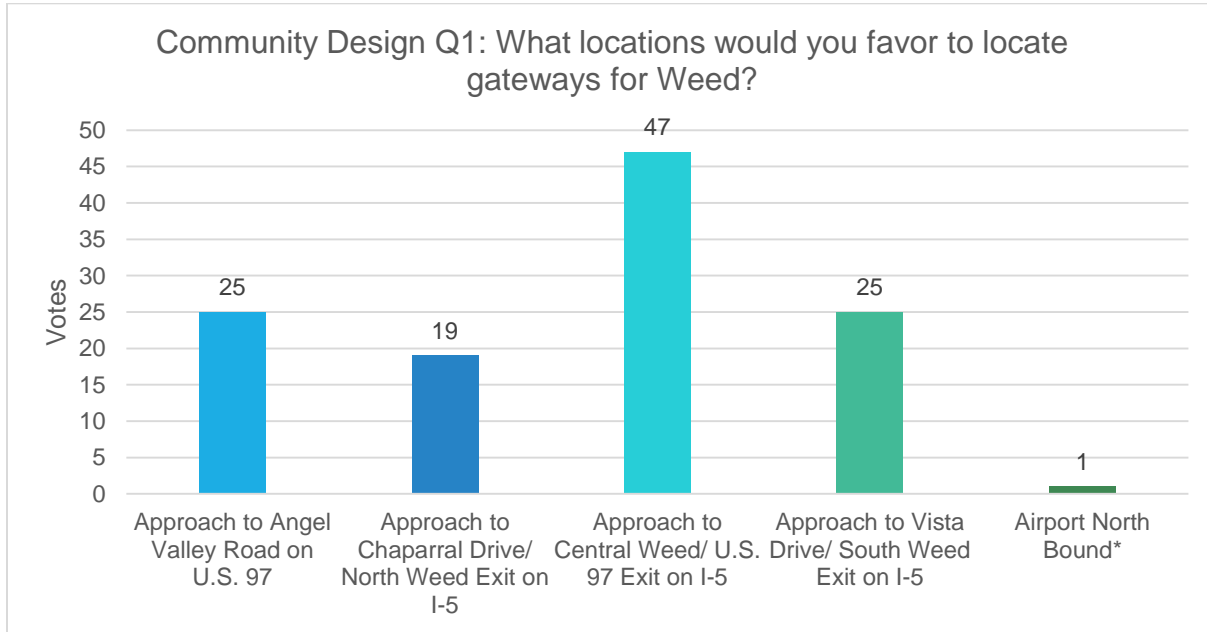
Community input from the first meeting identified the lack of pedestrian activity along Main Street as well as the lack of pedestrian amenities in comparison to South Weed Boulevard. Community members also noted that there were insufficient gateways and wayfinding signage in the City. This is important because signage is an important component in assisting residents and visitors with orientation and navigation within the City. Signage is also important because it contributes to the aesthetic character of a place. Another major constraint in terms of the appearance of downtown is the amount of vacant buildings.

15.5 Emerging Directions

At the second public meeting, held on November 7th 2015, community members were asked 5 separate questions pertaining to community design (each with multiple answer options) and were asked to vote based on preference for various options. Figure 15.11 through Figure 15.15 provide the complete results from the meeting on community design preferences. Based on existing conditions and community feedback, the emerging directions for community design in Weed are to emphasize the City's sense of place by connecting to the City's rich history and to increase public art, landmarks, wayfinding, and pedestrian lighting throughout the City's commercial streets.

15.5.1 Community Preferences

Figure 15.11 Preferred Gateway Location, Total Votes 117



**Answer not in the original questionnaire and added by participants*

Figure 15.12 Wayfinding Amenities on Commercial Streets, Total Votes 76

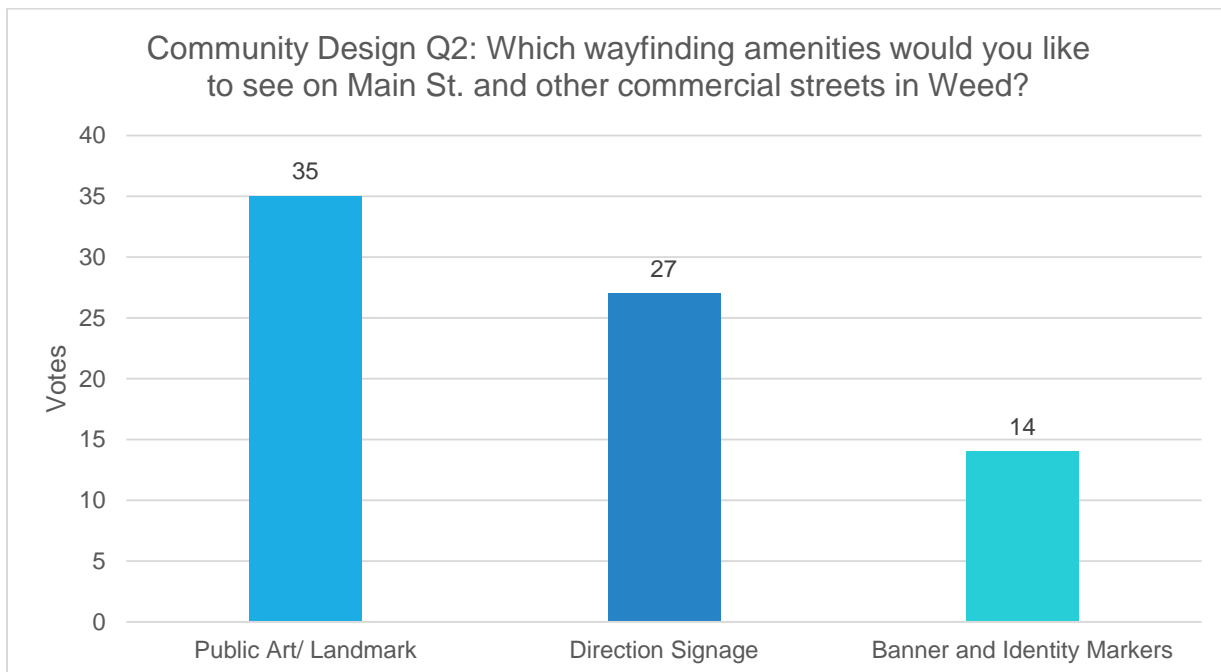
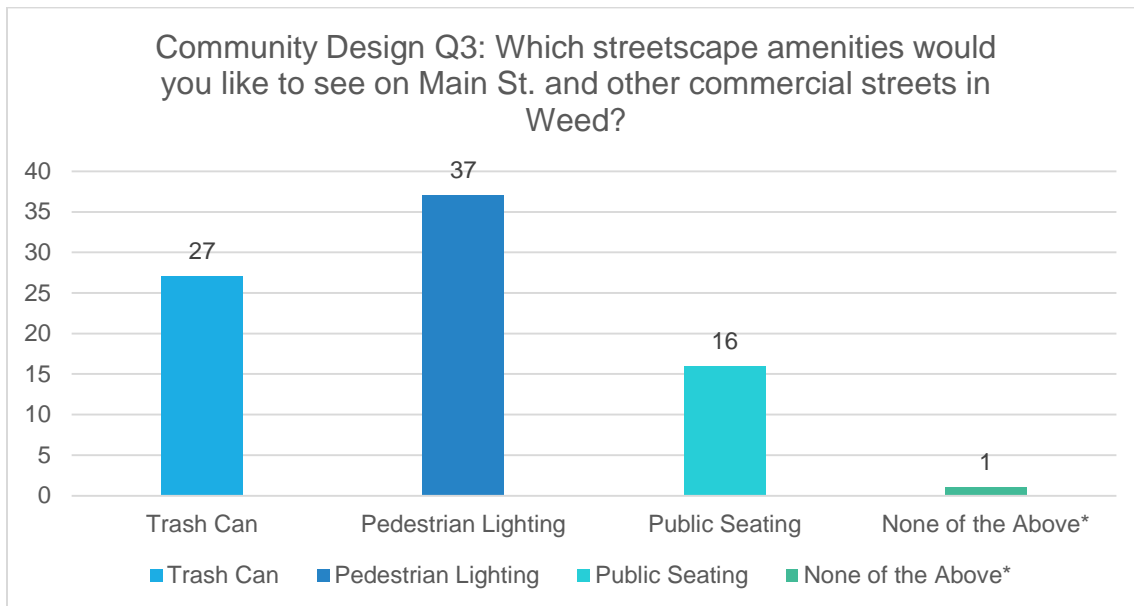
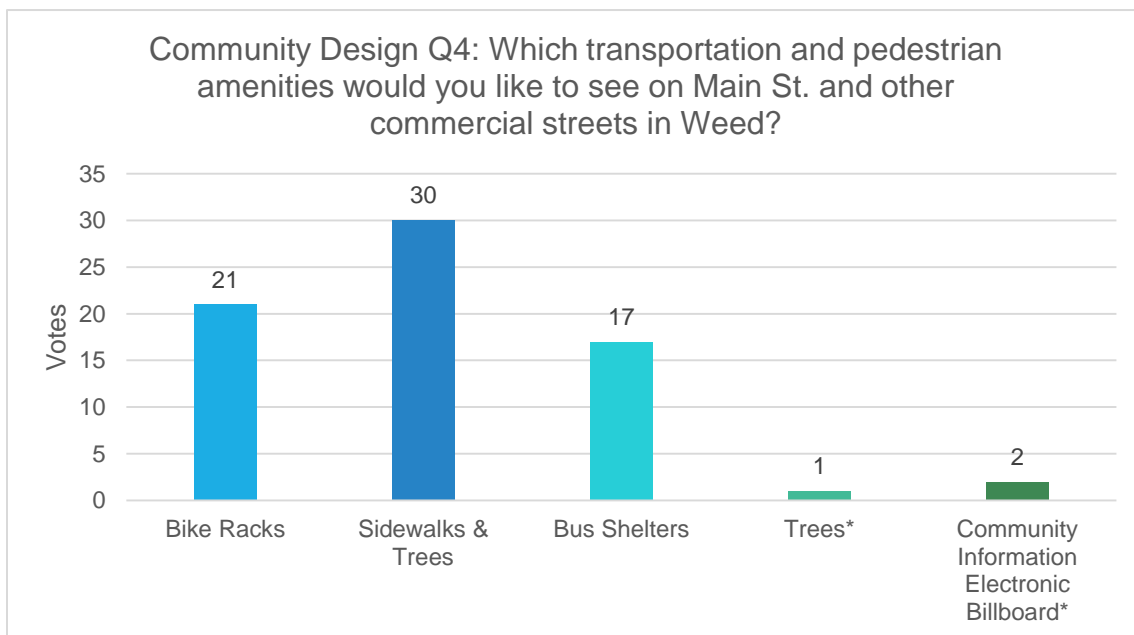


Figure 15.13 Streetscape Amenities on Commercial Streets, Total Votes 81



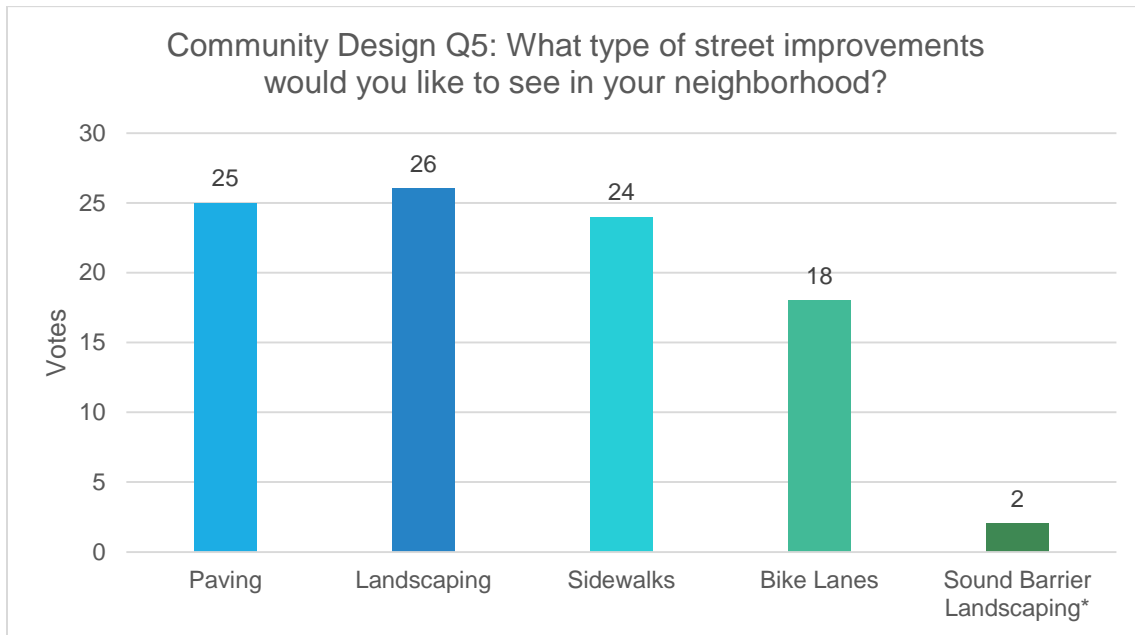
**Answer not in the original questionnaire and added by participants*

Figure 15.14 Transportation and Pedestrian Amenities, Total Votes 71



**Answer not in the original questionnaire and added by participants*

Figure 15.15 Street Improvements, Total Votes 95



**Answer not in the original questionnaire and added by participants*

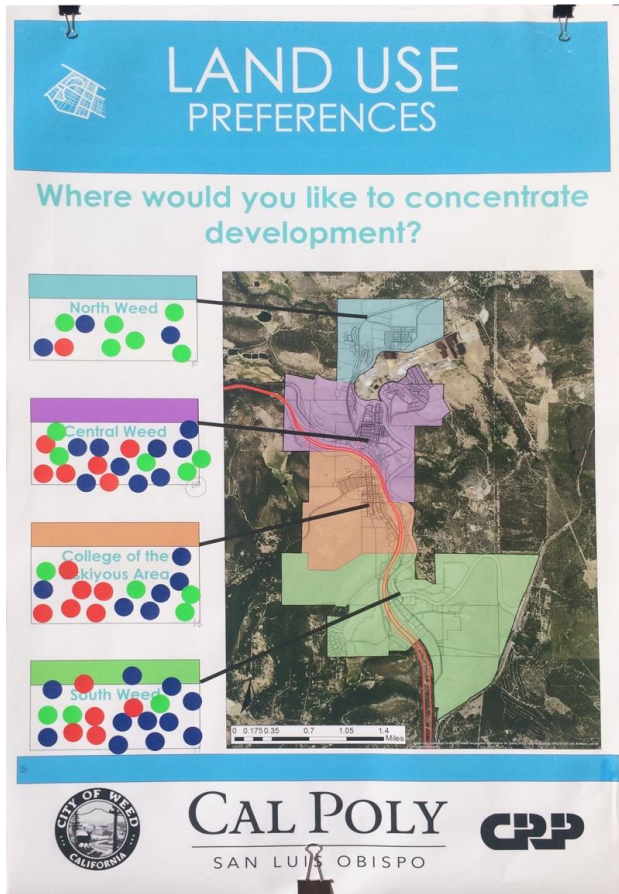
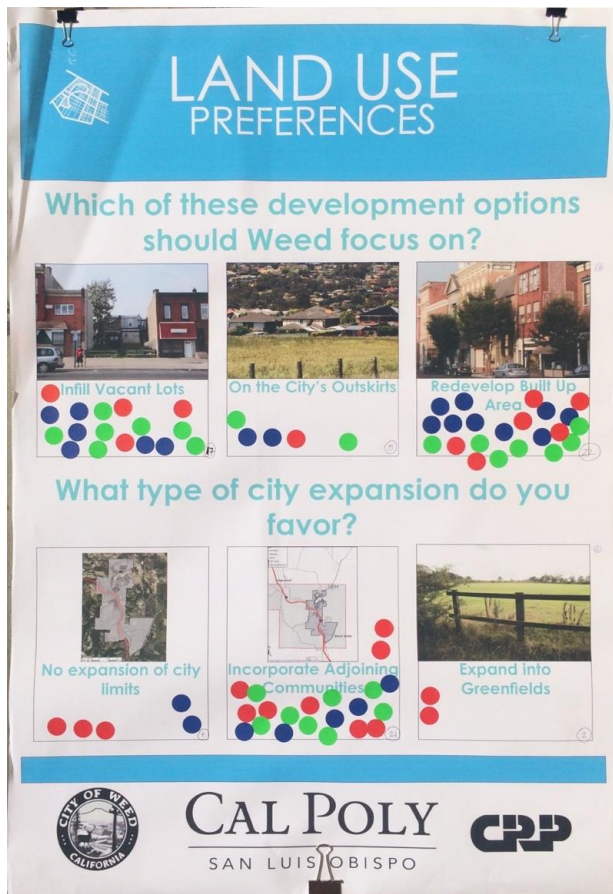
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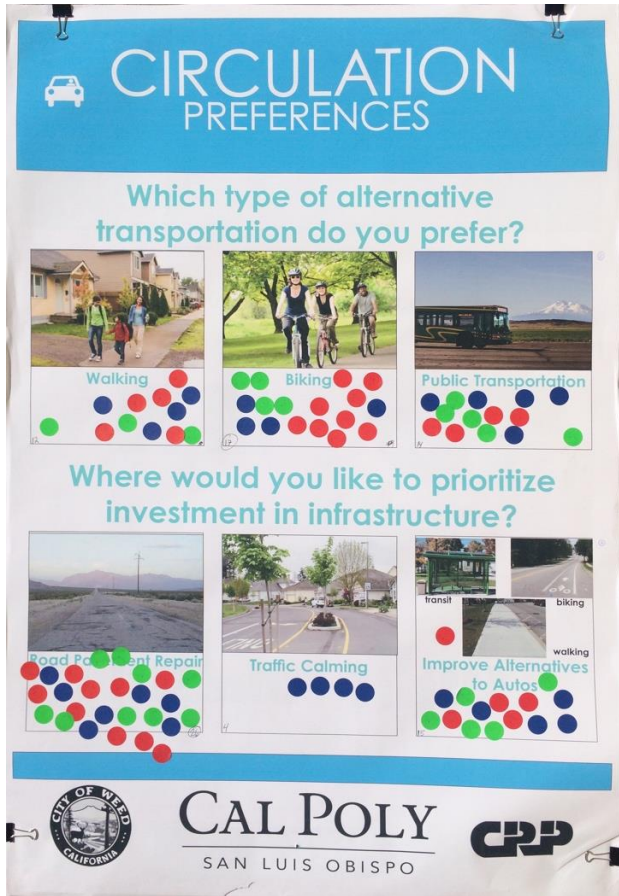
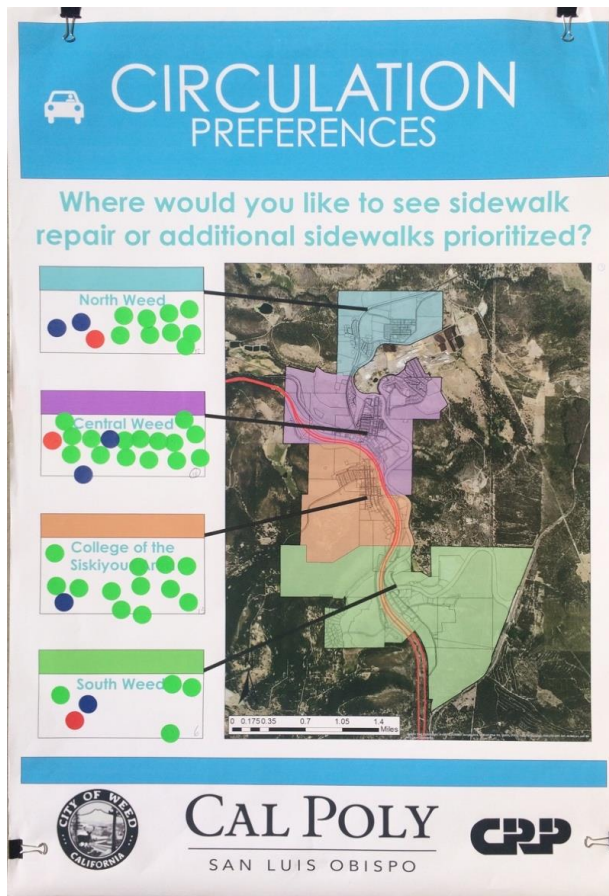
16 APPENDICIES

16.1 Community Meeting #2 Preference Posters

Land Use



Circulation



Housing



HOUSING PREFERENCES

Which of the following special needs housing should we prioritize?


| | | |
|--|--|--|
|  Senior Housing  |  Low Income Housing  |  Workforce Housing  |
|  Student Housing  |  Persons with Disabilities  |  Temporary Housing  |



CAL POLY







SAN LUIS OBISPO








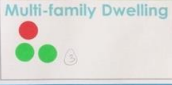



HOUSING PREFERENCES

What type of affordable housing would be most beneficial for the City?

| | | |
|---|--|--|
|  Apartments  |  Secondary Dwelling Units (Granny Flats)  |  Mobile Home  |
|---|--|--|


What types of housing do you prefer?

| | | |
|---|---|--|
|  Single Family Detached  |  Single Family Attached  |  Multi-family Dwelling  |
|---|---|--|




CAL POLY

SAN LUIS OBISPO




Open Space



OPEN SPACE

PREFERENCES


What type of park would you like to see most in Weed?



Sports Park

●
●
●
●
●
●


7



Play Parks

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●

5




Small Neighborhood Parks (Pocket Parks)

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20

What activities would you like to enjoy in the City's park system?


already have enough



Biking and Walking on Trails

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17



Events

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18



Exercise

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6



Leisure


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●
●

5



CAL POLY

SAN LUIS OBISPO



Conservation

CONSERVATION PREFERENCES

What is your top conservation priority?

Water

16

Air Quality

10

Endangered Species

3

Forests

8

Which of these conservation activities are you willing to use?

Energy Efficient Appliances

9

Xeriscaping

10

Solar Panels

12

What is the most pressing environmental health problem for you?

Water Pollution

9

Air Pollution

15


Litter

11

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Air Quality




AIR QUALITY PREFERENCES

What would you do to improve air quality?



Plant a Tree


6



transit biking
walking


Use Alternative Modes
of Transportation

12



Use Clean Energy
Sources


14



Upgrade to Green
Building


10

Handwritten notes:
- Left of 'Plant a Tree': 10 red, 5 blue, 5 green dots.
- Right of 'Upgrade to Green Building': 5 red, 5 blue, 5 green dots.
- Above 'Upgrade to Green Building': 10 red, 5 blue, 5 green dots.

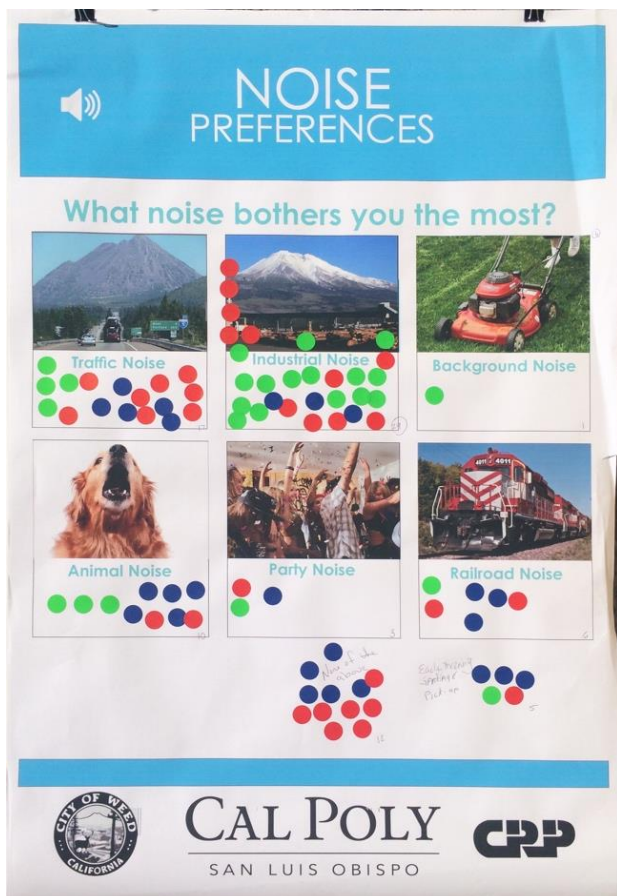
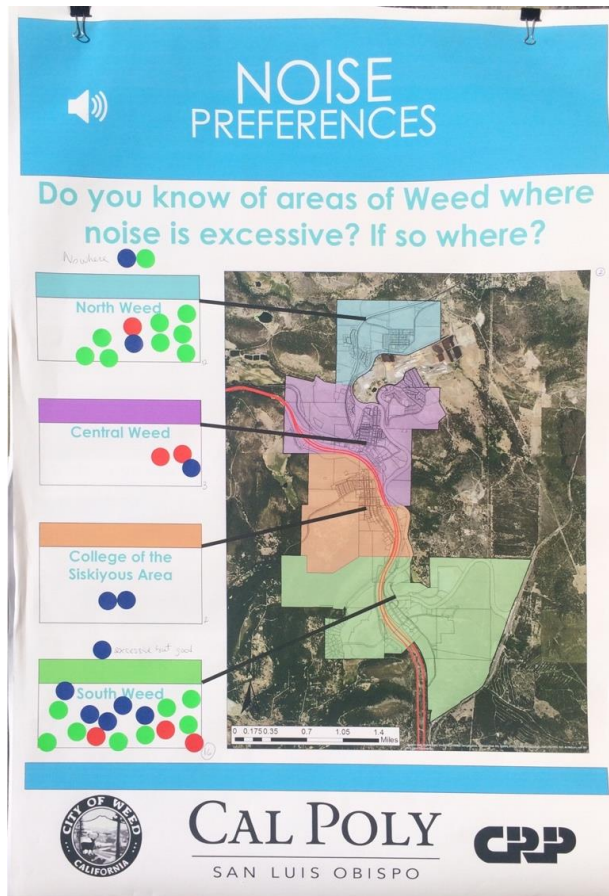


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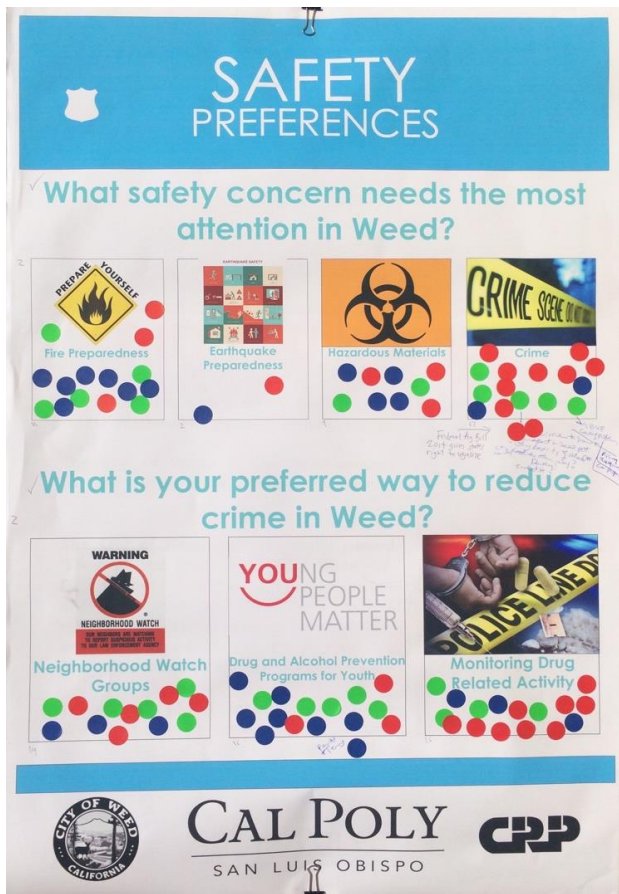
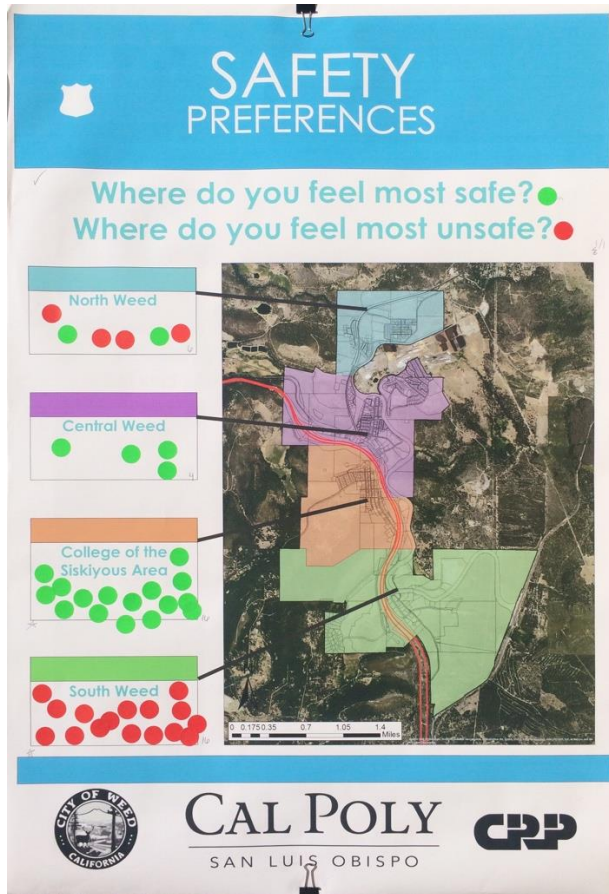
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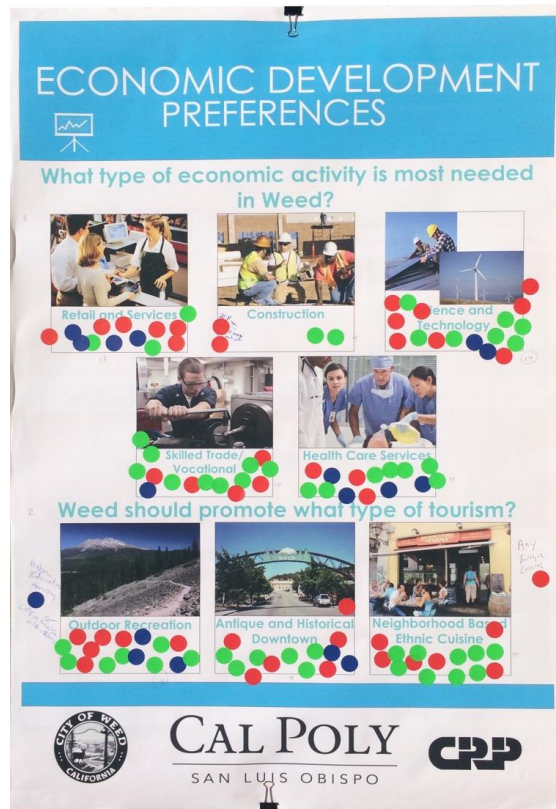
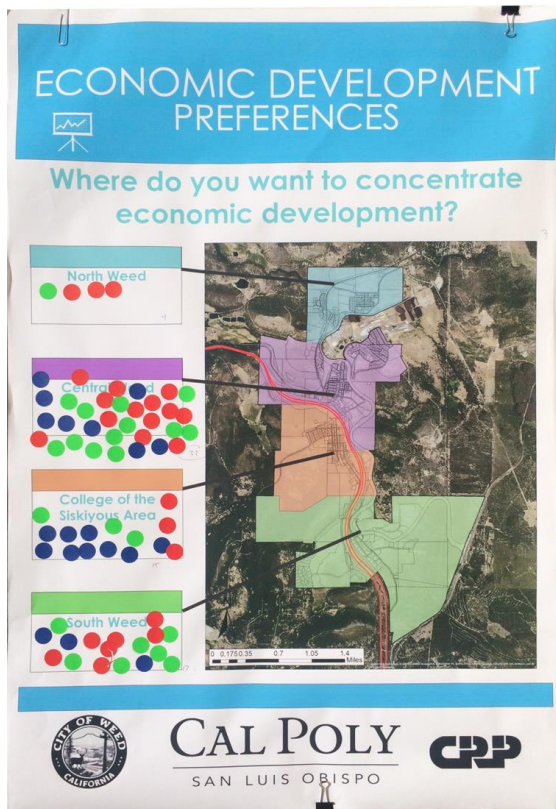
Noise



Safety






Economic Development






Public Facilities



PUBLIC FACILITIES
PREFERENCES

What kind of youth activities would you like to see most?

| | | |
|---|---|--|
|  A Teen Activity Center 12 |  Afterschool Programs 10 |  Early Childhood Programs 9 |
|---|---|--|

What existing services or facilities need improvement or expansion?

| | | |
|--|--|--|
|  Youth Recreation Programs 17 |  Expansion of Fire Services 7 |  Road Improvements 10 |
|--|--|--|

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PUBLIC FACILITIES
PREFERENCES

What recreational or community facility is most needed in Weed?

| | | |
|--|--|---|
|  A New Community Center 11 |  An Arts and Culture Center 7 |  Creative use of College Buildings as Community Facilities 8 |
|--|--|---|

What public issue needs the most attention in Weed?

| | | | |
|---|--|--|--|
|  Homelessness 10 |  Drug Abuse 14 |  Rebuilding Utilities Destroyed by Fire 9 |  Education 17 |
|---|--|--|--|

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Health

HEALTH PREFERENCES

Which of the following would most encourage you to choose more healthy food options?

Farmer's Market
Community Garden
Healthy Supermarkets

Which of the following will encourage you to be more active?

Nature Trails and Paths
Recreational Facilities and Activities
Walkable / Bikeable Street Systems

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HEALTH PREFERENCES

Which of these is the most pressing health need in Weed?

Senior Care
Women's Health
Pediatric Services
Rehabilitation Programs and Mental Health
Health Education

What activity/ service is most needed for seniors?

Social Recreation
Enrichment
Volunteer Programs

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HEALTH PREFERENCES

Which activity/ service is most needed for youth?

Social Family Recreation
Sports Programs
Volunteer Programs
Career Tutoring
Healthy School Lunches
Safe Routes to School

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Community Design

