Healdsburg 2030 General Plan

Background Report

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Introduction

This Background Report is intended to provide information to be used by the public and decision-makers during the Healdsburg General Plan update process, As with the City's current General Plan, in addition to a Background Report, this process will include preparation of a revised Policy Document that comprise goals, policies and implementation programs.

This Background Report includes chapters on the following topics:

- Land Use
- Economy
- Transportation
- Public Safety
- Parks and Recreation
- Agricultural Resources
- Air Quality
- Geologic Hazards
- Noise
- Urban Design
- Population
- Housing
- Utilities and Services
- Schools
- Cultural Resources
- Mineral Resources
- Biological Resources
- Flooding and Drainage
- Scenic Resources

Each of these chapters begins by describing existing conditions or factors to be considered in updating the General Plan, as well as providing setting information needed in an Environmental Impact Report to be prepared for the draft General Plan Update.

1 Land Use

1.1 Regional Setting

Healdsburg is located in northern Sonoma County within the nine-county San Francisco Bay Region. Situated 12 miles north of Santa Rosa, the county seat, Healdsburg lies just beyond the northern edge of the intense urban development that has occurred along the Highway 101 corridor in Sonoma County. The Town of Windsor, with a 2007 population of nearly 26,000, lies approximately four miles to the south. The small unincorporated community of Geyserville is located approximately eight miles to the north, and the City of Cloverdale is located approximately 18 miles to the north.

Geographically, Healdsburg is situated in an inland valley defined principally by Highway 101, Russian River, surrounding agricultural lands, and mountains to the east and west. Highway 101 is the principal coastal route between San Francisco and the Oregon border. The Russian River flows through Healdsburg on its way to the Pacific Ocean, approximately 20 miles to the west. The city lies at the intersection of three rich agricultural valleys - Russian River Valley, Dry Creek Valley and Alexander Valley - and is elevated between 100 to 430 feet above sea level. East and west beyond the agricultural lands rise subsystems of the Coastal Mountain Range. As of 2007, the Healdsburg city limits contained 3.68 square miles.

Wet winters and dry summers characterize the Healdsburg region's inland Mediterranean-type climate. Climate is temperate, with an average annual high of 75°F and an average minimum of 47°F. Rainfall totals can vary widely over a short distance; windward mountain areas west of Healdsburg can receive more than 60 inches of rain, while shadow areas, such as the city proper, receive about 40 inches annually.

Historically, Healdsburg served as an agricultural service center and a milling and distribution center for north coast lumber. More recently, however, the development of tourist-related businesses such as overnight accommodations, specialty retail, restaurants and wine tasting has diversified the local economy.

The area that now comprises Healdsburg and its Urban Service Area was originally inhabited by Native Americans. This included Southern Pomo and Wappo tribes in the Dry Creek and Alexander Valleys, respectively. Their population once numbered close to 10,000 before it was decimated by small pox epidemics and hostility from the Mexican and later by secondary Euro-American settlement in the 1850s. Those who survived were displaced to missions or rancherias.

1.2 Planning Boundary Locations

The following terms are used to describe the area covered by the General Plan and are depicted in Figure 1.

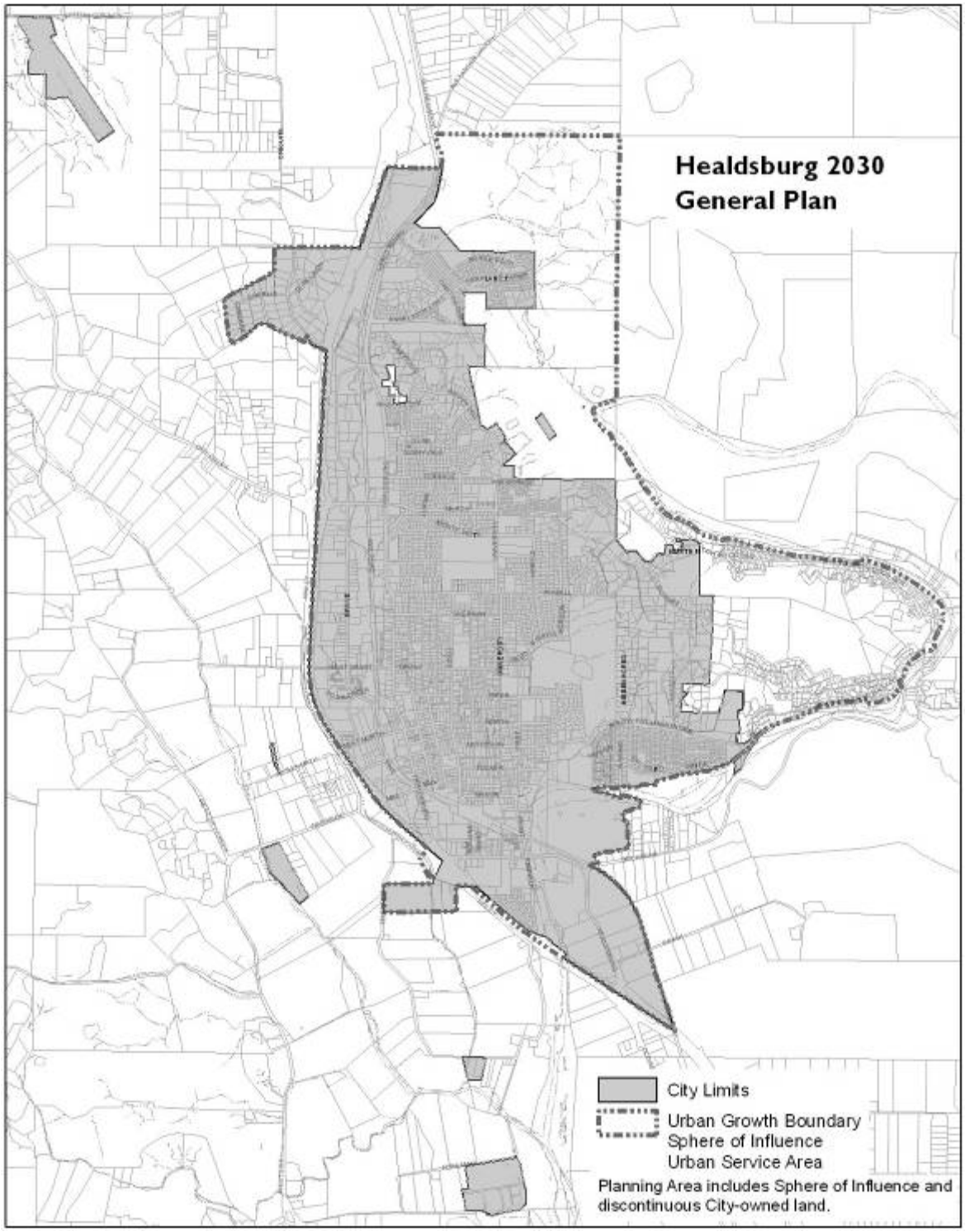

Figure 1 Planning Boundaries

- City Limits

  The incorporated area of the City of Healdsburg contained 3.68 square miles in 2007, including city-owned properties outside of the city proper, such as the Healdsburg Municipal Airport and the wastewater treatment plant.

- Planning Area

  The Planning Area of the General Plan includes incorporated Healdsburg, the unincorporated area within the City's Sphere of Influence, and non-contiguous city-owned land. The latter includes four properties totaling approximately 99 acres: the Healdsburg Municipal Airport, Healdsburg Corporation Yard, Magnolia Pump Station and Wastewater Treatment Plant.

- Sphere of Influence

  The City's Sphere of Influence is the probable ultimate physical boundary and service area of the City as determined by the Sonoma County Local Agency Formation Commission and includes incorporated Healdsburg and unincorporated areas. Healdsburg's Sphere of Influence encompasses approximately 3,518 acres; of this total, 2,356.43 acres currently lie within the city limits.

- Urban Service Area

  The boundaries of the Healdsburg Urban Service Area are the same as its Sphere of Influence.

- Urban Growth Boundary

  The Urban Growth Boundary (UGB) was adopted by city voters in 1996 and is coterminous with the City's Sphere of Influence and Urban Service Area boundaries. It represents the ultimate edge of urban uses in the Healdsburg Planning Area by the year 2016. The boundary can only be enlarged by a majority vote of city voters, although it can be reduced by the City Council. The City, however, is allowed to provide services and utilities to any site outside the UGB in order to permit the construction of affordable housing.

1.3 Existing Land Use

Table 1 shows the amount of acreage in various land use categories within the Planning Area in 2004. Approximately 68 percent of the land was developed in 2004.

The Planning Area contains a significant amount of vacant or underdeveloped acreage, including approximately 492.13 acres in the northern Planning Area (Areas A, B and C). Areas B and C, however, include 158.87 acres that the Sonoma County Agricultural and Open Space District owns or controls by conservation easements that prohibit development. Therefore, the northern Planning Area has a total of about 333.26 acres that remains potentially developable. The Grove Street area (Area G) also contains a relatively significant amount of land that is vacant or underdeveloped. Although within the Urban Growth Boundary, the Fitch Mountain area (Area K) is not expected to accommodate growth due to infrastructure and environmental constraints.

Table 1 Land Uses Within Healdsburg Planning Area (2004)

General Plan Land Use Designation	Total acreage	Developed acres	Vacant acres
Agricultural	16.69	16.69	0
Residential	1,733.04	1,351.22	381.82
Commercial	204.67	181.25	23.42
Mixed Uses	16.91	16.91	0
Light Industrial	124.37	113.25	11.12
Heavy Industrial	203.26	130.92	72.34
Institutional (Public & Semi-Public)	342.12	342.12	0
Open Space	432.75	n/a	n/a

Source: City of Healdsburg GIS mapping and corresponding county tax assessor's information (11/2/04). Vacant acreage totals derived from inventory of vacant residential, commercial and industrial properties based on survey conducted in summer, 2004. Based on General Plan Land Use Diagram as of 2004.

The City of Healdsburg owns nearly 274 acres of land both inside and outside the Urban Service Area. City-owned land is listed, along with associated acreage, in Table 2. This table does not include various street rights-of-way, minor landscape areas (e.g. along Parkland Farms Blvd.), and smaller water tanks such as the Cadoul and Sunset Reservoirs.

Table 2 City-Owned Land

Property Name	Acres	Property Name	Acres
Municipal Airport	45.25	City parking lots	4.21
Gibbs Park	2.43	City Hall	2.22
Gauntlett/Iverson Reservoirs	2.73	Inactive Dry Creek Well	1.00
Fire house lot on University St.	2.19	Corporation Yard	14.85
Grove Street Detention Basin	9.43	Magnolia Sewer Pump Station	5.33
Fire Department	1.59	Wastewater Treatment Plant	36.00
Panorama Reservoir	3.53	Railroad Park	0.61
Villa Chanticleer	16.70	Badger Park & Substation, Fitch well field	12.08
North Detention Basin	12.07	Regional Library	0.69
Barbieri Brothers Park	6.29	Fitch Mountain Terrace (senior housing)	2.00
Tayman Park/Golf Course	60.33	Boys and Girls Club	1.35
Oak Mound Reservoir	3.40	Carson Warner Memorial Skate Park	1.04
Giorgi Park	3.51	Parkland Farms Open Space (Lot 271)	3.48

Property Name	Acres	Property Name	Acres
Recreation Park	4.83	308 East Street (future housing site)	0.25
Tilly Park	0.60	Alliance Clinic (1381 University)	1.00
Museum	0.21	155 Dry Creek Road	3.53
City Parking Lot	0.29	20 W. Grant Street (future housing site)	3.20
Senior Center	0.11	3 North Street	1.06
Police Station	0.46	554 Tucker St. (Tivio remainder)	1.41
Plaza	1.00	Tivio parcel	1.48
Chamber of Commerce	0.11	Total	275.28

Source: City of Healdsburg Public Works Department, October 2009.

1.4 Conserved Open Space

A significant portion of the wooded ridges and hillsides that form the city's eastern backdrop are protected from development by public ownership or conservation easements over privately-owned land, as show in Figure 2.

The Healdsburg Ridge Open Space Preserve includes approximately 152 acres purchased in fee by the Sonoma County Agricultural Preservation and Open Space District (SCAPOSD). The preserve features a prominent ridgeline that provides a visual backdrop for the northern part of the city and offers an impressive overlook of the Russian River Valley. Its management plan is guided by the following goals:

- Protect and enhance the natural resources and biodiversity of the Preserve.
- Encourage activities and limit land uses to those that maintain and enhance the open space values of the area.
- Manage the Preserve to protect and enhance the land and its resources.

The City and District are working together to provide public access to and trails through the Preserve.

The SCAPOSD also holds conservation easements over 106 acres immediately south of the Preserve (Callahan) as well as 182 acres to the southeast that include Fitch Mountain, Healdsburg's most prominent natural feature. Public access is not currently provided to either of these areas, however, their conservation ensures that this important scenic resource will be preserved.

1.5 Sonoma County General Plan

All of the area outside the city limits and within the Urban Service Area is governed by the Sonoma County General Plan. The County General Plan divides the County into nine sub-county planning regions. Healdsburg's Planning Area falls within the "Healdsburg and Environs" planning region and is predominantly designated Rural Residential (RR), Resources and Rural Development (RRD), Land Intensive Agriculture (LIA) and Diverse Agriculture (DA).

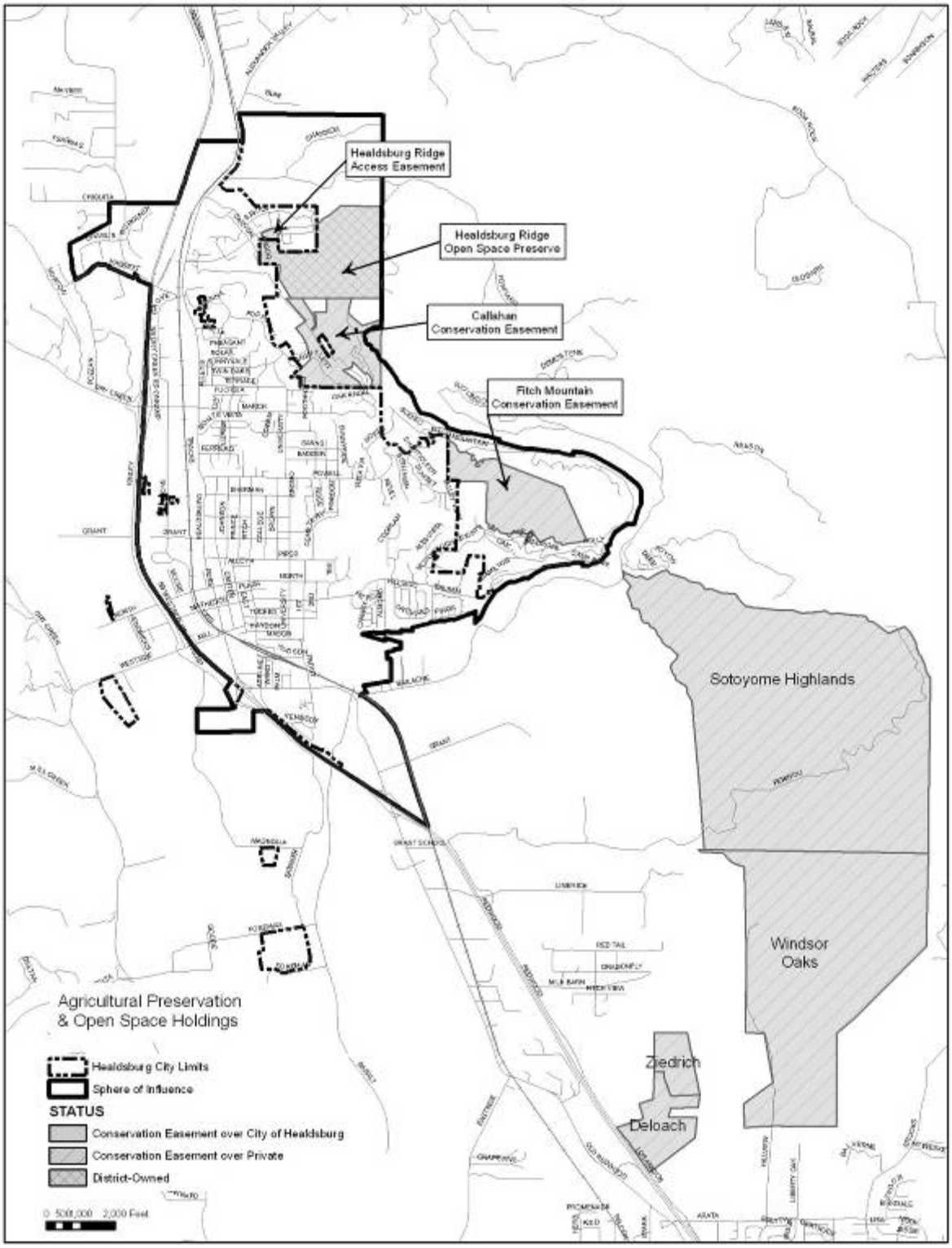

Figure 2 Conserved Open Space

Minimum lot sizes range from 1 to 20 acres in the areas designated RR, and up to 100 acres in areas designated RRD such as Areas B and C. The areas designated DA and LIA require 10- and 20-acre minimum lots, respectively. The RRD designation, which applies to Areas B and C and the upper slopes of Fitch Mountain, allows low-density residential development and recreational and visitor uses. The RR designation, which applies to the lower slopes of Fitch Mountain, pertains to enclaves where existing rural residences are present.

Regardless of land use designation and zoning, the County has imposed a combining zone on properties that are within the City's Urban Service Area, freezing existing lot sizes so that they cannot be further subdivided prior to annexation by the City.

The Sonoma County General Plan also has designated the area between Healdsburg and Windsor as a Community Separator (Figure 3). According to the Plan's Open Space Element, a characteristic that distinguishes Sonoma County from many parts of the San Francisco Bay Area is the continued existence of separate, identifiable cities and communities. Some land areas need to remain open or retain a rural character in order to avoid corridor-style urbanization. These lands may not necessarily be highly scenic in their own right, but provide visual relief from continuous urbanization and are a special type of scenic border -- a community separator. They are frequently subject to pressure for development because they are close to developed areas and major roads.

The Open Space Element's objectives and policies seek to preserve important open space areas in the community separators, retain a rural character and promote low intensities of development in community separators, avoid their annexation or inclusion in spheres of influence for sewer and water service providers, and preserve existing specimen trees and tree stands within community separator areas.

The Open Space Element also designates Scenic Landscape Units around much of the city (Figure 3). According to the Element, certain landscapes are of special importance to Sonoma County and preservation of these scenic resources is important to the quality of life of County residents and the tourists and agricultural economy. Other features provide scenic backdrops to communities. As the county urbanizes, maintenance of the openness of these areas provides important visual relief from urban densities. These landscapes have little capacity to absorb very much development without significant visual impact.

The Element identifies the protection of the agricultural Alexander and Dry Creek Valleys scenic beauty, located north and west of the city, as not only important from an aesthetic standpoint, but also from an economic one as agricultural marketing is closely tied to the area's scenic image. The hills along Highway 101 and above the valley floor are also particularly sensitive. The hills east of Windsor, located southeast of the city, are also identified as a Scenic Landscape Unit because they provide a scenic backdrop to the Santa Rosa Plain and form part of the Healdsburg-Windsor Community Separator.

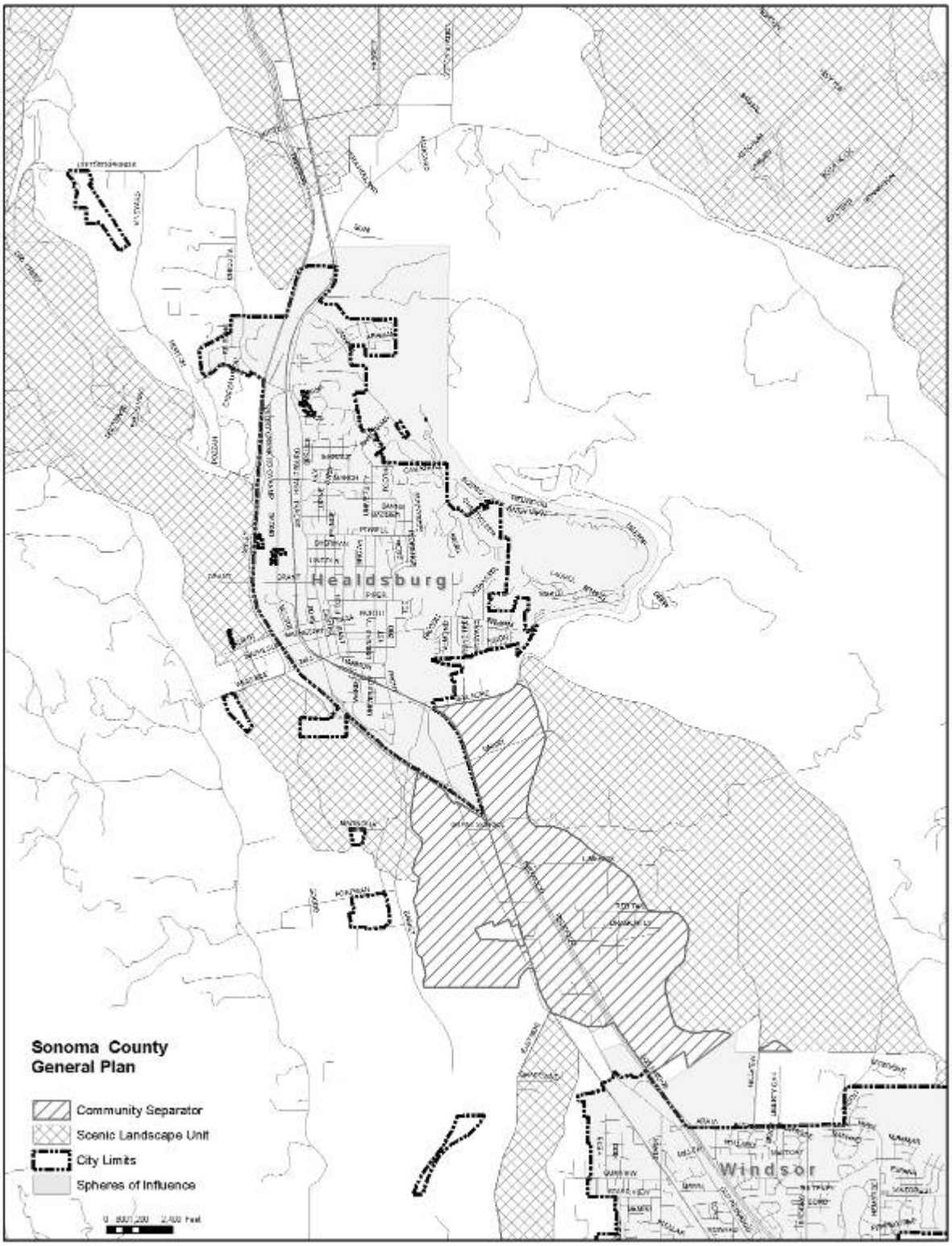

Figure 3 Community Separators and Scenic Landscape Units

The Open Space Element's objectives and policies directed at preserving the qualities of the Scenic Landscape Units include:

- avoiding amendments to increase residential density in excess of one unit per ten acres
- avoiding commercial and industrial uses other than those which are permitted by the agricultural or resource land use categories
- siting new structures below exposed ridgelines
- screening new structures with natural landforms and existing vegetation, and with native, fire retardant plants on exposed sites
- discouraging cuts and fills
- screening driveways from public view
- undergrounding utilities where economically practical
- establishing building envelopes for structures
- limiting building height
- clustering buildings
- locating building sites and roadways to preserve significant existing tree stands and significant oak trees

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2 Population

2.1 Historic Population Growth

As of January 1, 2009, the population of Healdsburg within its city limits was estimated to be 11,782 (California Department of Finance, May 1, 2009). Table 3 presents information on changes in population and households between the two most recent U.S. Censuses. Healdsburg's population grew by 13% between 1990 and 2000. This growth rate was lower than the county's growth rate and slightly lower than the State's. During the previous decade (1980-90), the city's growth rate was considerably higher, about 31%, which was slightly higher than the county's during the same period.

Healdsburg's 12.1% household growth rate from 1990 to 2000 was slightly less than its population growth rate. However, it exceeded that of the state. The city's 2000 average household size was 2.69 persons, slightly higher than the county's average, but slightly lower than the state's.

Table 3 Population and Household Changes

	Healdsburg	Sonoma Co.	California
Population			
2000	10,722	458,614	33,871,648
1990	9,469	388,222	29,760,021
Growth (1990-2000)	13.2%	18.1%	13.8%
Average annual growth (1990-2000)	1.24%	1.30%	1.47%
Households			
2000	3,968	172,403	11,502,870
1990	3,541	149,011	10,381,206
Average Household Size			
2000	2.69	2.60	2.87
1990	2.67	2.61	2.87

Source: California Department of Finance

Healdsburg's population at the time of the last comprehensive General Plan update (1987) was 9,731. Under build-out of the 1987 General Plan, the population was expected to increase to 16,937.

Measure M, a city voter-approved residential growth management program adopted in 2000, limits the number of building permits for new residences to 90 in any three-year period, subject

to certain exemptions. This program can only be repealed or amended by a majority vote of the voters. The adopted "Policy and Procedures" for this growth management program exempts housing units built for very low-, low-, and moderate-income households (up to 120% of median income), secondary dwelling units, homeless shelters, elderly care facilities, nursing homes, sanitariums, and community care and health care facilities, including housing for the disabled.

2.2 Projected Population Growth

ABAG is the official comprehensive planning agency for nine Northern California counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma). It is responsible for developing plans for transportation, growth management, hazardous waste management, and a regional growth forecast that is a foundation for these plans, as well as regional air quality plans developed by the Bay Area Air Quality Management District.

ABAG is also responsible for preparing bi-annual long-term forecasts of population, households, and employment. *Projections 2007* is the most recent edition of ABAG's long-term forecast. The forecast recognizes emerging trends in markets, demographics, and local policies that promote infill development and transit-oriented development, but is also designed to realistically assess growth in the region. ABAG expects the Bay Area's population to grow by about 2 million people between 2005 and 2035, which makes population growth and how it will shape the region in 2035 central to the forecast.

As shown in Table 4, ABAG projects the total population within the city limits to increase by approximately 14 percent between 2005 and 2025, which is slightly less than the change projected for the SOI and County during the same time period. As used in *Projections 2007*, Healdsburg's SOI includes both the area currently within the city limits and the unincorporated areas.

Table 4 Population Projections

	2005	2010	2015	2020	2025	Change 2005 – 25 (percent)
Healdsburg City Limits	11,600	12,300	12,700	12,900	13,200	13.79
Sonoma County	478,800	509,100	522,300	535,200	548,900	14.64
Healdsburg SOI	12,200	13,000	13,400	13,600	13,900	13.93

Source: Association of Bay Area Governments, *Projections 2007*

3 Economy

3.1 Local Economic Base

According to the Healdsburg Finance Department, there were 1,178 active business licenses in Healdsburg in October 2006. The top employers in Healdsburg and number of employees are shown in Table 5.

Table 5 Top Employers in Healdsburg

Employer	Empls.	Employer	Empls.
Healdsburg School District	342	Parkpoint Health & Swim Club	61
Healdsburg District Hospital	204	Garrett Hardware	52
City of Healdsburg	180	Simi Winery	52
Healdsburg Senior Living Community	100	Max Machinery	52
Alliance Medical Center	98	Granite Construction Company	50
Hotel Healdsburg & Spa	82	Nu Forest Products	49
Big John's Market	80	Willi's Seafood & Raw Bar	44
Safeway	77	Opperman & Sons Trucks	44
Syar Industries	75	Costeaux French Bakery	41
E & M Electric & Machinery	71	Evans Design, Inc.	40
Bear Republic Brewing Company	68	Capital Lumber Company	38
Healdsburg Lumber Company	66	Longs Drugs	38
General Dynamics	65	McConnell Chevy-Olds-GEO	38
Silveira Pontiac-Buick-GMC Inc.	62	Seghesio Family Vineyards	36
Dry Creek Kitchen	62	Oakville Grocery Corporation	33

Source: City of Healdsburg Finance Department, October 2006

The total number of jobs in the Urban Service Area in 2005 was estimated as 6,700 by the Association of Bay Area Governments. Healdsburg's job growth rate from 1990 to 2000 is estimated at 24.8%, higher than the 19.3% job growth rate in Sonoma County over the same period. Job growth significantly exceeded growth in the labor force in Healdsburg, with the total number of employed residents of Healdsburg increasing by only 9.6% from 1990 to 2000. The ratio of total jobs to employed residents is estimated to have increased from 0.66 in 1990 to 0.75 in 2000 in comparison to a decline in Sonoma County figures from 0.88 to 0.86.

3.2 Existing and Projected Employment

Table 6 shows estimated and projected employment by major sector in the Healdsburg Urban Service Area in 2005, 2010 and 2015 as well as the estimated and projected number of employed residents for each area.

Table 6 Estimated Employment by Major Sector for Urban Service Area

	2005		2010	2015	2020	2025	Change 2005-25
Sector	**Jobs**	**Share**	**Jobs**	**Jobs**	**Jobs**	**Jobs**	
Agriculture, Natural Resources	350	5.3%	360	370	370	370	5.7%
Manufacturing, Wholesale, Transport.	1,430	21.7%	1,470	1,520	1,540	1,570	9.8%
Retail	820	12.4%	870	920	960	1,000	22.0%
Financial & Professional Services	810	12.3%	860	920	960	1,000	23.5%
Health, Education, Entertainment, Accommodation & Food Services	2,250	34.1%	2,350	2,470	2,520	2,590	15.1%
Other	930	14.1%	990	1,050	1,090	1,130	21.5%
Total Jobs	**6,590**		**6,900**	**7,250**	**7,440**	**7,660**	**16.2%**
Employed Residents	**5,830**		**5,950**	**6,220**	**6,270**	**6,350**	**8.9%**
Jobs/Employed Residents	**1.13**		**1.16**	**1.17**	**1.19**	**1.21**	**7.1%**

Source: Association of Bay Area Governments, *Projections 2007*

The total number of jobs in 2005 exceeded the number of employed residents, with a ratio of 1.13 jobs per employed resident. Between 2005 and 2025, this ratio is projected by ABAG to slightly increase to 1.21 jobs per employed resident.

Due to its wine country location, attractive setting and success of the downtown in attracting businesses that appeal to visitors, the city is continuing an evolution from an agricultural- and resource-based economy to one more dominated by tourism. The greatest job growth is anticipated to be in the sector that includes accommodation and food services and will be more than double that expected in the agriculture and natural resources sector.

For local businesses in the downtown area, the principal problem has been escalating rents. A major challenge for tourist-related businesses is to attract visitors during the mid-week and fall and winter months when occupancy rates are lowest. Having more small-scale convention and meeting facilities would be beneficial in this regard.[1]

Attracting new commercial and industrial businesses to the city is hampered by the high cost of housing, land, and construction; and competition from other communities with less-expensive or more-available land, office space and infrastructure, such as the Airport Business Park near Windsor. Regionally, technology and manufacturing jobs have been declining as companies

[1] Lynn Woznicki, President/CEO, Healdsburg Chamber of Commerce, May 11, 2004

trying to compete in the global marketplace continue to relocate manufacturing jobs from Sonoma County to locations in other areas, such as Asia, where labor is less costly.

3.3 Sources of Funding for City Government and Services

The City's budget for maintaining city government and services includes the General Fund, along with Enterprise Funds, Special Revenue Funds, Community Redevelopment Agency and other special-purpose funds.

The General Fund portion of the city budget is used almost exclusively for funding police and fire services and the related administrative support for those services. The sources of funding for General Fund services consist primarily of property and sales taxes, development fees and permits, fines and forfeitures, service fees, business license fees, transient occupancy tax, property transfer tax, franchise fees and revenues from other governmental agencies, including the State vehicle license fees. The property tax makes up the largest source of revenue for funding city services, and goes directly into the General Fund.

Enterprise funds are used to fund specific utilities and services. Enterprise funds are restricted to certain purposes and can only be spent to provide specific services. These include the city's water, sewer, and electric systems; and bus service and airport. These services are self-supported by user charges. In general, charges are levied to compensate for costs. These services and enterprises have been self-sustaining. User fees and charges are used not only to fund ongoing operations, but also planned and needed capital improvements, such as the wastewater treatment plant upgrade.

Service funds include the Insurance and Benefits Service Fund, Information Systems Service Fund, Vehicle Service Fund, and the Building Maintenance Service Fund.

The Transient Occupancy Tax is paid by hotels, motels and inns in the amount of 12% of their gross revenues. These tax revenues are primarily earmarked for the city's parks and recreational activities, local bus transportation, and youth and senior programs. A small percentage also funds police and fire services.

3.4 Healdsburg Community Redevelopment Area

The Healdsburg Redevelopment Agency (RDA) was created in 1980 and established the Sotoyome Project Area in 1981 that encompasses approximately 1,000 acres of the city. The RDA provides funds to promote all of Healdsburg's businesses and to assist in economic revitalization of the city. Its focus has primarily been to foster commercial and industrial activity and to provide low- and moderate-income housing. Past projects supported by RDA funds include Vineyard Plaza Shopping Center, Dry Creek Inn, Hotel Healdsburg, downtown parking, numerous affordable housing projects, and various street and drainage improvements.

3.5 Economic Development Office

The City of Healdsburg maintains an economic development partnership with the Healdsburg Chamber of Commerce through the Economic Development Office. A part-time Economic Development Coordinator works as an ombudsman in the business community by promoting business retention, assisting with business expansion, and attracting new businesses to the area. In addition, new businesses are pursued that will add to the economic vitality and diversity of

the city. The Economic Development Office partners with the Redwood Empire Small Business Development Center to provide no-cost business consulting services to existing and prospective businesses; business workshops on varied timely topics; in-depth business operation reviews; and assistance with new product development, patents, trademarks, copyrighting, and import/export issues.

3.6 Economic Development Strategic Plan

The 2002 Economic Development Strategic Plan was developed by an Economic Development Task Force to maintain and strengthen the economic vitality of the city. This plan includes several goals that could be considered for incorporating into the General Plan Update in the area of economic development:

- Retain, grow and attract businesses that will best provide for the present and future needs of the community.
- Continue to market the City of Healdsburg as a business-friendly community.
- Provide businesses with access to financial and human resources that will enable them to succeed.
- Create a balance in business expansion that relates to the needs of our community, including tourism and agricultural.
- Enhance the public and service infrastructure of the city to provide opportunities to continue the success for both businesses and our community.
- Create more affordable housing.
- Improve the working relationship between the community and the local and area educational programs to insure the availability of a trained workforce.
- Expand business opportunities for underrepresented groups within the community.

The Economic Development Strategic Plan also identified the following as weaknesses that inhibit local economic growth:

- Lack of affordable housing
- Lack of available land and office space for business expansion
- Cost of doing business in and with the City (e.g., sewer hook-up fees)
- Infrastructure issues related to adequate sewer, roads, and parking, etc. (e.g., lack of sewer and water service south of the Russian River)
- Need for additional "local-serving" retail services

4 Housing

Unlike the other elements of the General Plan, the Housing Element's timeframe is tied to a "housing needs process" schedule set by the State. Typically, the State orders the California Housing and Community Development Department to provide a determination of each region's share of the state housing need. The Bay Area's latest Housing Needs Determination covers the period of January 1, 2007 - June 30, 2014. This Housing Element's timeframe is consistent with that period.

The most current housing data and population information available were used during the preparation of the Housing Element, including the 2000 U.S. Census. Census data was supplemented with information from other sources, such as the California Department of Finance. Other information sources include a housing stock conditions survey that was conducted during July 2008, countywide surveys of the homeless in 2007 and 2009, the City's affordable homeownership waiting list and contacts with providers of special needs housing and local realtors. The General Plan's Land Use Plan and the policies contained in the Land Use Element were used to determine the location, amount and type of potential housing.

The Housing Element's Background Report was released to the public on March 18, 2009. Fifty-seven notices regarding its release were sent to interested parties (see Appendix G for the names of groups who were notified and their areas of interest). A display ad was also published on two occasions in the Healdsburg Tribune, a copy of the Background Report was given to the Healdsburg Library and the report was published on the City's web site. Opportunities for public comments on the draft Housing Element were given at Planning Commission public hearings on April 14, 2009 and June 30, 2009 and at a City Council public hearing on January 4, 2010, at which the 2009 Housing Element Update was adopted.

4.1 Healdsburg Residential Development and Population Growth

This section provides an overview of the development of housing in Healdsburg and its population growth.

The area that now comprises Healdsburg and its Planning Area was originally inhabited by Native Americans including Southern Pomo and Wappo tribes in the Dry Creek and Alexander Valleys, respectively.[2] Their population once numbered close to 10,000 before it was decimated by small pox epidemics and hostility from the Mexican and later by secondary Euro-American settlement in the 1850s. Those who survived were displaced to missions or rancherias.

[2] Adapted from *Healdsburg Cultural Resource Survey, Final Report*, 1983 and www.ourhealdsburg. com, Hannah Clayborn, 2003.

4.1.1 Early Settlement Era

The majority of Healdsburg's Euro-American settlers came from the southern United States and Missouri, Kansas and Oklahoma. The first structures they built were residences and outbuildings of split-log redwood. No example remains of these early, temporary structures. The first permanent structures were made of adobe, utilizing native clay and local Indian labor. Most of these adobe residences were destroyed or severely damaged in the 1906 earthquake.

Most of the early cabins and houses in and around Healdsburg were modest structures often "designed" and built by amateur carpenters. Residences lined the main street and clustered in the downtown area on the east and south sides of the Plaza.

The town of "Healdsburg" was mapped and recorded by Harmon Heald on March 5, 1857. The earliest residential section (1850 to 1870) developed close to the commercial core area along North Street (200 and 300 block), Matheson Street (formerly South Street) (200 to 400 block), Tucker Street (200 and 300 block), Haydon Street (100 to 300 block), the south side of Mason Street, University Street (100 to 300 block), Fitch Street (300 block), East Street (200 and 300 block) and Center Street (200 and 300 block). A string of residences also developed very early along the west side of Healdsburg Avenue (formerly West Street) north of Piper Street. Of these early residential sections, the southern end of Center Street appears to be the oldest (1850 to 1860). Other early residences were scattered on larger lots in the area now bounded by Piper Street, Powell Avenue, Healdsburg Avenue and Brown Street (Figure 5).

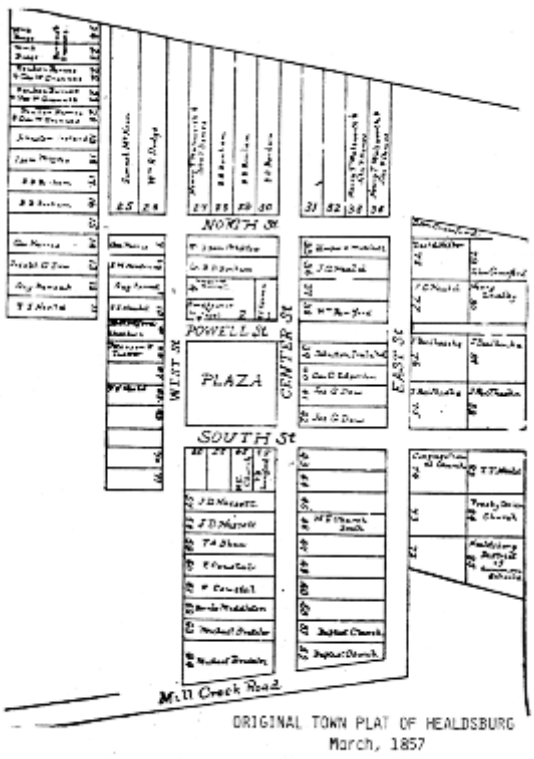


Figure 4 Original Town Plat, 1857

Settlers in the early 1850s built simple wood frame "homestead"-style structures. The earliest homestead houses were small single-story, single-gable structures built to shelter the settlers, most of whom were without families. The fact that sawn lumber was still at a premium and nails had to be hand-forged were additional reasons for the relatively small scale of these early buildings.

In the late 1850s and 1860s, houses became bigger in order to accommodate larger families and because sawn lumber and nails were becoming more readily available; the latter being mass-produced. Simplicity and design based on function rather than ornamentation were still the dominant characteristics during this period, reflecting the agricultural emphasis of the survey area and the need to devote available time, energy and resources to agricultural pursuits.

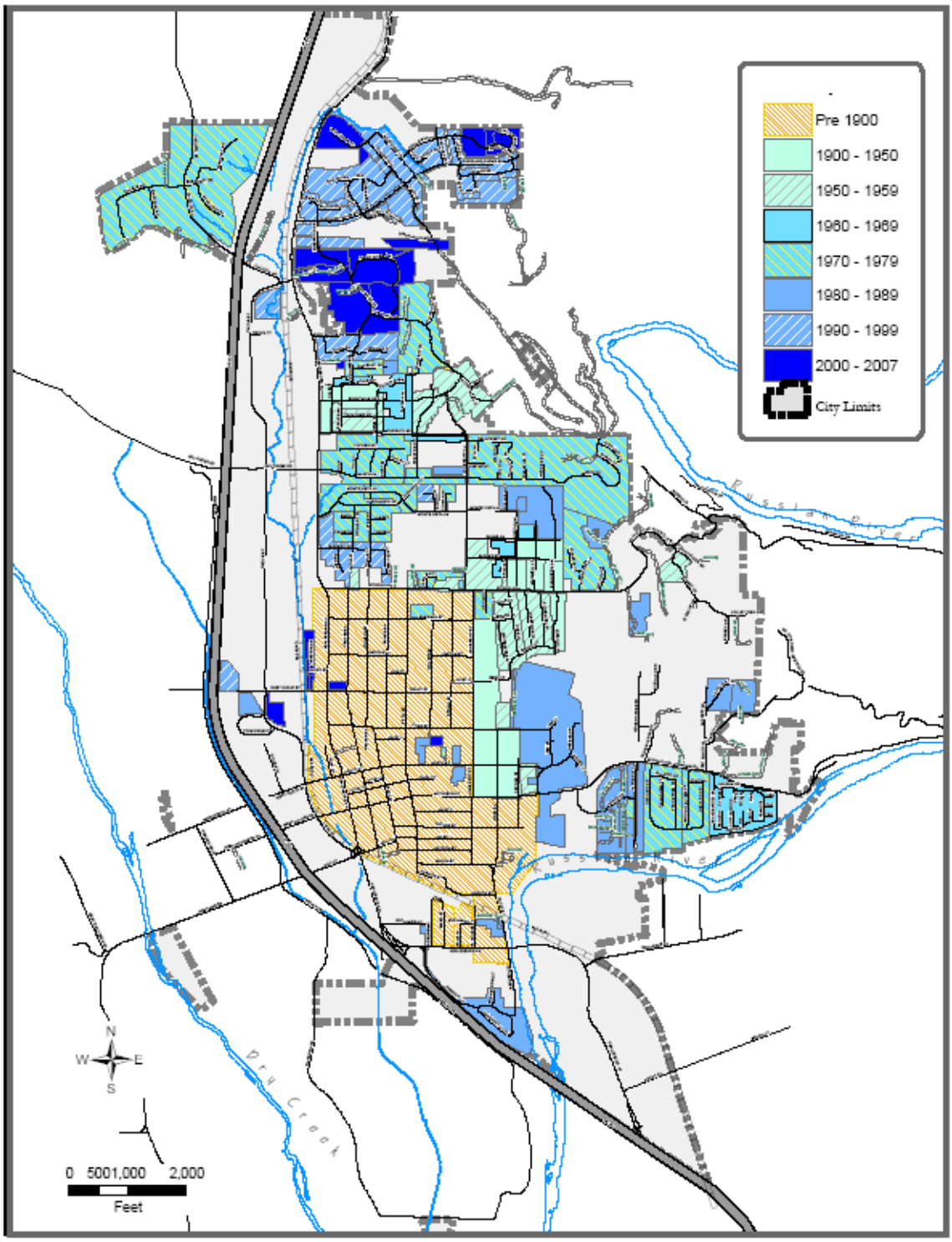


Figure 5 Residential Development Phases

Generalized locations based on final map recordation dates

4.1.2 Late Settlement Era

By what is considered to be the "late settlement" era (1870-1880), the prosperity of businesses and farms began to be reflected in more elaborate local architecture. Several Italianate mansions and larger homes were constructed during this time that incorporated far more ornate features such as balconies, brackets, and grillwork. The areas south of the Northwestern Pacific Railroad tracks were developed between 1880 and 1890. The houses that were built here are nearly identical modest, single-story Italianates that served as middle class housing and examples of the earliest row or tract housing in the city.

Water mains were first laid in the city in 1876. The Johnson Street area was the first residential section of the city to install electric lights. During that period, Johnson Street was known as "Electric Avenue." The first sewage disposal systems were installed in 1900.

Between 1880 and 1906, construction of residential structures was slow but steady. The residential area in the northeast portion of the city (Knaack's Addition) became more densely populated. A small area west of Healdsburg Avenue, known as West Grant and Grove Streets, was subdivided and new residences built, although the area remained unincorporated.

It was not uncommon during this period and later for farm families with residences in outlying agricultural areas to build residences in town to allow their school age children to attend the public school. It also allowed senior family members to retire to a more convenient and social environment.

As the city's population increased toward the end of the 19th century, a substantial middle class developed and a large number of moderately-sized homes were built. The vast majority of these homes were cottages in the Queen Anne style. Even though relatively small, these homes were embellished with verandahs, circular bays, multi-gabled roofs and other features characteristic of this style.

4.1.3 Twentieth Century Development

By the turn of the 19th century, the city witnessed slow but steady new residential construction of a number of Transitional-style homes showing the influences of both Queen Anne and the Bungalow style to follow. Like the earlier Homestead style, the Transitional style involved less ornamentation, but still utilized such features as oversized gables and sawn shingles for their decorative effect.

Between 1900 and 1925, two styles of bungalow, the California bungalow style and the locally popular Craftsman bungalow style, became characteristic of the movement away from, and a reaction against, the excesses of Victorian architecture. Both provided housing for the middle class population, superseding the function of the Queen Anne cottage, and both involved an effort to integrate indoor and outdoor living spaces with the use of sleeping porches, natural wood, etc. The more prevalent Craftsman homes, with their broad-based pillars, overhanging eaves, and exposed beams, made use of somewhat more prominent design features than the simpler bungalow.

The effects of Prohibition brought about a severe depression in the local hop and vineyard industries, and by the mid-1920s this depression severely curtailed residential construction.

Consequently, very few examples exist of architectural styles prevalent in other parts of the country during this time, such as the Prairie style, which was very popular in the nearby San Francisco Bay area. Some Mediterranean and Spanish- or Mission-style homes were constructed in the area, generally between 1930 and 1945, exhibiting arches, red tile roofs and brick walls finished in stucco.

Healdsburg's population remained at approximately 2,000 from 1880 to 1940. The remarkable stability of the size and population of Healdsburg during this period accounts for the well-preserved condition of the residential areas. The post-war years in Healdsburg, like most other areas in California, was a period of rapid growth. Population figures increased by 30% from 1940 to 1950, and by another 47.8% from 1950 to 1960 (Figure 6). The population growth trend slowed to a 12% increase between 1960 and 1970, and a 17% increase between 1970 and 1980.

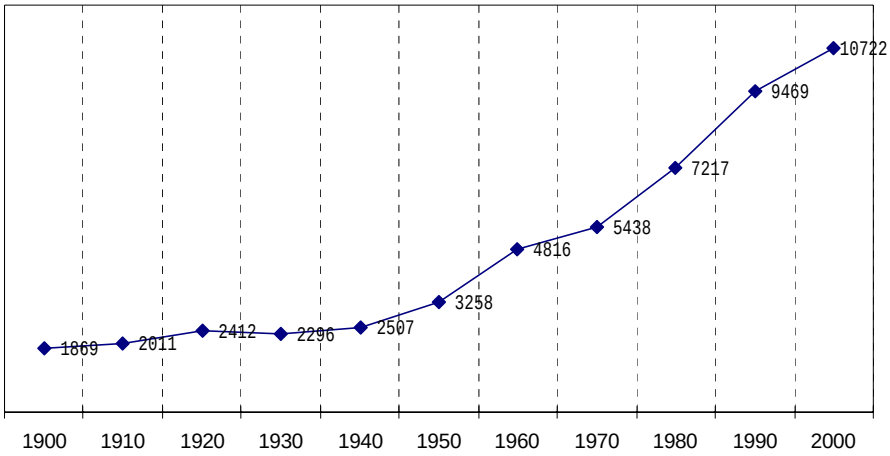


Figure 6 Healdsburg Population 1900 - 2000

This population growth within the city limits during the 20th century is partially attributable to increased municipal subdivisions and annexations. Between 1947 and 1983, there were 46 separate subdivisions and expansions to the city limits. With few exceptions, these annexations were located to the north and east of the original town. These subdivisions followed the formation of the first city planning commission in 1946.

Between 1990 and 1997, the annual number of building permits for new dwelling units ranged from as few as 5 units (1996) to as many as 48 (1995). Between 1998 and 2000, however, building permits were issued for 476 units, primarily in the newly-annexed 231 acres at the north end of the city (Figure 7).

This growth spike led to a local ballot initiative that was approved in 2000 (Measure M) limiting residential growth to an average of 30 building permits per year and 90 building permits over a three-year period, beginning in 2001. Affordable housing and secondary (”granny”) units are exempt from this limit. Since 2001, residential building permits have averaged 16 units per year for market-rate units and 27 per year for both market-rate and affordable units.

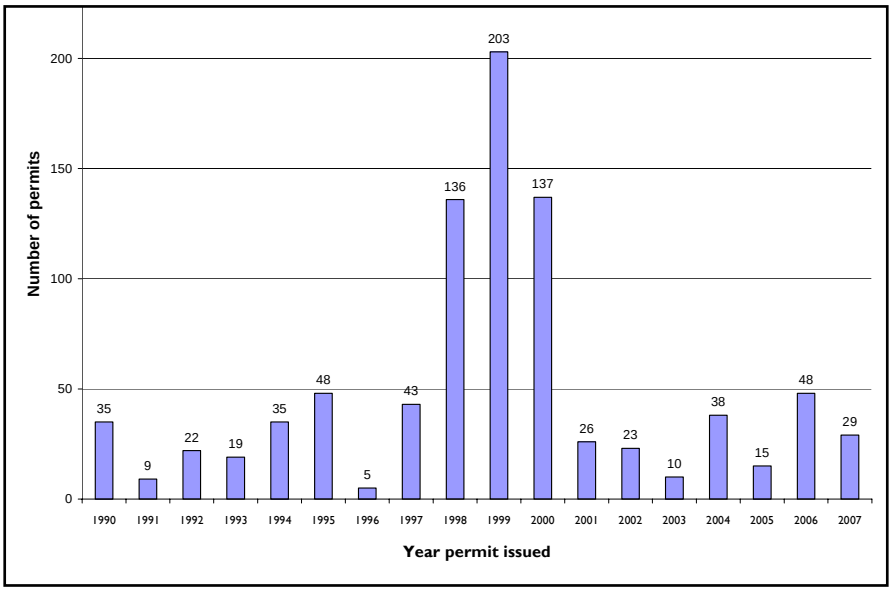


Figure 7 Residential Building Permits 1990 - 2007

As shown in Table 7, the population growth rate in Healdsburg since 1990 has averaged between 1.24 and 1.31 percent annually, slightly lower than the state's growth rate. Healdsburg's 11,706 residents represented only 2.4 percent of Sonoma County's population in 2008. Although the city has never represented a large proportion of the county's population, its share has been declining since 1940, when the city represented 3.6 percent.

Table 7 Population Change, 1990 - 2009

Population	Healdsburg	Sonoma Co.	California
1990	9,469	388,222	29,760,021
2000	10,722	458,614	33,871,648
Growth 1990-2000	13.2%	18.1%	13.8%
Average annual growth 1990-2000	1.24%	1.30%	1.47%
2009	11,782	486,630	38,292,687
Growth 2000-2009	9.9%	6.1%	13.1%
Average annual growth 2000-2009	1.10%	.68%	1.46%

Sources: California Department of Finance, U.S. Census

4.1.4 Current Population Characteristics

According to the Census, approximately 29 percent of Healdsburg's population was below the age of 20 in 2000, a proportion similar to that of the State's. Approximately 15 percent was 65 years or older, which is somewhat higher than statewide. The most significant change between 1990 and 2000 in the distribution of Healdsburg's population among age groups was in the 45 to 54 years of age category, which saw an increase of 889 persons (Figure 8).

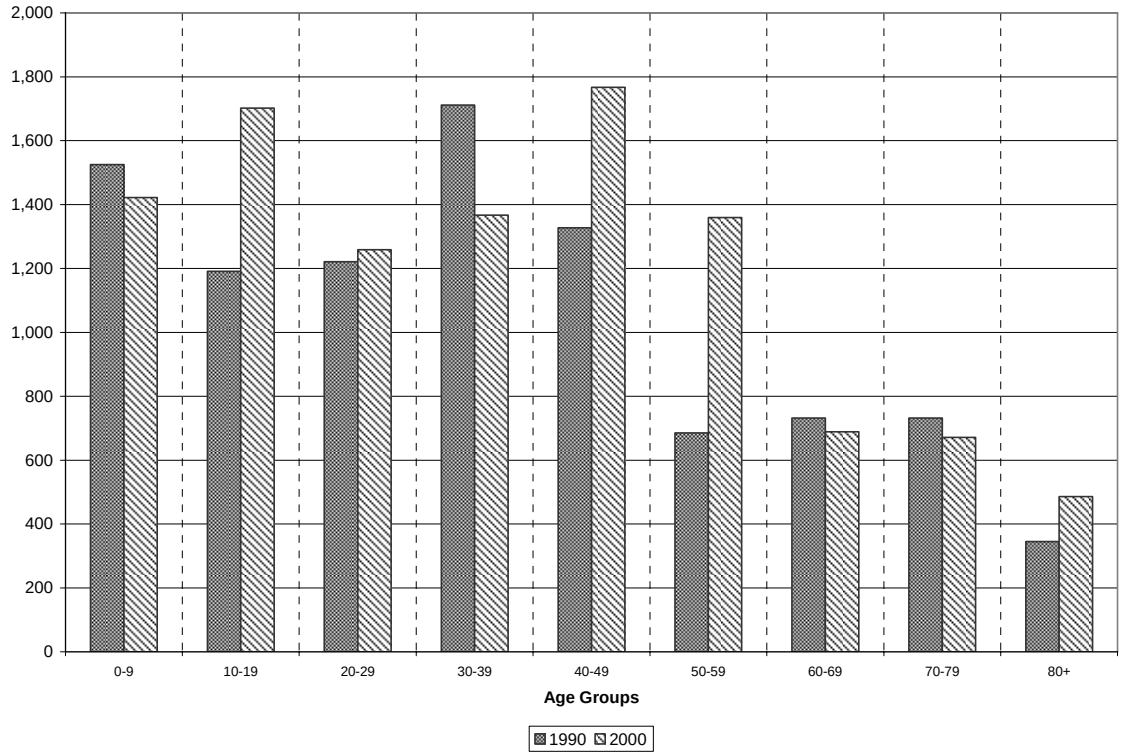


Figure 8 Healdsburg Population by Age 1990 - 2000

4.1.5 Current Housing Mix

At the beginning of 2008, more than three-quarters of the city's homes were single-family units, a proportion that has been maintained over the last few decades. Multi-family units (two or more units in structure) comprised 20 percent of the housing stock. Given the limited number of ownership-type attached housing in Healdsburg (i.e., condominiums), most of the multi-family units were probably apartments. The number of mobile homes has remained unchanged for more than 20 years.

Table 8 Housing Stock Characteristics 1990 - 2008

Year	Total	Single			Multiple			Mobile-homes
		Total	Detach.	Attach.	Total	2-4	5+	
1990	**3,766**	2,941	--	--	726	--	--	99
1995	**3,860**	3,007	--	--	754	--	--	99
2000	**4,191**	3,287	3,057	230	805	427	378	99
2005	**4,538**	3,509	3,255	254	930	451	479	99
2008	**4,615**	3,578	3,298	280	938	453	485	99

Source: California State Department of Finance, Demographic Research Unit

4.2 Existing Housing Needs

4.2.1 Housing Stock Conditions

- Exterior Conditions

In mid-2008, approximately 2,540 residences in Healdsburg's older neighborhoods were inspected by a "windshield survey." Figure D-1 in Appendix D depicts the survey area boundary.

The condition of each housing unit was classified utilizing the following definitions:

> *Sound* A structure providing safe, sanitary and adequate housing. The structure shows no visible damage and exhibits the appearance of regular maintenance. Small areas of peeling paint, untended fences, or unkempt landscaping may be included in a sound rating.
>
> *Sound Deficient* A structure providing safe, sanitary and adequate housing but shows two or more deficiencies which if unrepaired may lead to structure deterioration. Deficiencies include broken windows, large areas of peeling paint, large driveway cracks, missing shingles, and deteriorating fencing.
>
> *Deteriorating* A structure that does not provide safe, sanitary and adequate housing but could if rehabilitated. The structure exhibits a combination of major defects and deficiencies that indicate a prolonged absence of regular maintenance or inadequate original construction. Examples include several broken and/or boarded windows, large areas of missing roof shingles, holes or cracks in the walls and/or foundation, sagging porch and/or roof lines, missing or damaged doors, inadequate additions and inadequate original construction.
>
> *Dilapidated* A structure that has deteriorated past the point of economical rehabilitation, is unsafe, unsanitary, and inadequate housing. The structure exhibits a number of major defects and deficiencies, such as a severely-damaged foundation, roof, and/or porch line, large holes in walls or roof, missing or broken windows or doors, severely peeling paint, an unpaved pitted and rutted driveway, structurally inadequate additions and structurally inadequate original construction.

The overwhelming majority of units surveyed were found to be in "sound" condition, with the appearance of regular maintenance of the home and landscaping. Many homes had been renovated with new roofs, windows or additions, or were in the process of renovation. The only deficiencies identified were minimal painting needs (e.g., trim), clean-up of limited outdoor storage (e.g., a pile of construction materials), replacement of garage doors, and resealing of cracked driveways.

Only 46 units were identified by the survey as "sound deficient," with junk- or trash-filled yards, one or more broken or cracked windows, large areas of peeling paint, substantially cracked driveways, overgrown yards and/or deteriorated fencing. In all cases, it appeared that a nominal amount of work would correct all of the deficiencies. One home was identified as "deteriorating," with numerous broken windows, structurally unsound additions and an

inadequate foundation. The homes in need of repair are scattered throughout the survey area; no single neighborhood was identified as having a concentration of deficient units. Figure D-1 in Appendix D depicts the locations of the deficient units.

Example of deteriorated foundation and siding

It should be noted that the housing conditions survey was only an exterior visual inspection, and it is likely that many of the older homes are in need of such maintenance as new roofs and heating systems, as well as such energy-saving measures as insulation, double-pane windows, and weather-stripping. These conditions could only be identified by a thorough on-site inspection.

The generally well-maintained condition of homes and presence of home improvements are evidence of an interest in conserving the city's existing units in the face of limited housing development. There is also a growing recognition and appreciation for the historic qualities of the homes in many of Healdsburg's older neighborhoods.

In 2009, the decline in the national, state and local economy and its impacts on home ownership and affordability has resulted in an increase in foreclosures. However, there has been no visible impact on residential property conditions as a result of foreclosures in Healdsburg. This could be attributed to the relatively few foreclosures that have occurred in the community, their dispersed locations and the continued maintenance of the properties by the lenders who assume ownership of these properties.

- Structural Integrity

Healdsburg would be subjected to very high levels of shaking by a strong earthquake on the Healdsburg-Rodgers Creek fault. The Association of Bay Area Governments estimates that at least 13,669 dwelling units in Sonoma County would be uninhabitable following a magnitude 7.1 event.[3]

More than half of the units that may become uninhabitable as a result of an earthquake are mobile homes, which tend to sustain greater damage from intense shaking than wood-frame buildings. During an earthquake, the jacks on which a mobile home is typically placed can tip, causing the coach to fall off some or all of its supports. Although the jacks may punch holes through the floor of the mobile home, it usually sustains no other substantial damage. Despite the minimal damage, however, the mobile home becomes uninhabitable, as it must be returned to a stable foundation and reconnected to utilities.

[3] Association of Bay Area Governments, *Shaken Awake!*, 1996.

Although single-family, wood-framed homes are less likely to be red-tagged, significant damage can occur from falling hot water heaters, failed cripple walls, falling unreinforced masonry chimneys, and dislocation of structures from their foundations.

Two-story homes with living space over garages are particularly vulnerable to damage. Similarly, multi-family, wood-framed buildings may have living areas above parking areas, supported only by posts. The "soft" first story may also be constructed of concrete masonry unit bearing walls. These designs offer little resistance to lateral seismic forces. The mid-2008 housing conditions survey identified several buildings with this design that could be severely damaged during a seismic event unless they are reinforced.

- Housing Rehabilitation

Through its Neighborhood Improvement Program, the Healdsburg Redevelopment Agency assists low- and moderate-income households by providing minor exterior rehabilitations in an effort to preserve the community's existing affordable housing stock. Each summer, local youth are employed to clean-up landscaping and complete exterior painting and minor property repairs. This program serves an average of 12 households per year, including disabled households. The program is publicized through the City's utility billings, the Senior Center newsletter and the Healdsburg Tribune. Households are served on a first-come, first-served basis. Efforts have included repairs of porches and steps, window replacement, exterior debris removal and exterior paint for low-income senior and disabled households, and the provision of debris boxes and paint vouchers for other low- and moderate-income households.

However, at least six program applications were received from households outside the City's redevelopment area boundaries during 2008, in the area generally northwest of March Avenue and Prentice Drive.

Between 1999 and 2006, two Healdsburg homeowners received low-interest loans of $10,978 and $30,000[4] through the Sonoma County Community Development Commission to rehabilitate their residences. The loans are available to low- and moderate-income households to repair structural, electrical and mechanical deficiencies, improve accessibility and increase energy efficiency. Deferred payments with no monthly expenditures are available, and the program also provides a free on-site evaluation, followed by a written report of items that need to be addressed. Homeowners are assisted in obtaining bids and permits, selecting qualified contractors and managing the project paperwork and budget.

4.2.2 Housing Supply

An insufficient supply of housing can occur when formation of new households – through children leaving home, marriage and divorce – increases at a more rapid pace than housing construction, and can lead to high housing costs, overcrowded living conditions, gentrification pressure on existing housing and difficulty in finding suitable housing. In Sonoma County, the

[4] Gary Taggart, Sonoma County Community Development Commission, personal communication, November 2008.

demand for housing is also affected by job growth related to the expansion of local companies and the establishment of new businesses that bring in large numbers of out-of-area buyers.

- Housing Occupancy

The occupancy status of the city's 4,138 total housing units in 2000 is summarized in Table 9.

Table 9 Housing Occupancy Status

Occupied units	**3,968**
Owner	2,392
Renter	1,576
Vacant units	**170**
For rent	34
For sale	24
Rented or sold, not occupied	30
For season, recreational or occasional use	62
Other vacant	20
Total units	**4,138**

Source: Census 2000 Summary File 1, Tables H3 & H4

Approximately 1.4 percent of the city's total housing units at that time were vacant and available for rent or sale. Of these, more than one-third were for seasonal, recreational or occasional use; only 24 were for sale (1.0 percent vacancy rate) and 34 were for rent (2.1 percent vacancy rate). The city's vacancy rate was identical to the county's vacancy rate and significantly lower than the state's (2.4 percent)[5]. It was also significantly lower than the 5.1 percent level that the State finds is needed to allow adequate mobility within the housing market.

However, a comparison between real estate conditions in September 2008 and four years ago at the same time of year indicates that the current supply of housing available for purchase in Healdsburg may greatly exceed demand, based on the following:

- The number of units for sale in September 2008 was double the number offered four years ago.
- The number of days, on average, that a unit took to sell in September 2008 was double than four years previous (approximately 120 days vs. 60 days).
- The months of unsold inventory, based on the previous rate of sale (which had dropped by two-thirds between 2004 and 2008), had increased from 3 months to more than 14 months.

It should be noted that nearly 14 percent of the 141 units for sale in September 2008 were located in the Foss Creek Villas project, where 40 units that were formerly rented as

[5] Census 2000 Summary File 1, Table H3 and H4.

apartments were being offered for sale as condominiums. Another 13 units were part of newly-constructed projects (i.e., The Grove and Healdsburg Commons.)

Local realtors have noticed a recent trend of home purchases for use as second (or third) homes by residents of the San Francisco Bay Area, Portland, Seattle, Los Angeles, the East Coast, and foreign countries. These purchases attest to Healdsburg's attractiveness as a weekend and vacation destination as well as the desire for some to own a low-maintenance property (such as the homes at The Grove and Healdsburg Commons) for eventual use as a retirement residence.

- Rental Housing

The 2000 Census reported that 1,576 units (39.7 percent of total units) were renter-occupied, a rate that was marginally higher than 1990 (38.9 percent). The city's proportion was somewhat higher than the county's (35.9 percent) but lower than the state's (41.6 percent). Many of the renter-occupied units were probably single-family homes, as Healdsburg had only 805 multi-family units in 2000.

It is difficult to determine the effects that the recent downturn in housing prices has had on the availability of rental housing. Owners who are unable to sell their homes may rent them out in the interim, increasing the supply of single-family homes and condominiums rentals, which reduces the demand for apartments. However, as home prices fall, more families may stay in apartments instead of buying a home while they wait for the housing market to level off. Other families who have lost their homes to foreclosure may have moved to apartments and other rental housing. Both trends would reduce the vacancy rate.

The number of apartments in Healdsburg has recently been reduced by the removal of 40 units (Foss Creek Villas) from the rental market. These units were originally converted to condominiums in 1993 but had never been sold as such and were rented as apartments until they were vacated and renovated for sale in 2007.

All of the income-restricted apartments in the city have lengthy waiting lists, with wait times between six months (Canyon Run) and three years (Fitch Mountain Terrace I and II).

- Ownership Housing

A major element of the American dream is a home of one's own in the neighborhood of one's choice. Owning a home is one of the primary ways of accumulating wealth in our society, a form of wealth acquisition that is especially protected in the U.S. tax code. Homeownership stabilizes housing costs for a family and protects them from the variations that occur in rental housing.

Being a homeowner is also known to increase people's feelings of control over their lives and their sense of overall well-being. High rates of homeownership are believed to strengthen neighborhoods as well, by increasing residents' stake in the future of their communities.

The 2000 Census reported that 2,392 units (60.3 percent of total units) at that time in Healdsburg were owner-occupied, an ownership level that was somewhat lower than the county's (64.1 percent) but higher than the state's (58.4 percent).

4.2.3 Housing Affordability

Housing cost is generally the greatest single expense item for households. For owner households, housing expenses consist of mortgage and interest payments, insurance, maintenance and property taxes; some owners may also pay homeowners association dues or a special assessment. The housing cost burden for recent home purchasers is even greater than that of other homeowners, since the relative cost of homeownership decreases over time (i.e., long-term owner costs do not adjust to the market value of housing) and the property tax that has limited increases following the home's purchase is adjusted upwards when the property sells.

For renter households, housing expenses generally consist of a security deposit, rent and utilities. Rent levels can fluctuate over the course of occupancy unless local rent controls are imposed.

Higher-income households may choose to spend greater portions of their income for housing expenses. However, many low-income households must involuntarily spend a large share of their income on housing.

- Long-Term Affordable Housing

In addition to housing that is affordable to lower- and moderate-income households by virtue of characteristics such as amenities, location, condition and age, there are currently 323 units (seven percent of total units) within the city whose long-term affordability to these households is assured through deed restrictions and other agreements (see Table 10 and Figure 9).

Beginning in 1986, the City of Healdsburg has worked with for-profit and non-profit developers to provide a range of housing types targeted to meet the needs of families, seniors, farmworkers and the homeless. Appendix B provides details on each of these affordable projects. Additionally, six affordable units have been provided to date through the City's inclusionary housing program, with another seven under construction.

- Housing Prices

Homes in Healdsburg generally command higher prices than much of California, given the city's desirable climate; its surroundings of vineyards and world-class wineries, wooded hillsides and the Russian River; its proximity to the San Francisco Bay Area and a full range of services in nearby communities; and its historic small-town character.

The median value of Healdsburg homes reported by the 2000 Census, $263,800, was the fourth-highest of the nine cities in Sonoma County. Although this median was approximately $10,000 lower than the County's median value at the time, it was more than $50,000 higher than the State's median value. Only 6.5 percent of the city's owner-occupied homes in 2000 were affordable to lower-income households (i.e., with incomes less than or equal to 80 percent of the HUD Area Median Family Income at the time).[6]

[6] U.S. Department of Housing and Urban Development, Consolidated *Housing Affordability Strategy* (CHAS), 2003.

Table 10 Restricted Affordable Housing Units

Project	Year	Tenure	Sponsor	Location	Units	Income Group(s)[1]	Target Groups	Exp. Date	City/RDA Contributions[2]	Other Subsidies[3]
Fitch Mt. Terrace I	1986	Rental	Burbank Housing	710 S. Fitch Mountain Road	40	40 Very Low	Seniors	2099	Land donation Pre-development loan	FmHA/515, RHCP, USDA Rural Dev.
Fitch Mt. Terrace II	1990	Rental	Burbank Housing	713 Heron	20	6 Very Low 14 Low	Seniors	2089	Land donation Construction loan On- & off-site improvements	CalHFA, SCCDC, Tax credits
Riverfield Homes	1995	Rental	Riverfield Homes	1-35 Adeline	17	4 Very Low 13 Low	Families	2044	Density bonus Loans	CDBG, HOME, Tax credits
Harvest Grove Apartments	1996	Rental	Burbank Housing	205-292 W. Grant Street	44	43 Very Low 1 Mod. (mgr)	Farmworker families	2026	Loan	CDBG, USDA, FmHA
Park Land Senior Apartments	1999	Rental	Burbank Housing	1651-1669 Rosewood Drive	23	22 Very Low 1 Mod. (mgr)	Seniors	2054	Land donation Loan Modifications to development standards	HOME, CDBG, AHP, CalHFA, Tax credits, RHCP
Oak Grove Apartments	1999	Rental	Private developer	1570-1592 Grove Street	81	40 Very Low 41 Low	Families	2055	Affordable housing overlay Covered parking waiver Reduced riparian setback Fire truck purchase	Tax credits, CalHFA
Canyon Run Apartments	2001	Rental	Burbank Housing	1671-1687 Canyon Run	51	14 Very Low 36 Low 1 Mod. (mgr)	Families	2056	Land donation Loans Covered parking waiver	CalHFA, Tax credits, HOME, AHP, FHRCAC
Quarry Ridge	2001	Owner	Burbank Housing	141-197 Quarry Ridge	20	Low	Families	varies	Modifications to development standards, loan	USDA, HCD, SHOP
Victory Apartments	2002	Rental	City of Healdsburg	308 East St.	4	Very Low	Homeless	2057	Site purchase and funding for property rehabilitation	CDBG

Table 10, continued

Project	Year	Tenure	Sponsor	Location	Units	Income Group(s)	Target Groups	Exp. Date	City/RDA Contributions	Subsidies
Palomino Court	2004	Owner	City of Healdsburg	1716-1748 Palomino Court	15	3 Low 12 Moderate	Families	10 years from re-sale date	Land donation Modifications to development standards 2nd mortgages	MCC
Sienna Pointe	2005	Owner	Private developer	Paul Wittke Drive	1	1 Low	Families	2035	Inclusionary housing program	
Grove Lofts	2007	Owner	Private developer	W. Grant St. Grove Street	2	2 Low	Families	2053	Inclusionary housing program	
Healdsburg Commons	2008	Owner	Private developer	Healdsburg Ave.	2	1 Low 1 Moderate	Families	2053	Inclusionary housing program	
Foss Creek Villas	2008	Owner	Private developer	Foss Creek Circle	2	2 Moderate	Families	2028	Condition of approval for condo conversion	
Fanny Hill	2009	Owner	Private developer	Rosewood Drive	1	1 Low	Families	2054	Inclusionary housing program	

[1] Very Low-Income - 50% of area median income or below
Low-Income - between 51% and 80% of area median income
Moderate-Income - between 81% to 120% of area median Income

[2] See Appendix B for details on City of Healdsburg and Healdsburg RDA contributions

[3] Programs:

AHP	Federal Home Loan Bank Board Affordable Housing Program
CalHFA	California Housing Finance Agency State Housing Program
CDBG	US Department of Housing and Urban Development Community Development Block Grant entitlement program
FHRCAC	Farmworker Housing Rural Communities Assistance Corp.
FmHA/515	Farmers
HCD	State of California Housing and Community Development Department
HOME	California HOME Investment Partnership Program
MCC	Mortgage Credit Certificate Program
SHOP	Self-Help Homeownership Opportunity Program
SCCDC	Sonoma County Community Development Commission

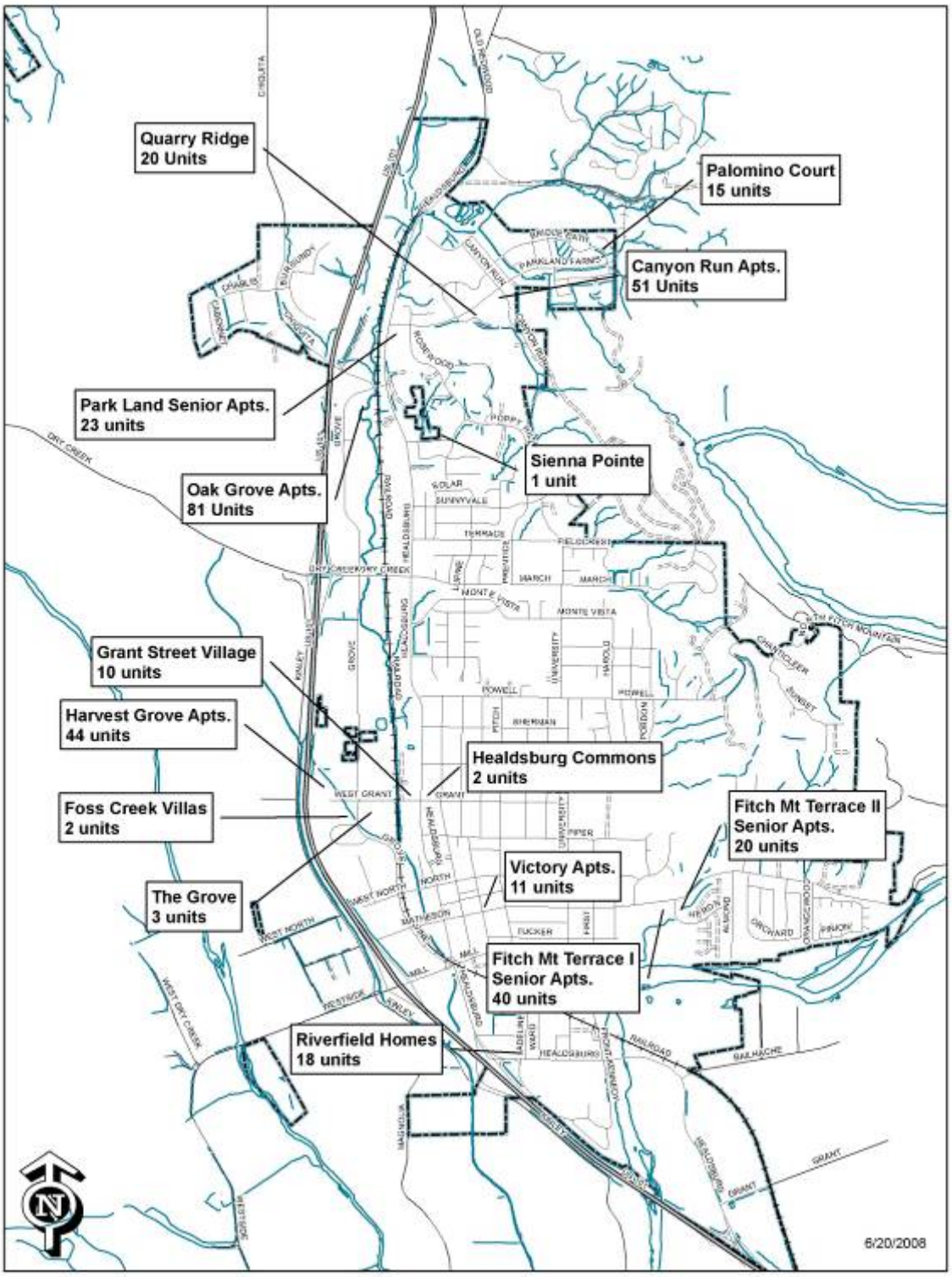


Figure 9 Restricted Affordable Housing

Sonoma County home prices were "extremely overvalued" from 2004 through much of 2006. The housing market peaked in the summer of 2005 when the median home price reached $560,000[7]. Home values began dropping significantly in mid-2006, reaching $305,000 by the end of 2008 and ending an eight-year boom that nearly tripled the price of the typical home in Sonoma County. The Santa Rosa-Petaluma metropolitan area improved from the ninth least-affordable region for housing in national metropolitan areas of less than 500,000 in the second quarter of 2008 to the 33rd least-affordable region in the fourth quarter of 2008[8].

As shown in Table 11, 85 single-family homes were offered for sale in Healdsburg in February 2009 (down from 121 homes for sale in September 2008), at prices ranging from $175,000 to $2.195 million:

Table 11 Asking Prices for Single-Family Units

Price Range	No. of Properties
$215,000 – $399,999	35
$400,000 – $600,000	20
$600,000 – $800,000	13
$800,000 – $1 million	8
>$1 million	9

Source: Movoto.com – 2/19/09

None of the homes listed for sale were Fannie Mae or Freddie Mac foreclosure homes that originally had a Fannie Mae or Freddie Mac conventional mortgage and were subsequently foreclosed upon. However, there were three few bank-owned homes in Healdsburg for sale, at the time.

Buyers who were priced out of the market are now seeing opportunities that were out of their reach just two years ago. Some families have enjoyed an increase in their buying power, as lower prices combined with favorable interest rates reduce monthly mortgage costs. Bay Area home buyers in January 2009 took out mortgages with a typical monthly payment of $1,297, down from $2,571 a year earlier[9]. The average rate on a 30-year fixed mortgage had dropped a full percentage point, to 5.04 percent, at the end of February 2009.

For many would-be buyers, however, Sonoma County home prices remain too high compared with what they can afford. In response to an outreach effort by the City in Fall 2008, 118 low-income households (income between 51% and 80% of area median income) and moderate-income households (income between 81% and 120% of area median Income) who had not owned a home within the previous three years applied for placement on a waiting list for the purchase of a future inclusionary unit. Ninety-two of the applicants lived or worked in

[7] National Association of Home Builders/Wells Fargo Housing Opportunity Index, http://www.nahb.org/page.aspx/category/sectionID=135

[8] Ibid.

[9] Michael Coit, *Foreclosures drive up Bay Area home sales*, The Press Democrat, February 19, 2009.

Healdsburg, indicating a strong unmet local need for affordable entry-level housing for first-time homebuyers.

Home prices rose far faster than incomes during the housing boom and since have returned to being "moderately overvalued." Prices may also be bid up by a trend towards second (or more) home purchases in Healdsburg for the past few years. A local realtor reports that most of their office's "walk-ins" are interested in a second home for now that may turn into a retirement home later. The downtown core is most often cited as the focus area for these potential homebuyers; walking distance to the Plaza and a house with "character" are the top priorities. Most are from the San Francisco Bay Area, but Portland, Seattle and Los Angeles residents are showing up due to the recent reinstitution of Horizon Air flights to the Sonoma County airport.

The greatest factor in the slowdown of mid- and higher-priced homes remains high loan costs as lenders charge a premium for so-called jumbo loans needed to purchase homes priced around $500,000 or more, a result of tighter financing rules. Jumbo loans accounted for 12.5 percent of January 2009 purchases in the Bay Area, compared with 62 percent before the credit crunch hit in fall 2007 as foreclosures began to soar[10].

An income group whose housing needs have generally not been addressed by public entities in the past are "workforce" or "middle income" households – often with two wage earners - earning between 121 and 180 percent of area median income (the lower end of the above moderate-income group). In 2007, the average entry level California home was priced at $504,000, which would have required a family of three to have an income equal to 163 percent of median income[11]. These households do not typically qualify for the traditional housing assistance programs.

- Housing Rents

The 2000 Census reported a median rent in Healdsburg of $868. Table 12 summarizes the range of rents sought for rental units in Healdsburg during June 2008, compared to average county-wide rents and the fair market rents (FMRs) allowed by the U.S. Department of Housing and Urban Development (HUD).

Fair market rents are gross rent estimates primarily used by HUD to determine payment standard amounts for their various programs. They include the shelter rent plus the cost of all tenant-paid utilities, except telephone, television and Internet service. HUD sets FMRs to assure that a sufficient supply of rental housing is available to program participants. To accomplish this objective, FMRs must be both high enough to permit a selection of units and neighborhoods and low enough to serve as many low-income families as possible. FMRs are slightly below average rents, as shown in Table 12 when compared to the countywide averages.

[10] Ibid.

[11] California Association of Realtors, *Trends in California Real Estate,* September 2007.

Table 12 Healdsburg, Sonoma County and Fair Market Rent Comparison

Unit Type	Unit Size			
	Studio	1 bedroom	2 bedroom	3 bedroom
Apartment (Healdsburg)[1]	$695-800	$875-1000	$950-1238	$1895
Attached single-family (Hbg.)[1]		$950-995	$1100-1375	
Attached single-family (Hbg.)[1]		$850-1000	$1100-1650	$1675-2400
Countywide average rent[2]	*$785*	*$945*	*$1,230*	*$1,760*
Fair market rent[3]	*$740*	*$901*	*$1,137*	*$1,613*

Data compiled during June 2008.
Sources:
[1] Craigslist.com, Rentometer.com, HealdsburgRentals.com, PressDemocrat.com, HomeandCommercialRentals.com, Healdsburg Property Management, June 2008
[2] Sonoma County Housing Element Technical Report, October 2007, Economic & Planning Systems, Inc.
[3] U.S. Department of Housing and Urban Development, 2008

Rents in Healdsburg appear to be generally consistent with those countywide; the lower range of rents for all but the three-bedroom units would include the FMRs used by HUD. This finding is consistent with 2000 Census data (Table 13), which showed that nearly 90 percent of Healdsburg's rental units were affordable to lower-income households (i.e., households whose incomes are 80% or less of area median income).

Table 13 Affordability of Rental Units by Income Group

Affordability Level	No. of Units	% of Total
Extremely low income (≤30% of AMI)	108	6.8%
Very low income (31-50% of AMI)	295	18.4%
Low income (51- 80% of AMI)	1,018	63.6%
Moderate income & above (≥81% of AMI)	179	11.2%
Total	1,600	100.00%

AMI: Area Median Income
Source: State of the Cities Data Systems: Comprehensive Housing Affordability Strategy (CHAS) Data, based on 2000 Census.

A survey of second units in Healdsburg during July 2008 showed that approximately half were being rented out (the other half were occupied by relatives or guests). Of these, approximately three-quarters were rented at rates affordable to lower-income households (adjusted for household size) and one-quarter were affordable to moderate-income households.

- Overpayment for Housing

The State of California considers a lower-income household (i.e., 80% or less of area median income) that pays more than 30 percent of its income for housing (rent or mortgage payment plus utilities) to be living in unaffordable housing and "overpaying" for housing. Based on this

standard and Census data, overall, approximately 647 Healdsburg homeowners (26.7 percent of all homeowners) and 536 renters (33.8 percent of all renters) overpaid for housing in 2000 (Table 14).

However, the 30 percent standard is deceptive because, for many low-income families, spending 30 percent on housing costs leaves very little for other necessities, whereas for middle-income families, it is an appropriate expenditure level. More than 46 percent of low-income homeowners overpaid for housing compared to only 17 percent of higher-income homeowners; more than 52 percent of low-income renters overpaid for housing compared to only 5 percent of moderate- and above moderate-income homeowners.

Table 14 Overpayment for Housing by Household Income

	Income Group	No. of house-holds	% of house-holds[1]	Housing cost ≥30% of income		Housing cost ≥50% of income	
				No.	%	No.	%
Owner	Extremely low	134	5.6%	59	44.0%	49	36.6%
	Very low	298	12.3%	123	41.3%	39	13.1%
	Low	383	15.8%	194	50.7%	84	21.9%
	Higher	1605	66.3%	271	16.9%	67	4.2%
Renter	Extremely low	238	15.0%	174	73.1%	164	68.9%
	Very low	293	18.5%	178	60.8%	89	30.4%
	Low	433	27.3%	154	35.6%	4	0.9%
	Higher	620	39.2%	30	4.8%	0	0.0%

[1]Share of owner or renter households

Source: State of the Cities Data Systems: Comprehensive Housing Affordability Strategy (CHAS) Data, based on 2000 Census.

Households that spend 50 percent or more of their income are considered "extremely cost burdened." As expected, a higher percentage of lower-income households fall into this category (approximately 21 percent of lower-income homeowners and 27 percent of lower-income renters) than higher-income households (only 4 percent of higher-income homeowners and no higher-income renters).

HUD establishes annual income limits in various categories that are used in the administration of its programs. The 2008 HUD income limits for Sonoma County and its jurisdictions are shown in Table 15. The maximum monthly housing cost that households in each income category should bear has been calculated using a maximum expenditure of 30 percent of income for rent and utilities or for mortgage, property taxes and insurance (assuming a 30-year loan at 6.5 percent and a 5 percent downpayment).

As shown in Table 16, many of the jobs in Healdsburg and the region have salaries within the low-income range if there is only a single wage earner in the household. These include jobs in the service sector, such as waiters, cooks, room cleaners, and food preparation workers; in the retail sector, such as sales clerks; and professional jobs such as teachers and firefighters. In many cases, even the combined wages of two workers result in a lower-income household.

Table 15 Income Limits and Maximum Affordable Housing Costs, 2009

Household Size	Income Group Limits[1]			
	Extr. Low (≤30% of AMI)	**Very Low** (31-50% of AMI)	**Low** (51- 80% of AMI)	**Moderate** (81-120% of AMI)
1 person				
Maximum annual income	$16,850	$28,050	$44,800	$67,400
Maximum monthly rent	$421	$701	$1,120	$1,685
Maximum price[2]	$55,432	$107,342	$175,566	$267,149
2 persons				
Maximum annual income	$19,250	$32,100	$51,200	$77,000
Maximum monthly rent	$481	$803	$1,280	$1,925
Maximum price	$63,960	$123,471	$201,520	$306,266
3 persons				
Maximum annual income	$21,650	$36,100	$57,600	$86,650
Maximum monthly rent	$541	$903	$1,440	$2,166
Maximum price	$73,044	$139,970	$227,661	$345,384
4 persons				
Maximum annual income	$24,050	$40,100	$64,000	$96,250
Maximum monthly rent	$601	$1,003	$1,600	$2,406
Maximum price	$81,943	$156,285	$233,964	$384,316
5 persons				
Maximum annual income	$25,950	$43,300	$69,100	$103,950
Maximum monthly rent	$649	$1,083	$1,728	$2,599
Maximum price	$88,802	$169,262	$274,194	$415,462

[1] Established by State and HUD for Sonoma County based on 2009 area median income of $80,200 for a family of four
[2] Assumes studio unit

Table 16 Examples of Average Annual Salaries by Occupation

Occupation	Income	Occupation	Income
Cook – fast food	$17,709	Agricultural equipment operator	$24,249
Dishwasher	$17,750	Bank teller	$26,684
Waiter	$18,359	Teacher assistant	$26,688
Host/hostess	$18,504	Salesperson	$27,420
Bartender	$19,536	Manicurist/pedicurist	$27,611
Farmworker/laborer, crop	$20,379	Groundskeeper	$28,953
Home health aide	$20,610	Truck driver, light/delivery	$29,597
Maid/housekeeper	$21,416	Massage therapist	$32,206
Hotel/motel clerk	$22,090	Medical assistant	$32,227
Food preparation worker	$22,283	Hairdresser/cosmetologist	$32,289
Janitor	$23,450	Housekeeping supervisor	$34,426
Cashier	$23,615	Tour guide/escort	$36,708
Child care worker	$23,894	Secretary, general	$37,103
Construction laborer	$37,990	Accountant/auditor	$62,072
Emergency medical technician	$38,189	Real estate agent	$67,261
Accounting clerk	$39,236	Physical therapist	$71,226
Dental assistant	$40,921	Police officer	$72,033
Truck driver - heavy	$42,035	Medical lab technician	$73,260
Chef	$42,139	Court reporter	$74,128
Retail sales manager	$42,490	Insurance sales agent	$74,497
Firefighter	$42,522	Urban planner	$78,660
Painter	$42,978	Loan officer	$78,771
Mail carrier	$44,671	Civil engineer	$81,251
Auto service tech/mechanic	$47,002	Registered nurse	$83,409
Physical therapy assistant	$47,509	Veterinarian	$93,279
Construction/extraction	$50,348		
Teacher – secondary school	$52,344		
Landscaping supervisor	$53,477		

Source: State of California Employment Development Department http://www.labormarketinfo.edd.ca.gov/ - Santa Rosa/Petaluma Metropolitan Statistical Area, First quarter 2007

The Housing Choice Voucher Program (Section 8) is a federal subsidy program that permits low income persons to live in privately-owned rental properties and to pay approximately 30-40 percent of their total gross monthly income for their share of the rent. In Sonoma County, the Sonoma County Housing Authority pays the balance to the owner within reasonable rental limits. In 2008, 131 Section 8 vouchers were in use in Healdsburg.

The waiting list for this program is lengthy, and households waiting to receive assistance may remain homeless or at risk, and improperly housed. Many of the households on the Section 8 waiting list have special needs, including, but not limited to the elderly, large families and the disabled.

4.2.4 Overcrowding

High housing costs force lower-income households to share living accommodations with extended family and friends, or rent out rooms in their homes, leading to crowded living conditions. Large household sizes, multi-generational households, high numbers of children per household, low incomes and the limited availability of large rental units all are related to overcrowding. In 2000, renter households in Healdsburg had an average household size larger than owner-occupied units and the percentage of renter households with five or more persons was twice that of owner households (Table 17).

Table 17 Household Sizes by Type of Occupancy

Household Size	Owner occupied		Renter occupied	
1-person household	577	24.1%	449	28.5%
2-person household	918	38.3%	401	25.4%
3-person household	359	15.0%	225	14.3%
4-person household	327	13.7%	216	13.7%
5-person household	124	5.2%	120	7.6%
6-person household	52	2.2%	68	4.3%
7+ person household	35	1.5%	97	6.2%
Total units	2,392	100%	1,576	100%
Aver. household size	**2.52**		**2.94**	

Source: Census 2000 Summary File 1

In 2000, only 402 (10 percent) of the city's occupied dwelling units had more than one person per room (excluding kitchens and bathrooms) and were therefore considered "overcrowded" (Table 18). The 10 percent level of overcrowding overall was significantly lower than the statewide level of 15.2 percent.

Approximately 7 percent of the units were severely-overcrowded (over 1.5 persons per room). Overall, renter-occupied units had a much higher proportion of overcrowded and severely-overcrowded units than owner-occupied units. This could be partly accounted for by the fact that the average household size for renter-occupied units in 2000 was larger than that of owner-occupied units.

Table 18 Overcrowding by Type of Occupancy

Occupants per room	Owner occupied		Renter occupied	
≤0.50	1,860	77.2%	808	51.2%
0.51 – 1.00	471	19.5%	448	28.4%
1.01 – 1.50	30	1.2%	87	5.5%
1.51 – 2.00	50	2.1%	105	6.7%
≥2.01	0	0%	130	8.2%
Overcrowded		**3.3%**		**20.4%**

Source: Census 2000 Summary File 3 (SF 3) – Sample Data, Table H20

4.2.6 Fair Housing

Along with affordability, availability and accessibility are key issues in providing and maintaining fair housing choices.

Only one fair housing complaint was received by HUD from Healdsburg residents between January 2000 and July 2008. The complainant in the 2006 case believed that a loan was denied on the basis of disability[12]. The California Fair Housing Assistance Program received one claim of racial discrimination between October 2000 and October 2005, but was not able to substantiate it and closed the claim[13]. Fair Housing of Sonoma County reported receiving 83 complaints from city residents between 2000 and 2007[14]. Approximately 95 percent of the complaints were tenant-landlord disputes; the remaining calls fall into general categories such as discrimination, family status and habitability issues.

A 2005 fair housing study found little evidence of discrimination in lending throughout Sonoma County[15]. Additionally, the study determined that none of the nine jurisdictions in the county were currently involved in any legal actions or litigations regarding fair housing law.

Existing fair housing practices of the City of Healdsburg include:

- Mandating the implementation of fair housing practices in contracts with affordable housing developers.
- Disseminating fair housing information through posters, brochures, forms and landlord/tenant handbooks from the State Department of Fair Employment and Housing and Fair Housing of Sonoma County in public locations.
- Referring fair housing complaints to the State Department of Fair Employment and Housing and Fair Housing of Sonoma County.

[12] U.S. Department of Housing and Urban Development, San Francisco Fair Housing Regional Office, personal communication, July 2008.

[13] City of Petaluma, City of Santa Rosa, County of Sonoma, *Analysis of Impediments to Fair Housing Choice*, Fall 2005.

[14] Molly Ackley, Community Action Partnership, personal communication, July 2008.

[15] City of Petaluma, City of Santa Rosa, County of Sonoma, *Analysis of Impediments to Fair Housing Choice*, Fall 2005.

- Conducting outreach efforts for the City's affordable housing programs in Spanish as well as English and publicizing the programs through such organizations as churches.
- Utilizing the Uniform Housing Code standards for maximum occupancy of dwelling units, which has no limit on the number of residents in a dwelling unit, as long as minimum floor area requirements are met.
- Providing equitable public services throughout the City, including public transportation, crime prevention, police protection, street lighting, street cleaning, trash collection, recreational facilities and programs, and schools; and providing for the development of commercial centers in all neighborhoods.
- Promoting the provision of housing affordable to lower-income households, which affirmatively furthers fair housing because minority families and persons with disabilities are disproportionately represented among those that would benefit from low-cost housing.

4.2.5 Special Housing Needs

The special housing needs of certain persons and households are discussed in this section.

- The Elderly

The 2000 Census reported 808 ownership units and 218 rental units occupied by elderly households[16]. An overwhelming share of the total senior household units (79 percent) were owner-occupied. While only 14 percent of the total city population was aged 65 or over, 26 percent of households were headed by persons 65 and over, which could be accounted for by the 480 individuals 65 years and over who lived by themselves.

Senior Housing Needs

Some elderly homeowners are not physically or financially able to maintain their homes. While younger homeowners can usually perform routine home repairs themselves, elderly homeowners are often too frail to do so and must rely on others for assistance. They may also not be able to afford modifications that are needed to ensure their safety and improve their mobility, such as grab bars and ramps.

Younger homeowners may be more willing to move out of a home if they no longer consider its features adequate. Elderly people are often less willing to move, despite the physical condition of their homes. Most often the home is paid for, so it is more cost effective to stay in the home.

The majority of the elderly are on fixed incomes such as pensions, Social Security and/or personal savings, which can result in an excessive proportion of their income going towards housing, especially lower-income senior households that do not qualify for Section 8 rental assistance. The percentage of senior renters paying more than 30 percent of their income for housing costs in 2000 was greater than that of Healdsburg renters in general (53 percent vs. 34 percent). However, the percentage of senior homeowners paying more than 30 percent of

[16] Census 2000, Summary File 1, Table H2.

their income for housing costs in 2000 was less than that of Healdsburg homeowners in general (22 percent vs. 27 percent), which may be due to the fact that senior households may no longer have mortgage payments. Additionally, only 4.3 percent of senior Healdsburg families had incomes below the poverty level in 2000, compared to 6.6 percent of families citywide.

For the elderly who cannot live independently, congregate or group housing provides small individual units without kitchens or with minimal provision for cooking, and some common facilities and services, including shared arrangements for meals and housekeeping services. Congregate care housing is particularly attractive to older persons, as building design and services can be tailored to their specific needs.

Life care facilities can also provide all levels of care on the same site to meet the progressively greater needs of the elderly. These facilities often have apartments, congregate housing, an infirmary, and nursing home in the same complex. Elderly persons buy into a life care project with an initial fee, then pay a monthly fee thereafter. The fee usually guarantees occupancy in a particular size of apartment and one meal a day. Tenants may also move into a "personal care" unit or nursing facility if health support needs change.

House sharing can provide older homeowners with revenue, as well as added security and companionship, and provides renters with affordable housing. Secondary units, which are separate units within a home or on the same site as a single-family home, offer the same advantages plus privacy.

Existing Housing and Assistance for the Elderly

More than 350 units concentrated in the southeast portion of the city are restricted to 55 years and older occupants, including 60 rental units at Fitch Mountain Terrace I and II that are restricted to very low- and low-income households aged 62 years and over. Each of these projects has 60 people on their waiting list, with a wait time for a unit of one to three years. Another 23 units restricted to very low-income senior households are located at Park Land Senior Apartments, at the north end of the city.

Healdsburg Senior Living Community is licensed for 93 clients and provides skilled nursing, assisted living and dementia care. The community's current population is an even mix of persons who formerly lived elsewhere in Healdsburg and parents of current Healdsburg residents. Occupancy of the assisted living units is currently at 80 percent and the City of Healdsburg has approved a master plan that would allow expansion of the facility. In addition to this facility, a senior care home located at 121 Fitch Street is licensed for 19 residents.

The City's Neighborhood Improvement Program described earlier helps low- and moderate-income senior households stay in their homes. In addition to providing information on this program, the Senior Center also provides information on local subsidized senior housing and fair housing assistance, as well as copies of the screened list of senior housing providers compiled by the Sonoma County Area Agency on Aging. Other housing-related inquiries at the Senior Center are from widows who are living with family members and wish to find

independent local housing but do not qualify for Section 8 housing assistance because of their income.[17]

- The Disabled

The North Bay Regional Center, which serves the developmentally disabled under contract with the California Department of Developmental Services, reported that 81 of their clients lived in Healdsburg as of August 2008. (The Center defines a "developmental disability" as mental retardation, autism and/or cerebral palsy.) The North Bay Housing Coalition estimates that two percent of the population is developmentally disabled, which equates to approximately 234 Healdsburg residents.

According to Becoming Independent, a Sonoma County organization that works with persons who have developmental disabilities, Healdsburg is an ideal setting for some clients because of the small-town atmosphere and open-minded attitudes of residents. Many clients do not drive, so the fact that parts of Healdsburg are walkable is very beneficial.

Persons with disabilities may encounter significant challenges in finding and maintaining housing that accommodates their needs. Disabilities can take many forms, as evidenced by the numerous categories identified by the 2000 U.S. Census:

- Sensory disability – Blindness, deafness or a severe vision or hearing impairment
- Physical disability – A condition that substantially limits one or more basic physical activities, such as walking, climbing stairs, reaching, lifting or carrying
- Mental disability – Difficulty with learning, remembering or concentrating
- Self-care disability – Difficulty dressing, bathing or getting around inside the home
- Employment disability – Difficulty working at a job or business

The disabled may consequently have lower incomes that affect their ability to afford suitable housing. There is also evidence of discriminatory rental housing practices against the disabled as reported by a 2005 HUD study of the Chicago-area housing market.[18] Testers who were deaf and used a telephone typewriter or teletypewriter (TTY) system to inquire about advertised rental units were refused service in one out of four calls. Even when providers accepted their calls, the TTY users received significantly less information about the application process and fewer opportunities for follow-up contact than comparable hearing customers making telephone inquiries. People using wheelchairs to visit rental properties sometimes learned about fewer available units than non-disabled people – and fewer units were wheelchair-accessible – or were denied the opportunity to inspect any units. Wheelchair users also received less information about the application process. In addition, persons with disabilities are frequently denied their requests for reasonable modifications and accommodations that are

[17] Sonja Drown, Healdsburg Senior Center, personal communication, June 2008.

[18] Office of Policy Development and Research, U.S. Department of Housing and Urban Development, *Discrimination Against Persons with Disabilities; Barriers at Every Step,* 2005.

necessary to have an equal opportunity to use and enjoy a dwelling, including public and common use spaces, as required by the federal Fair Housing Act.

The 2000 Census reported at total of 1,856 Healdsburg disabled residents 16 years or older in all of the disability categories described above. However, it did not quantify the number of persons whose disability affected their ability to live in conventional housing or to afford housing. Nearly 31 percent of disabled residents were aged 65 years or older, which is double the percentage that they represent in the city's population as a whole.

Disabled Housing Needs

According to the *2005 Sonoma County Consolidated Plan*, the housing needs of persons with disabilities are similar to those of seniors. As reported in the Plan, a survey of many nonprofits and social service agencies indicated that the disabled need low-cost, accessible housing close to public transportation, shopping and medical facilities. The provision of accessibility modifications in the existing housing stock, as well as new accessible housing units for disabled households, is a growing need as more disabled persons are striving to lead independent and productive lives.

Developmentally disabled and mentally disabled individuals require a variety of supportive living arrangements. Becoming Independent staff identified a need for small, affordable studio apartments, apartments that accept Section 8 vouchers, apartments located on the first floor, housing located near public transportation and housing located in mixed used developments.

The Community Support Network, a private non-profit organization, operates a number of housing facilities designed to serve the needs of people with emotional, mental, or developmental disabilities. Demand for their facilities is great, turnover is rare, and the vacancy rates are zero. None of these facilities are located in Healdsburg, therefore, facilities are needed in Healdsburg to allow people with disabilities to remain in their own community where their social networks are strongest and most familiar.

Besides the construction of new accessible housing, the needs of individuals with limitations can sometimes be met by retrofitting existing housing to transform conventional units into suitable housing. This is perhaps the least costly way to provide housing specifically for individuals with special limitations.

State and Federal Requirements

In response to the serious lack of accessible housing in the United States, the Fair Housing Act of 1988 and the Americans with Disabilities Act require that all ground floor dwelling units in buildings of four or more units without elevators and all dwelling units in elevator buildings of four or more units include the following basic features of accessible and adaptive design:

- Public and common areas must be accessible to persons with disabilities
- Doors and hallways must be wide enough for wheelchairs
- All units must have:
  - An accessible route into and through the unit
  - Accessible light switches, electrical outlets, thermostats and other environmental controls

- Reinforced bathroom walls to allow later installation of grab bars
- Kitchens and bathrooms that can be used by people in wheelchairs.

In the case of persons with a physical or mental disability (including hearing, mobility and visual impairments, chronic alcoholism, chronic mental illness, AIDS, AIDS Related Complex and mental retardation) that substantially limits one or more major life activities, landlords may not:

- Refuse to let tenants make reasonable modifications to their dwelling or common use areas, at their expense, if necessary for the disabled person to use the housing, or
- Refuse to make reasonable accommodations in rules, policies, practices or services if necessary for the disabled person to use the housing.

Furthermore, state and federal laws prohibit housing discrimination against the disabled in land use practices and decisions, such as applying special requirement that have the effect of limiting the ability of such individuals to live in the residence of their choice in the community. Local governments must also make reasonable accommodation when necessary to afford persons with disabilities the opportunity to use and enjoy a dwelling.

State law prohibits the City from treating facilities that provide permanent or transitional group living environments for persons with a physical and/or mental disability differently than other housing without a compelling reason and requires it to make reasonable accommodations for these facilities in its land use policies and decisions. Furthermore, licensed group homes and residential care facilities with six or fewer residents must be considered a residential use and the occupants must be considered a family. Group homes must be allowed in any area zoned for residential use, and the City may not place requirements or standards on these homes in addition to or different from those placed on other family dwellings of the same type in the same zone. Larger facilities are also entitled to reasonable accommodations and may not be denied or be subject to conditions of approval based solely on the fact that the home will be occupied by persons with mental or physical disabilities.

City Support for the Disabled

Disabled-accessible units were provided in multi-family projects constructed in Healdsburg during the 1999-2006 period, including Canyon Run Apartments and Oak Grove Apartments. All but four of the Park Land Senior Apartments are accessible or can be adapted for disabled

The City's Neighborhood Improvement Program described earlier helps low- and moderate-income disabled households stay in their homes.

According to the California Department of Social Services, there are no licensed group homes or adult residential facilities in Healdsburg that provide 24-hour non-medical care and supervision in a supportive living environment for the physically handicapped, developmentally disabled or mentally disabled. However, the Salvation Army operates a "transitional living program" in a Healdsburg home for six single males recovering from alcoholism or addiction. The Healdsburg Zoning Ordinance does not include any specific requirements or standards for residential care homes or supportive housing facilities. However, it does not clearly designate these types of facilities as permitted uses in the city's residential district; doing so may facilitate their establishment.

- Large Families

Large families are defined by the Census as households with six or more members. In 2000, there were 252 such households, or 6.3 percent of all households in Healdsburg. Of these, 87 (35 percent) lived in owner-occupied units and 165 (65 percent) occupied rental units. Approximately five households on the City's affordable homeownership waiting list (2007) have families with six or more members.

Large Family Housing Needs

Large households require housing units with more bedrooms than typical housing units. In general, housing for these households should provide safe outdoor play areas for children and should be located to provide convenient access to schools and child-care facilities. These types of needs can pose problems particularly for large families that cannot afford to buy or rent single-family houses, as apartment and condominium units are often developed with childless or smaller households in mind.

Lower-income, large households generally have difficulty locating appropriately-sized housing. Very few market-rate rental projects offer three- or four-bedroom units. Whereas 70 percent of owner-occupied units in Healdsburg contained three or more bedrooms in 2000, only 21 percent of renter-occupied units were as large. However, rental agents at the Harvest Grove and Riverfield Homes projects have reported difficulty renting their larger units. In the case of Harvest Grove, the manager believes that this is because larger households tend to have income levels that exceed the maximum allowed by occupancy restrictions.

Existing Housing for Large Families

The City worked with its affordable housing partners, including the developers of the Harvest Grove and Riverfield Homes projects, to ensure the inclusion of larger units. Four-bedroom units were also included in the following affordable housing projects developed between 1999 and 2006: Canyon Run Apartments (6 units), Quarry Ridge (5 units) and Oak Grove Apartments (16 units).

- Female-Headed Households

The 2000 Census documented 260 Healdsburg families (with 442 children) that were headed by a female with no husband present (20 percent of all families with minor children). Approximately 16.4 percent of these families lived below the poverty level in 1999, compared to 10.2 of Healdsburg families with minor children; they represented approximately one-quarter of all Healdsburg families living in poverty in 2000.

Due to lower incomes, female-headed households often have more difficulty finding adequate, affordable housing than families with two adults. Also, female-headed households with young children may need to pay for childcare, which further reduces disposable income. This special needs group would benefit generally from expanded affordable housing opportunities.

- Farmworkers

Farmworker Housing Needs

Although there is a limited amount of land within the city limits devoted to agricultural uses, an important part of the city's economy is related to the viticulture that surrounds the community. Visitors drawn to the region's vineyards and wineries patronize the city's tasting rooms, wine bars and wine shops as well as its restaurants, retail establishments and overnight accommodations.

The Census reported that 213 city residents were employed in farming, fishing, and forestry occupations in 2000. The Association of Bay Area Governments estimated that 350 city residents were employed in agriculture and natural resources in 2005 (*Projections 2007),* but it is not known how many of these residents were employed as farmworkers. The number of city residents employed in agriculture and natural resources is expected to increase slightly over the next 20 years.

Farmworkers have a difficult time locating affordable housing in Sonoma County. Due to a combination of limited English language skills and very low household incomes, the ability to obtain housing loans for home purchase is extremely limited. For the same reasons, rentals are also difficult to obtain.

Housing needs include permanent family housing as well as accommodations for migrant single men, such as dormitory-style housing, especially during peak labor activity in September and October. If this housing is not available, then individuals and families are forced to crowd into rental units and unconventional forms of housing such as converted motels.

The lack of adequate migrant farmworker housing results in homelessness among farmworkers who come to the Healdsburg area during the summer and harvest months. North County Community Services (NCCS), a non-profit organization based in Healdsburg, reports that the number of calls from farmworkers surges during the summer months.

Existing Housing for Farmworkers

Housing in Healdsburg specifically for farmworkers includes the U.S. Department of Agriculture (USDA)-subsidized Harvest Grove Apartments, which provides 44 units to very low-income farmworker households. This project was constructed in 1996 on property zoned Multi-Family Residential. As of July 2008, only five families were on the waiting list for the complex. Its manager, the non-profit Burbank Housing Development Corporation, reports that it is difficult to find qualified tenants because of occupancy restrictions tied to the USDA funding: the primary household wage earner must be working legally in the United States and must be employed in qualified farm labor (i.e., working directly with raw agricultural products. It is particularly difficult to find tenants for the four-bedroom units, because larger households tend to have income levels that exceed the maximum allowed by occupancy restrictions.

Additional agricultural worker housing in Healdsburg includes the 20 units at Quarry Ridge, an ownership project financed partially by the USDA and constructed on a 8.66-acre site in the Parkland Farms area. The site was rezoned to Planned Development to allow a modification to Zoning Ordinance development standards, including minimum lot size (the lots range in size

from 2,420 to 4,120 square feet), side and rear yard setbacks, and minimum lot width. The initial purchasers contributed their own "sweat equity" to the construction of their home. The project's program also includes a reduced mortgage loan, favorable loan terms and reduced cash down payment requirements.

North County Community Services (NCCS), a local non-profit group, refers many calls from farmworkers for housing assistance to Santa Rosa-based California Human Development, which has Spanish-speaking staff and runs a rental assistance program.

- The Homeless

A person or family is considered homeless if they lack a fixed and regular night-time residence, or has a primary night-time residence that is a supervised publicly-operated shelter designated for providing temporary living accommodations, or is residing in a public or private place not designated for, or ordinarily used as a regular sleeping accommodation for human beings, (e.g., the street, abandoned buildings, vehicles, encampments).

Reasons for homelessness include:

- Insufficient income
- Personal emergencies
- Inadequate support systems
- Chronic substance abuse
- Spousal/partner abuse or abandonment
- Physical or mental illness
- A lack of life skills
- Loss of employment

Populations at risk of becoming homeless also include those living in subsidized housing units if their subsidies are discontinued, and those who have fixed or low incomes facing rent increases.

It is very difficult to reliably estimate the numbers of homeless. The Sonoma County Task Force on the Homeless conducted a "point in time" count of the county's homeless between January 26 and 31, 2007[19], to which the City of Healdsburg contributed funding. The count identified 38 homeless persons in Healdsburg during this time (two percent of the countywide number), which is similar to the 2005 count. For purposes of this survey, a homeless person was defined as anyone without a place to live to which they had a legal right, and included "at risk" and "precariously housed" people staying temporarily in a motel or with friends or relatives, as well as individuals in jails, hospitals and treatment facilities who would be released within one week.

The Healdsburg Police Department reported in July 2008 that there were three homeless camps within the city limits that have 10 to 12 residents each, 90 percent of whom were male. There were also six transient individuals, two of whom had a mental disability. The Department believes that since 2000, the local homeless problem has significantly improved, possibly

[19] Sonoma County Task Force for the Homeless, *Homeless in Sonoma County 2007 – The Sonoma County Point in Time Homeless Count*, May 2007.

because of an increase in the housing supply. The Women's Emergency Shelter in Santa Rosa reported in July 2008 that there were 29 Healdsburg-based clients in need of housing.

The number of homeless persons in Healdsburg could actually be higher than those identified by the 2007 count or the Police Department. Based on information from service providers, many of Healdsburg's homeless are itinerant farmworkers, whose population peaks in September through October. Additionally, housing experts estimate that, on average, one percent of a community's population may be homeless at some time during the year. Based on a population of about 12,000, approximately 120 people in Healdsburg would be homeless at some time during a year using this estimate.

This estimate is consistent with the results of the 2009 Sonoma County homeless census that was conducted on January 23, 2009[20]. The methodology employed in the 2009 study was significantly different from previous homeless counts conducted in Sonoma County and more comprehensive. The 2009 survey identified 3,247 homeless people, compared to 1,974 in 2007. Within the Healdsburg city limits, the survey identified 119 homeless people, including 95 individuals, all of whom were unsheltered, and 24 people in families, who were living in transitional housing and emergency shelters.

The 2007 count reported the following findings regarding the homeless persons who were identified in Healdsburg (see Appendix E):

- Nearly three-quarters of the homeless were male.
- Only two children were identified as being homeless, a much lower percentage than countywide.
- More than half of the Healdsburg respondents completed their surveys in Spanish, compared to only 9 percent countywide. A higher percentage of homeless farmworkers were identified in Healdsburg than the county as a whole. This characteristic was true of the 2009 homeless count; more than half of the in-depth Healdsburg surveys were conducted in Spanish, compared to only one percent countywide.
- In general, only a few reported having a mental illness, physical or developmental disability, substance abuse problem or HIV/AIDS.
- More than half received income from employment, which was more than twice the level countywide. Very few received disability, public aid or retirement income.
- A lack of deposit for housing was identified by more than three-quarters as a reason for homelessness.
- Approximately one-quarter were considered chronically homeless (i.e., an individual with a disability who was alone and had been homeless more than one year or had been homeless four times in the last three years).

[20] Applied Survey Research, *2009 Sonoma County Homeless Census and Survey*.

Homeless Housing Needs

Housing needs of the homeless are wide-ranging, since this group includes persons who are homeless for many different reasons, as described above. Some need assistance with putting together the large sum of money needed to cover first and last rent payments and security deposits. The mentally and physically disabled need support services such as counseling, along with housing. Historically, many social service organizations and resources have been provided in Santa Rosa, approximately 15 miles to the south. But, according to service providers, additional services should be made available for homeless persons in Healdsburg.

Sonoma County's 10-Year Homeless Action Plan (2007)[21] identified local investment in assistance for the homeless and capacity building in Healdsburg as critical to enable local service providers to own and operate housing at the scale needed. The Plan calls for Healdsburg to add at least six emergency shelter beds.

Local Assistance for the Homeless

In 2002, the City of Healdsburg purchased and rehabilitated a deteriorated four-unit apartment building at 308 East Street in downtown Healdsburg to be used as a transitional housing facility for up to 16 very low-income persons, including children. Transitional housing bridges the gap between homelessness and permanent housing. It is typically a temporary shared living environment with the provision of supportive services that are designed to help persons transitioning from homelessness to maintain stability and to prevent repeated homelessness. Healdsburg RDA funding for the Victory Apartments project included $575,000 for property acquisition and renovation. The City leases the Victory Apartments building to NCCS to operate and maintain this facility.

NCCS also operates the Spare Room, an emergency shelter located in St. Paul's Episcopal Church. The facility has two sets of bunk beds to accommodate one to four people for one to three nights. In emergencies, two additional people can be accommodated. Staff reports that it is always full and that many guests stay at the shelter multiple times during a single month. Guests are accepted on a first-come, first-served basis, with women and children receiving first preference. NCCS provides sheets and toiletries. St. Paul's Church also makes a shower available to the general homeless population, providing approximately 100 showers per month. The City of Healdsburg has supported the shelter by awarding $5,726 to St. Paul's from the Community Benefit Grant Program in 2007.

Additionally, NCCS provides two two-bedroom apartments in Healdsburg as transitional housing, funded by NCCS and the Community Foundation of Sonoma County.

Besides providing information and referral services to those in need of shelter and other support, NCCS also runs a program to cover rent deposits and a limited number of rent payments to assist families and individuals in obtaining and retaining permanent housing.

[21] Sonoma County Continuum of Care Planning Group, *A Roof Over Every Head: Sonoma County's 10-Year Homeless Action Plan*, January 2007.

Volunteers staff this organization, which can serve approximately 10 families per month with rental assistance. At least 10 to 20 families are turned away each month.

Homeless Housing Opportunities

Few buildings in Healdsburg could be readily and economically converted into a conventional emergency shelter. Given high apartment occupancy rates and the fact that local motels are thriving, there may not be an opportunity to develop emergency housing in this manner. There are also no residential hotels, rooming houses or similar buildings that lend themselves to conversion to a traditional emergency shelter.

If a conventional emergency shelter were established in Healdsburg, it would probably be in a newly-constructed building. The shelter should be located close to public services and facilities, including transportation, and easily accessible from areas where homeless persons congregate.

4.3 Projected Housing Needs

4.3.1 ABAG Projections

The Association of Bay Area Governments (ABAG) is the official comprehensive planning agency for nine Northern California counties (Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, and Sonoma). Among other responsibilities, ABAG prepares bi-annual long-term forecasts of population, households and employment. *Projections 2007* is the most recent edition of ABAG's long-term forecast. The forecast recognizes emerging trends in markets, demographics and local policies that promote infill development and transit-oriented development, but is also designed to realistically assess growth in the region. ABAG expects the Bay Area's population to grow by about 2 million people between 2005 and 2035, which makes population growth and how it will shape the region in 2035 central to the forecast.

Projections 2007 has estimated population growth for Healdsburg between 2005 and 2015, a period that mostly closely aligns with the Housing Element's planning period of January 1, 2007 - June 30, 2014 (see Table 19). According to this estimate, the population within the Healdsburg Sphere of Influence (SOI), which represents the City's probable ultimate physical boundaries as well as Healdsburg's urban growth boundary, would increase from 12,200 to 13,400, an increase of 1,200 persons, or almost 10 percent. Based on the current average household size, this population increase would be the equivalent of 455 new housing units.

Table 19 Population Projections

Jurisdiction	2005	2010	2015	2020	2025	Change 2005 – 25
Healdsburg City Limits	11,600	12,300	12,700	12,900	13,200	13.79%
Sonoma County	478,800	509,100	522,300	535,200	548,900	14.64%
Healdsburg SOI	12,200	13,000	13,400	13,600	13,900	13.93%

Source: Association of Bay Area Governments, Projections 2007

ABAG anticipates that nearly two-thirds of the new jobs projected to be added within the Healdsburg Sphere of Influence between 2005 and 2015 will be in the service and retail sectors (see Table 20), which typically pay some of the lowest wages (see Housing Affordability), and the same will likely be true for jobs within the city itself. The increase in low-paying jobs will have an associated increase in the demand for affordable housing.

Table 20 Projected Employment by Major Sector

Sector	2005		2015	Change 2005-15
	Jobs	Share	Jobs	
Agriculture, Natural Resources	350	5.3%	370	+5.7%
Manufacturing, Wholesale, Transportation	1,430	21.7%	1,520	+6.3%
Retail	820	12.4%	920	+12.2%
Financial & Professional Services	810	12.3%	920	+13.6%
Health, Education, Entertainment, Accommodation & Food Services	2,250	34.1%	2,470	+9.8%
Other	930	14.1%	1,050	+12.9%
Total Jobs	**6,590**	100.0%	**7,250**	**+10.0%**
Employed Residents	**5,830**		**6,220**	**6.7%**
Jobs/Employed Residents	**1.13**		**1.17**	**3.5%**

Source: Association of Bay Area Governments, Projections 2007

4.3.2 Regional Housing Need Determination

Periodically, the State of California provides funds for HCD to determine the housing needs for each region. The housing needs process focuses attention on one of the most significant problems facing the state, region and community, and calls upon each local jurisdiction to address its fair share of responsibility. HCD determines the supply and affordability of housing that would, if met, make housing more accessible to existing and future residents. This determination is based on existing housing need, including the level of overcrowding, the potential loss of housing due to demolition, and projected regional growth rates (projected population, households and jobs).

HCD has recently determined the San Francisco Bay Area's 2007-2014 housing construction need to be 214,503 units. This number is a goal that is not meant to match, and often exceeds, anticipated and actual growth in housing.

In turn, ABAG is responsible for allocating the regional housing need goal among the cities and counties in the Bay Area. ABAG allocates to each jurisdiction its "fair share" of the existing and projected new construction need for the next housing element period, taking into account the following factors and their respective weights:

- Household growth (45%)
- Existing employment (22.5%)
- Employment growth (22.5%)
- Household growth near existing transit (5%)

- Employment growth near existing transit (5%)

The application of these factors and weights is intended to result in:

- Housing units directed to areas where local governments are planning housing growth,
- Housing and job growth being planned together and existing jobs-housing imbalances being addressed,
- Housing development directed to communities with transit infrastructure and
- Fewer housing units directed to outlying areas; thereby reducing development pressures on open space and agricultural lands.

The assigned need is broken down by income categories: very low, low, moderate and above moderate. It is this regional housing needs determination that communities must use when making adequate provision for their housing needs in their housing elements.

Table 21 shows the ABAG Regional Housing Needs Determination for new construction in Healdsburg during the planning period, adjusted to include its need for extremely low-income housing. State law requires that the City determine the subset of the very low-income regional need that constitutes the community's need for extremely low-income housing. Local governments can either identify their own methodology for calculating the need or presume that the need is 50 percent of the total very low-income need. (The City of Healdsburg has chosen the latter method to estimate its extremely low-income need.)

Table 21 Healdsburg Share of Regional Housing Need, 2007-20141

Income Group	No. of Units	Share of Total	Annual Average
Extremely Low (≤30% of AMI[2])	35	11%	5
Very Low (31 – 50% of AMI)	36	11%	5
Low (51 – 80% of AMI)	48	14%	6
Moderate (81 – 120% of AMI)	55	17%	7
Above Moderate (≥120% of AMI)	157	47%	21
Total	**331**	**100%**	**44**

Source: ABAG Regional Housing Needs Determination, May 2008

[1] Planning period includes 1/1/07 through 6/30/14

[2] Area median income established by HUD on an annual basis

The numbers adopted by ABAG are required to be included in each locality's general plan, along with a strategy aimed at meeting the housing need in each income category.

The City's share of the regional housing need includes that share of the housing need of persons at all income levels within the area significantly affected by the city's general plan (Government Code §65584(a)). Therefore, the City has provided for its share of the regional housing need in its sphere of influence, which includes areas of potential development outside of the current city limits.

4.3.3 Potential Loss of Affordable Units

As shown in Table 10, there are no assisted affordable housing developments in Healdsburg that are at risk of converting to market-rate rents due to the termination of a subsidy contract, mortgage pre-payment, or expiration of restrictions on use during the planning period and the following five years (i.e., 2019). This includes multi-family rental housing that receives governmental assistance under a federal program, state and city multi-family revenue bond programs and City redevelopment programs.

4.4 Housing Development Constraints

A number of factors may constrain the development of housing, particularly housing affordable to lower-income households. These factors can generally be divided into "governmental constraints" - those that are controlled by federal, state and local governments - and "nongovernmental constraints" - factors that are not generally created or cannot be affected by government controls.

An analysis of these factors can help in the development of programs that lessen their effect on the supply and cost of housing.

4.4.1 Governmental Constraints

Governmental regulations and exactions are designed to achieve desirable land use patterns, coordinate development with infrastructure expansion, finance capital improvements, equitably distribute the cost of public services, maintain the ambiance of existing neighborhoods, improve the urban environment, and preserve open space and unique ecosystems.

However, they should be evaluated to determine whether they are excessive and represent an unnecessary constraint on the availability or affordability of housing being built, or contribute to the loss of existing affordable housing.

- Healdsburg General Plan

In addition to the Housing Element, the Land Use Element of the General Plan directly affects the location and type of housing that may be developed. The Land Use Element's land use designations provide for a variety of housing types with the density parameters shown in Table 16. Minimum densities are required for most of the designations in order to maximize residential development on a limited supply of land and achieve a balance and variety of housing types.

The Land Use Element's Land Use Plan applies the designations identified in Table 22 to properties within the City's sphere of influence. The locations of the various designations are guided by the following Land Use Element goals and policies:

> *Goal C: To provide for a pattern and intensity of land use that reflects historical patterns and at the same time respects natural constraints and conditions.*

Policies:

1. *Only very low and low-intensity land uses shall be allowed in areas characterized by steep slopes, environmental hazards, scenic ridgelines and hillsides.*
2. *Intensive urban development shall be allowed only in areas that are relatively free of topographic, geologic, and environmental limitations.*
3. *The integrity of distinct and identifiable neighborhoods and districts should be preserved and strengthened.*

Table 22 Residential Uses Allowed by General Plan Land Use Designations

General Plan Designation	Unit Types Allowed	Density (units/acre)
Very Low Density Residential (VLR)	Single-family dwellings	up to 1
Low Density Residential (LR)	Single-family dwellings	1 – 3
Medium Density Residential (MR)	Single-family dwellings, small lot subdivisions	3 – 6
Medium High Density Residential (MHR)	Single-family dwellings, small lot subdivisions	6 – 10
High Density Residential (HR)	Single-family dwellings, multi-family dwellings, mobile home parks	10 – 16[1]
Downtown Residential (DR)	Single-family dwellings, multi-family dwellings, small lot subdivisions	3 – 8
Office/High Density Residential (O/HR)	Single-family dwellings, multi-family dwellings	10 – 16
Mixed Use (MU)	Single-family dwellings, multi-family dwellings, mobile home parks subordinate to commercial	10 – 16
Grove Street Mixed Use (GMU)	1 single-family dwelling or duplex per lot	up to 3.5
Service Commercial (SC)	Single-family dwellings, multi-family dwellings, mobile home parks subordinate to commercial	10 – 16
Downtown Commercial (DC)	Single-family dwellings, multi-family dwellings	10 – 16
Industrial (I)	Multi-family – including live/work facilities, single room occupancy units and efficiency units – for owners and/or employees of on-site uses	10 – 16

[1] Single room occupancy units and efficiency apartments of 500 square feet or less are counted as one-half unit for purposes of calculating density

In combination with the density bonuses required by state law, the density achieved by affordable housing projects could exceed 21 units per acre, which is considered to be fairly dense in Sonoma County. In planning past or recently-constructed affordable housing projects, these density limitations have not posed any constraint to such housing development, since none of the for- and non-profit organizations that have built affordable housing projects in the last 22 years have chosen to build at the maximum density then allowed by the City. The actual development densities of all affordable housing projects constructed in Healdsburg since 1986 are shown in Table 23. The average density of the nine affordable multi-family housing projects

constructed in Healdsburg since 1986, nearly all of which were targeted at very low- and low-income households, is 13.6 units per acre.

Table 23 Density of Affordable Housing Projects Constructed Since 1986

Project	No. units	Net acreage	Density (du/ac)	Target income group(s)
Fitch Mountain Terrace I	40	3.97	10.0	Very low, low
Foss Creek Village	40	3.01	13.2	Moderate
Fitch Mountain Terrace II	20	1.55	12.9	Very low, low
Riverfield Homes	19	1.02	18.0	Low
Harvest Grove Apartments	44	3.03	14.5	Very low, low
Parkland Senior Apartments	23	1.33	17.3	Very low, low
Quarry Ridge	20	1.93	10.3	Low
Oak Grove Apartments	81	5.86	13.8	Very low, low
Canyon Run Apartments	52	4.25	12.0	Very low, low
Total	**339**	**Average**	**13.6**	

However, there is a recent trend towards higher-density affordable housing projects in the city. The 64-unit Eden Family Housing apartment project, which is currently under construction, has a density of 20 units per acre, which included a 25 percent density bonus. The project was approved with no reduction in density or number of units from those initially requested by the non-profit developer. In fact, the City encouraged the developer to include as many units in the project as feasible. The City Council also approved an effective density of 44 units per acre for the Victory Studios project in 2006.

The Healdsburg Zoning Ordinance also allows the approval of a greater density bonus than mandated by state law. The City approved a 48 percent density bonus for the Chiquita Grove project in 2005 (a density of almost 24 units per acre) and a 54 percent density bonus for the Habitat for Humanity project in 2008.

This "track record" demonstrates that the maximum density provided by the Healdsburg General Plan for the six land use designations that allow high density residential – up to 16 units per acre - can readily accommodate and facilitate the construction of lower-income housing. On the other hand, allowing density higher than 16 units per acre as a matter of right has not been demonstrated to be necessary and could result in increased neighborhood or community opposition to new housing projects based on traffic, infrastructure limitations, or environmental concerns.

A limited number of market rate multi-family units have been built in Healdsburg. While funding assistance in terms of both provision of land and subsidies have facilitated affordable housing projects for lower-income housing, there have been no similar economic incentives to build market rate housing on higher-density residentially-zoned land. Despite adequate acreage for

higher-density residential development, both the absence of funding assistance or subsidies as well as market conditions favoring single-family housing development over multi-family housing development has resulted in the lack of any market rate multi-family housing development being built in recent years in any zones that allow higher densities.

In addition to providing adequate acreage for higher density residential development, the City further encouraged single-family housing for moderate-income households by creating a new residential land use designation (Medium High Density Residential) and a new zoning district with reduced lot size and setback requirements (R-1-3,500) in 1993. However, a very strong market demand, in conjunction with a limited supply of housing in the region as a whole during the economic boom of the late 1990's, resulted in the construction of relatively large homes affordable only to above moderate-income households on these relatively small lots in the only area zoned R-1-3,500 to date.

The Land Use Element also includes the following provisions to promote affordable housing:

- Residential uses are promoted in mixed-use projects by exempting the residential floor area from the calculation of a project's maximum floor area ratio.
- In the mixed-use and commercial land use designations, single room occupancy units and efficiency apartments of 500 square feet or less are counted as one-half unit for purposes of calculating density.
- Small lot subdivisions for affordable housing are allowed on property designated Medium Density, Medium High Density or Downtown Residential. The enacting provisions in the Healdsburg Zoning Ordinance allow lots as small as 2,000 square feet as well as alternative lot configurations, such as zero lot lines, angled Z lots, zipper lots, alternative-width lots, quad lots and motor court lots.

The Land Use Element requires the preparation of specific plans prior to development of areas outside of the city limits and within the Healdsburg Sphere of Influence. While this requirement lengthens the review and approval process for development, it is necessary to ensure that it occurs in a manner that is consistent with land use and design criteria, environmentally sensitive areas are conserved and adequate infrastructure is provided. Development Sub-Areas[22] B and K are the only areas remaining outside of the city limits and within the Healdsburg Sphere of Influence. Both areas have environmental characteristics that severely constrain development, including earthquake faults, steep slopes, landslides, oak woodlands, high wildland fire hazard zones, scenic ridgelines and riparian corridors. The maximum potential residential development for Sub-Area B is only 41 units (see Appendix C), which are not needed to help fulfill the City's projected housing needs (see Section 4.5.4). Furthermore, no residential development was projected for Sub-Area K (see Appendix C) because of Land Use Element Implementation Measure LU-3, which calls for an evaluation of potentially removing Sub-Area K from the Healdsburg Urban Growth Boundary (see following sub-section) because of significant and pervasive environmental constraints, limited development potential and the financial infeasibility of providing city services to the area.

[22] *The City has been divided into 11 development sub-areas, depicted in Figure C-1.*

- Urban Growth Boundary

The Healdsburg Urban Growth Boundary (UGB) was adopted by city voters in 1996 and is coterminous with the City's Sphere of Influence and Urban Service Area boundaries. It represents the allowed extent of urban uses in the Healdsburg Planning Area by the year 2016. The UGB promotes a compact urban form that ensures the efficient provision of services while preserving agricultural and open space outside of the boundary. The boundary can only be enlarged by a majority vote of city voters, although it can be reduced by the City Council.

Although the UGB contains properties outside of the current city limits that could be used for future housing development, neither annexation of these areas, nor expansion of the UGB, is needed to provide adequate sites for accommodating the City's regional housing needs during this Housing Element planning period (see Section 5.4). Furthermore, the provisions of the UGB allow the City to provide services and utilities outside the UGB in order to permit the construction of affordable housing.

- Growth Management Program

Measure M, a residential growth management program, sponsored by a private citizen and approved by city voters in 2000, limits the number of building permits for new residences to an average of 30 per year and no more than 90 in any three-year period. The adopted "Policies and Procedures" for this growth management program exempts housing units restricted for occupancy by very low-, low-, and moderate-income households (up to 120% of median income), secondary dwelling units, homeless shelters, elderly care facilities, nursing homes, sanitariums, and community care and health care facilities, including housing for the disabled. The Policies and Procedures are reviewed on an annual basis and adjusted to maximize the efficiency of the program's administration. This program can only be repealed or amended by a majority vote of city voters.

Beginning in 2001, the City of Healdsburg has administered this program by awarding 30 allocations per year to approved residential projects on a first-come, first-served basis. Applicants for allocations are charged a nominal processing fee of $150 per unit.

Ten units are set aside each year for projects with four or fewer units ("Category A"). to date, five is the most allocations that have been issued in a single year to Category A units. Unused Category A allocations are assigned to projects that involve five or more dwelling units ("Category B"). Recipients of Category B allocations can request that their allocations be phased over more than one year for a maximum of two additional years, limited to no more than a total of ten per year. Unused or lapsed allocations may be carried over an additional two years within any three-year period.

All 30 allocations were issued during six of the last eight years (24 were issued in 2003 and 29 in 2004). However, the actual number of building permits issued for these allocations has been less than 30 during all but one year, indicating that the growth management program did not represent a constraint on development during this time.

The growth management program may encourage affordable housing construction by constraining market rate housing that would otherwise occupy or compete for the same site.

Since the ordinance exempts affordable housing development from its provisions, it could allow a given site to be developed earlier than for a project required to obtain a growth management allocation.

However, it is likely that the growth management program constrains the development of market-rate multi-family housing. Unlike single-family housing development, which could be readily phased over a number of years as allocations are acquired, a multi-family housing project of more than 20 units would have to acquire allocations over a number of years before construction could commence.

While the program could affect the rate at which above moderate-income, market-rate housing units are developed, more than 210 growth management allocations would be available during this Housing Element planning period to accommodate the City's remaining regional housing need of 90 above moderate-income housing units (see Section 4.5).

- Healdsburg Zoning Ordinance

The Healdsburg Zoning Ordinance specifies the zoning districts in which residential development may occur and under what circumstances.

Zoning Districts

Residential uses are allowed in all zoning districts with the exception of the Public, Open Space and Medical Office Districts (Table 24). In some cases, approval of a conditional use permit is required to ensure compatibility between residential and non-residential uses. The Zoning Ordinance does not differentiate between farmworker housing and other types of housing in terms of permitted or conditionally-permitted uses.

Table 24 Residential Uses Allowed by Zoning District

Zoning District	Types of Residential Uses Allowed	Type of City Review Required
One-Family Dwelling (R-1)	Single-family dwellings (including mobile homes and manufactured housing). Zero lot line and attached housing types allowed in R-1-3500 District and small lot subdivisions.	Design review for large projects
	Secondary dwelling units	Building permit
Multi-Family Residential (RM)	Multi-family dwellings including apartments, townhomes, condominiums	Design review
	Detached and semi-detached single-family dwellings	Residential master plan
	Emergency transition shelters	Conditional use permit
Downtown Residential (DR)	Single-family dwellings, small lot subdivisions	Design review for large projects
	Secondary dwelling units	Building permit
	Multi-family dwellings	Conditional use permit
	Emergency transition shelters	Conditional use permit

Table 24, continued

Zoning District	Types of Residential Uses Allowed	Type of City Review Required
Residential Master Plan (RMP)	Single- and multi-family dwellings Secondary dwelling units	Residential master plan
Grove Street Mixed Use (GMU)	Same as R-1 District	Design review
Office and Multiple Family Residential (ORM)	Same as RM District	Design review for large projects
Downtown Comm. (CD) Service Commercial (CS) Mixed Use (MU)	Multi-family dwellings located on same site as commercial Single room occupancy units located on same site as commercial Emergency transition shelters	Design review Design review Conditional use permit
Industrial (I)	Multi-family dwellings, live-work facilities and single room occupancy units for employees of on-site industrial	Conditional use permit

The Zoning Ordinance seeks to preserve the city's existing housing stock by prohibiting short-term rentals as vacation homes. The City monitors advertisements for these homes and actively works to abate illegal rentals.

Residential Development Standards

The Zoning Ordinance prescribes minimum standards for residential lot sizes, yards, and open space per unit, and maximum standards for lot coverage and building height (Table 25). These standards are typical of many California communities and contribute to the protection of the public health, safety and welfare, and the maintenance of the city's quality of life.

Table 25 Development Standards for Residential Zoning Districts

Zoning District	Minimum Lot Requirements			Minimum Yards			Max. lot coverage	Max. height
	Area	Width	Depth	Front	Side	Rear		
R-1-3,500	3,500 sq. ft.	40 feet	None	10 feet, 20 feet garage	Street side: 10 feet	None	50 %	35 feet[1]
R-1-6,000	6,000 sq. ft.	50 feet	90 feet	20 feet	1 story: 5 feet 2 stories: 10 ft. 3 stories: 15 ft.	20 feet	35%	35 feet[1]
R-1-12,500	12,500 sq. ft.	70 feet	100 feet	25 feet		25 feet	30%	35 feet
R-1-20,000	20,000 sq. ft.	100 feet	120 feet	30 feet		30 feet	25%	35 feet
R-1-40,000	40,000 sq. ft.	150 feet	150 feet	30 feet		30 feet	25%	35 feet
RM	6,000 sq. ft., 3,000 sq. ft./ multi-f. unit	50 feet	90 feet	20 feet		20 feet	40%	40 feet
DR	6,000 sq. ft., 4,500 sq. ft./ multi-f. unit	50 feet, 55 feet corner lots	90 feet	20 feet		20 feet	40%	40 feet[1]

[1]25 feet for small lot subdivisions

Height limits have not been a constraint to the development of housing for any income groups, including affordable housing projects. The Oak Grove Apartments affordable housing project has three stories and the recently approved Healdsburg Family Housing (40-62 W. Grant) affordable apartment project will have three stories. Note that the Healdsburg Zoning Ordinance measures building height to half the distance between the ridge and eave on a gable roof, rather than to the highest point of the roof, thereby allowing additional height for sloped roofs.

The Zoning Ordinance also provides for Planned Development and Residential Master Plan overlay zoning districts in which the development standards may be specifically tailored to the project that is proposed. The recently approved Healdsburg Commons and Grove Street Village projects have substantially reduced setbacks and private open space, as well as significantly higher lot coverage than is typically allowed for residential development. Consistent with the General Plan, the Zoning Ordinance allows small lot subdivisions for affordable housing in the R-1 and DR Districts on lots as small as 2,000 square feet and no required setbacks. These provisions were recently utilized in approving a low-income Habitat for Humanity project that created two 3,500-square foot lots from a 7,000-square foot lot.

Parking Standards

The Zoning Ordinance prescribes minimum parking requirements for residential uses. For single-family houses and condominium (ownership) townhouses, two spaces are required per unit, one of which must be covered. For all other types of housing units, 1.5 parking spaces are required, including one covered space. Only one parking space per residential unit is required in the downtown parking exemption area. Shared use of parking facilities is allowed for mixed use-type projects, which can reduce the number of overall required parking spaces. For emergency transition centers, one space per employee on the largest shift is required, plus one space for each five persons of maximum occupant load.

The Planning Commission may waive the requirement for covered parking for senior and affordable housing developments if this will reduce development costs or improve the design of a project, and may reduce the amount of required parking for senior housing. These requirements have often been modified in the past. The Commission has waived the covered parking requirement for the Park Land Senior Apartments, Oak Grove Apartments, Canyon Run Apartments, Eden Family Housing Apartments (40-62 W. Grant Street) and Chiquita Grove affordable housing projects.

The Commission also reduced the required amount of parking for the Park Land and Chiquita Grove projects. In the case of the Eden Family Housing Apartments project, the developer voluntarily provided 1.78 parking spaces per unit, 18 more spaces than required by the Zoning Ordinance, while still offering rents affordable to extremely low- and very low-income households.

Modifications to the Zoning Ordinance's parking location standards have also been approved for affordable projects. For example, tandem parking arrangements were approved for the Quarry Ridge and Grant Street Village projects, and the Habitat for Humanity project was allowed to locate required parking within the front yard setback.

Design Standards

The review of project site plans, elevation drawings and landscaping plans is guided by the Healdsburg Design Review Manual, which promotes both variation in design and compatibility with the desirable qualities of existing development. There are also specific design standards for multi-family housing intended to encourage designs that maximize common space, blend with the surrounding community, limit views of parking facilities from public streets, provide architectural compatibility of accessory buildings, and direct on-site lighting on driveways and walkways and away from adjacent properties. All of these standards are compatible with the typical design of recently constructed affordable housing projects. The Design Review Manual also provides guidelines for residential development that occurs in the downtown or on hillsides in order to promote compatible design.

The Zoning Ordinance includes design standards for manufactured homes to ensure that they are compatible with conventionally built residential structures in the surrounding area. These standards do not exceed the limitations prescribed by state law and design review is not required for manufactured homes.

State Requirements

The City's compliance with various housing-related requirements of the State of California is discussed below.

Zoning Ordinance definitions The Healdsburg Zoning Ordinance defines the term "family" as follows:

> *Family*. An individual or two or more persons living together in a dwelling unit as a single housekeeping unit and in compliance with the provisions of the California Uniform Housing Code.

This definition does not restrict the number of individuals who may reside in a home; any limitation is defined by Housing Code Section 15.12.010, based on the floor space of habitable rooms, consistent with the state's Uniform Housing Code. The "family" definition also does not act as a constraint on the ability of unrelated persons to live together as a household.

Second units A "second unit" is an additional residential unit on the same lot as a primary single-family dwelling that provides complete, independent living facilities for one or more persons. Second units are usually considered to be housing that is affordable to lower-income households because there are no land costs associated with their development and they frequently rent for less than comparably-sized apartments. They may also occupy unused space in large homes, and by supplementing the income of the homeowner, allow the elderly to remain in their homes or make it possible for lower-income families to afford homes.

The State of California has determined that second units are a valuable form of housing in the state for extended family members, students, the elderly, in-home health care providers, the disabled, and others. State law provides that any regulations adopted by the City to regulate second units cannot be so arbitrary, excessive or burdensome so as to unreasonable restrict the ability of homeowners to create second units.

Second units are allowed by the Healdsburg Zoning Ordinance in all zoning districts that allow single-family residences. Lots that are 4,500 to 6,000 square feet may have a 640-square foot unit; those greater than 6,000 square feet may have units of up to 850 square feet. The City also facilitates the development of second units by waiving the covered parking requirement, by not requiring that the property owner live on-site and by allowing the units to be located in the required rear yard setback. Second units are also exempt from the City's growth management program and development impact fees are assessed at only half the rate as a conventional dwelling unit. Thirty-five second units were constructed in Healdsburg between 1999 and 2006, an indication that the City's regulations encourage, rather than constrain, their development.

Density bonuses and other affordable housing incentives State law requires the City to adopt an ordinance that specifies the method of providing density bonuses and other incentives for the development of affordable and senior housing units. Zoning Ordinance Section 18125.1 provides the procedures and standards for their review and approval. In addition to those concessions and incentives required by state law, Section 18125.2 also allows the City to approve the following incentives:

- The City may grant an additional density bonus when an applicant proposes a project in which 100% of the remaining units not restricted to lower-income households will be affordable to moderate-income households.
- The City Council or Redevelopment Agency may grant financial incentives or concessions that result in identifiable cost reductions needed to make a qualifying project economically feasible, such as City subsidies for off-site improvements or land, City subsidies for development fees, and/or City sponsorship of mortgage bond financing.

Emergency shelters and transitional housing The Healdsburg Zoning Ordinance currently allows "emergency transition shelters" in the RM, DR, CD and CS Districts through a conditional use permit (CUP). These shelters are defined as, "A lodging facility sponsored and/or administered by a governmental or non-profit social services organization for the purpose of providing temporary housing for homeless families or individuals, battered women or children, or for similar social service or charitable purposes." As described in Section 4.2.6, the City supports the operation of a homeless shelter at St. Paul's and four transitional apartments, and is constructing seven additional transitional apartments (Victory Studios) that will be occupied in 2009. The Eden Housing apartment project currently under construction will also include five transitional housing units.

However, according to state law, the City must have a zone in place to permit at least one year-round emergency (i.e., homeless) shelter without a CUP or any discretionary permit requirements.

To comply with this requirement, as well as others related to transitional and supportive housing, the Healdsburg Zoning Ordinance must be amended within one year of the Housing Element's adoption to:

- Allow emergency shelters in at least one zoning district as a permitted use, subject to the same development standards that would normally be applied (e.g., minimum setbacks, maximum height and lot coverage).
- Allow transitional housing in all zoning districts that allow housing.
- Provide objective standards for emergency shelters, such as the proximity to other emergency shelters, the maximum number of beds or persons permitted to be served nightly by the facility, the maximum length of stay and the provision of on-site management and security.

Table 26 identifies sites where homeless shelters would potentially be allowed as a permitted use. All of the sites have water and sewer services available as well as public transit. The City of Healdsburg is in negotiations with the State for the purchase or long-term lease of a former armory site.

Table 26 Potential Homeless Shelter Sites

Address	*Site area*	*Zoning District*	*Existing Use*	*Ownership*
401 Grove	*0.60 ac*	*Public*	*Vacant*	*City of Healdsburg*
320 & 328 East	*0.49 ac*	*Downtown Residential*	*Vacant / vacant SFD*	*City of Healdsburg*
155 Dry Creek	*3.53 ac*	*Mixed Use*	*Vacant*	*City of Healdsburg*
1201 Grove	*1.36 ac*	*Mixed Use*	*Vacant*	*City of Healdsburg*
900 Powell	*2.00 ac*	*Public*	*Vacant armory*	*State of California*

Special needs State law provides that the City must treat proposals for supportive housing for target populations (such as those with mental disabilities, substance abuse and chronic health conditions) in the same manner as other residential uses allowed in the same zone. The Healdsburg Zoning Ordinance needs to be amended to add a definition for "residential care," which would include supportive housing, and add this type of housing as a permitted or conditionally-permitted use (depending on the number of residents) in the appropriate zones.

The City's building codes incorporate the latest federal requirements for disabled-accessible housing. There have been no code amendments that would diminish the City's ability to accommodate persons with disabilities.

City Ordinance No. 1018 allows the Planning & Building Director to grant deviations and modifications to residential development standards to accommodate household members with handicapped needs through a minor use permit. This authority has been used in the past to construct access ramps within required setbacks. Replacing this requirement with a ministerial review and approval would simplify this process and could reduce the associated cost.

Article 34 Authority Article 34 of the California Constitution requires that when the city develops, constructs or acquires a rental housing project targeted towards lower-income households, its qualified electors must approve the project by a majority. This requirement can pose a constraint to the production of affordable housing, since the process to seek ballot approval for affordable housing projects can be costly and time consuming, with no guarantee of success.

The provisions of Article 34 allow local jurisdictions to seek voter approval for "general authority" to develop low-income housing without identifying specific projects or sites. If the electorate approves general parameters for certain types of affordable housing development, the local jurisdiction will be able to move more quickly in response to housing opportunities that fall within those parameters.

There has been no vote taken for such action to date in the City of Healdsburg. However, by partnering with non-profit and for-profit developers that have used federal and state funding to construct hundreds of affordable housing units, the lack of Article 34 authority has not proved to be a hindrance to the City.

- Development Review and Approval Procedures

Developers must negotiate several steps to secure all necessary approvals to build housing on a given parcel of land. From the standpoint of the City, this process is necessary to ensure that new development adequately complies with local regulations that are meant to ensure the health, safety and welfare of the entire community. From the developer's standpoint, this process can complicate and lengthen the development process, increasing the difficulty and cost to develop new housing. The following is a brief description of the process to obtain entitlements to construct housing on vacant land in Healdsburg.

Subdivision Approval

The subdivision approval process in Healdsburg includes the filing of an application, payment of a deposit for application processing, staff review for completeness and public hearings before the Planning Commission and City Council. The Planning Commission action is advisory to the City Council, which has final authority over subdivisions. Depending on the size of the subdivision and specific site development issues, varying levels of environmental review are also required. Small subdivisions are generally exempt from the CEQA process under an infill development exemption; larger subdivisions typically require an initial study and negative declaration or environmental impact report. For projects processed with a mitigated negative declaration, a typical small lot subdivision takes about four months' processing time from complete application to approval.

Design Review for Residential Units and Projects

Article 26 of the Zoning Ordinance includes requirements and procedures for the design review of new development. Design review is not required for residential projects involving only one unit, with the exception of single-family dwellings in certain specific plan areas as noted below. The Planning & Building Department Director is empowered to grant minor design review approval for the following types of residential development applications:

- Single-family dwellings in Area A and the Grove Street Neighborhood Plan area
- Minor changes to the exterior of existing buildings that require a use permit.
- Changes to site design not involving major structural or site changes or use.

The Planning Commission conducts major design review for the following types of residential development applications:

- Residential projects with two or more units that involve the development of vacant land with site and building improvements or involving major changes or additions to a previously-developed site.
- Residential projects involving a change of use that requires substantial changes to the site and proposals for exterior building modifications.
- Projects subject to development approval by the Planning Commission, such as subdivisions, use permits and projects requiring the approval of variance.

Potential applicants are encouraged to submit their preliminary plans for review by city department representatives and/or the Planning Commission. For a nominal fee ($200), the applicants obtain feedback that can be readily incorporated into the final project design.

The design review process often results in an improved design that benefits both future project residents as well as neighbors. The Planning Commission includes two architects who facilitate the non-design professional members' understanding of project designs.

The Commission must make several general findings in approving a design review application:

- *The proposed development or use is consistent with all applicable policies and requirements of the General Plan and Zoning Ordinance.*
- *The proposed design of the development or use, and all appurtenant structures, is consistent with the policies set forth in the City of Healdsburg Design Review Manual.*
- *The proposed development or use is consistent with the purposes of the zoning district in which it is located.*
- *The proposed development or use is consistent with all other conditions imposed by the Planning Commission or City Council with respect to any matter related to the purpose of design review.*

The design review approval process is typically completed within four to six weeks, which is considered very short when compared with other Sonoma County jurisdictions. For example, the Planning Commission reviewed the preliminary plans and approved the final design for a 64-unit, very low-income rental project (Eden Housing apartments) within the space of eight weeks.

Conditional Use Permits

Multi-family housing projects in the DR District and transitional emergency shelters are subject to the approval of a conditional use permit by the Planning Commission. Article 27 in the Zoning Ordinance prescribes the procedures for obtaining a conditional use permit. Briefly, these procedures include submittal of a complete application followed by a public hearing before the Planning Commission. Upon receipt of a complete application, action is generally taken on major use permits in four to six weeks.

The Commission must make a few broad findings in approving a conditional use permit application:

- *The proposed location and operation of the conditional use is in accord with the Healdsburg General Plan, objectives of the Zoning Ordinance and the purposes of the district in which the site is located.*
- *The proposed location of the conditional use and the conditions under which it would be operated or maintained will not be detrimental to the public health, safety or welfare or materially injurious to properties or improvements in the vicinity.*
- *The proposed conditional use will comply with each of the applicable provisions of the Zoning Ordinance.*

In order to facilitate the development of multi-family housing projects in the DRD District, the Zoning Ordinance should be amended to delete the conditional use permit requirement. Any potential compatibility issues can be addressed through the design review process.

- Building Permits

Upon submittal of a complete set of plans, a typical single-family plan check is conducted and a building permit is issued within approximately two to four weeks, and about four to six weeks for a typical multi-family plan check. The City contracts with a consultant for more complex plan checks in order to expedite their review; however, such plan checks are done on a time and materials basis to minimize the cost. As an example, the building plan check fee for the Eden Family Housing Apartments project equaled only $609 per unit.

In summary, Healdsburg's processing and permit procedures are reasonable and more expeditious compared to those in many other California communities. The permit process only increases in complexity and duration when the circumstances of individual projects warrant extra consideration on the part of staff and officials. This is especially true of the environmental review component of the process, yet the City of Healdsburg has little flexibility to change this, since the California Environmental Quality Act specifies procedures that local jurisdictions must observe in reviewing the impacts of development projects.

- Adopted Codes

The City has adopted current editions of the Uniform Building Code (UBC), Uniform Housing Code, National Electrical Code, Uniform Plumbing Code, Uniform Mechanical Code and the Uniform Fire Code.

The City has amended these codes in a few instances when necessary to protect the health, safety, and welfare of its residents. For example, the Healdsburg Building Code includes additional requirements for concrete slab floors to mitigate local expansive soil conditions. Lighted address numbers are required to improve identification of homes by emergency personnel. Smoke detectors are required in single-family homes and automatic fire alarm systems must be provided in multi-family complexes, apartment complexes, and condominium complexes. Automatic fire suppression systems must be installed in new residential structures and substantially-remodeled dwelling units. While these measures result in higher initial housing costs, they are offset over the long run by savings on homeowners insurance and property damage.

Green Building Program

The Green Building Program recently adopted by the City includes amendments to the UBC. The program applies to certain types of non-residential development as well as the following types of residential development:

- Construction of single-family, secondary and multi-family dwellings.
- Additions to dwellings of 500 square feet or more of conditioned space.
- Construction of and additions to residential accessory structures of 500 square feet or more of conditioned space.
- Conversion of 500 square feet or more of unconditioned space in an existing dwelling to conditioned space.

In adopting these UBC amendments, the City Council found that the following local conditions exist to justify their adoption and that the requirements of the Green Building Program are considered necessary and reasonable modifications and do not lessen, diminish or change the standards set forth within the California Building Standards Code except as authorized by law.

- *Many scientists believe that a recent warming of the Earth's lower atmosphere, as evidenced by the global mean temperature anomaly trend, is believed to be the result of an "enhanced greenhouse effect" mainly due to human-produced, increased concentrations of greenhouse gases in the atmosphere and changes in the use of land due to deforestation. Some of the main sources of greenhouse gases due to human activity are the burning of fossil fuels and deforestation, leading to higher carbon dioxide concentrations.*

  The State has enacted the California Global Warming Solutions Act of 2006. This legislation required, among other actions, that the State Air Resources Board adopt regulations which will reduce statewide greenhouse gas emissions to 1990 levels by the year 2020. The Healdsburg City Council has established climate protection targets to reduce greenhouse gas emissions produced community wide by 25 percent below 1990 levels by 2015 and to reduce greenhouse gas emissions produced by internal municipal operations by 20 percent from 2000 levels by 2010.

  Reducing fossil fuel consumption by utilizing green practices such as sustainable manufacturing processes, higher equipment and mechanical system efficiencies, and use of renewable energy will help to curb greenhouse gas emissions within the City of Healdsburg. In addition, the use of recycled content, reclaimed materials, and rapidly renewable wood products and the reuse of construction waste will help reduce deforestation. Construction and demolition waste management measures reduce waste generation, protect the local environment from pollutants, and reduce the emission of gases that contribute to the greenhouse effect that affects the City of Healdsburg.

- *The Healdsburg area is prone to extended periods of drought, hot weather and mandatory summer water conservation measures due to limits on water supply. Many scientists believe that the greenhouse effect, as caused by greenhouse gas emissions, will cause an increased likelihood of drought or significant rain events that may reduce local water supplies or cause local flooding. Reducing water usage through water-efficient landscaping, irrigation measures*

and building practices will help reduce the impact to the city's water supplies. Implementation of energy-efficient measures for solar water heating, pipe insulation, and heat traps in buildings will reduce the heat loss due to hot water storage and distribution as well as the waste of potable water while waiting for hot water to reach the point of use.

The City Council also recognized that green building design, construction and operational techniques have become increasingly widespread and are easily applied throughout the systems and features of a building during its construction. The program allows significant flexibility to property owners and design professionals in the manner in which the program's requirements are achieved. The initial costs for many, if not most, green building measures will typically be offset over time through reduced operational costs and/or through reduced health-related costs to the building's occupants. Various alternatives to the components of the proposed Green Building Program were determined to be inappropriate for Healdsburg because of significant cost to applicants, such as requiring formal certification under the applicable green rating systems.

- Code Enforcement

Code enforcement is generally undertaken in response to a complaint filed with the City. This effort serves to maintain the conditions of the city's housing stock and does not constrain the production or improvement of housing in the city. The Healdsburg Municipal Code also establishes standards for the maintenance of properties regarding the accumulation of trash and debris, overgrown vegetation, and abandoned vehicles and equipment in order to protect property values.

- On- and Off-Site Improvements

For minor residential streets, the Circulation Plan of the Healdsburg General Plan calls for a 50-foot wide section that provides two travel lanes with parking lanes, curbs and gutters, sidewalks and utility easements on either side. This design is intended to adequately accommodate traffic, parking, pedestrians and drainage. These standards may be modified if warranted by individual circumstances, and therefore are not a constraint on development.

Additional requirements in the city's development standards include the planting of street trees and, in some cases, the installation of utility lines underground. These amenities greatly enhance the appearance of residential neighborhoods, thereby adding to the value of their homes.

Healdsburg Redevelopment Agency funds are routinely used to assist affordable housing projects with:

- Construction of on- and off-site public improvements (including, but not limited to public utility extensions, public street improvements, traffic mitigation measures, storm drainage and public landscaping)
- Construction of on-site improvements (including, but not limited to site preparation, grading, private utility extension, private street improvements and parking areas)
- Subsidies for impact, application processing and building permit fees.

Examples of funds that have been contributed by the City for these purposes include $147,350 to the Fitch Mountain Terrace II project for the construction of on- and off-site improvements and $200,000 to the Chiquita Grove project for the construction of a public street.

The City also routinely reimburses residential developers who construct off-site improvements, using development impact fees that have been collected from other development (see discussion in following section), or by establishing a reimbursement fund that subsequent developers in the area pay into.

- Development Fees

The City assesses capacity charges and impact fees on residential development projects to pay for the system capacities and services required to serve the development. While these fees may affect housing prices, the only alternatives would be their payment by existing Healdsburg taxpayers or no further residential development, either of which is infeasible.

In accordance with California Government Code Section 66001(a) the City does all of the following for any fee that is established, imposed or increased:

- Identify the purpose of the fee
- Identify the use to which the fee is to be put
- Determine how there is a reasonable relationship between the fee's use and the type of development project on which the fee is imposed
- Determine how there is a reasonable relationship between the need for the public facility and the type of development project on which the fee is imposed
- Determine that there is a "reasonable relationship" between the specific amount of the fee imposed as a condition of approval on a particular development project, and the cost of the public facility attributable to that project.

Typical development fees for residential units are summarized in Table 27.

A comparison of the development impact fees charged by Healdsburg with other Sonoma County jurisdictions is shown in Table 28. Healdsburg's impact fees total $40,858 for a single-family dwelling (four bedrooms, two baths, 2,000 square feet), a total that is nearly $6,000 lower than the Sonoma County average.

Development impact fees for multi-family projects are the same as those shown in Table 26, with the exception of the storm drain system fee, which is $1.32 per square foot of hard surface. The estimated development impact fees for the recently-constructed Eden Housing apartment project, (which was not subject to the in-lieu affordable housing fee), were $34,375 per unit, representing approximately 8.7 percent of a project unit's total development cost. These fees are representative of what would be paid for both affordable and market-rate multi-family projects.

Table 27 Development Fees per Unit

Type of Fee	Fee
Infrastructure Capacity Charges	
Water System	$7,213
Sewer System	$14,242
Streets & Traffic Controls	$2,991
Park System	$2,057
Storm Drain System	$3,222
Fire System Development Impact	$193
In-Lieu Affordable Housing Fee	$10,940
Total	**$40,858**

Source: Healdsburg Public Works Dept., Dec. 2007

[1] Assumes a 4 bedroom, 2 bath single-family detached home of 2,000 square feet on a 6,000-square foot lot valued at $650,000.

- Utility Charges

In addition to a mortgage or rent payment, housing costs usually include payment for utilities. The City discounts its monthly electric, water and sewer utility charges to almost 200 lower-income households and tenants of affordable residential projects by 20 percent. Monthly storm drainage maintenance fee are also discounted by 20 percent for these households.

- City Housing Programs

The City's inclusionary housing requirement is a critical component of the City's housing program and an active means of providing affordable units to households typically shut out of the housing market. Developers of residential projects with seven or more units are required to rent or sell 15 percent of the units at prices or rents affordable to lower- and moderate-income households. The inclusionary program is also intended to promote the economic integration of lower- and moderate-income households in neighborhoods and the dispersion of such units throughout the city.

The inclusionary requirement is also intended to offset the negative effects of new market-rate housing on the provision of non-market rate housing. The construction of above-moderate income housing depletes the amount of available residential land, while contributing to rising land prices because of a greater scarcity of developable sites. Market-rate housing development also exacerbates the affordable housing problem by creating greater needs for goods and services typically provided by low-income employees.

Table 28 Comparison of Residential Development Impact Fees[1] - Sonoma County Jurisdictions

Jurisdiction	Water	Sewer	Traffic	Parks	Drainage	Misc.	Affordable Housing	Total Fees	Rank
Sebastopol	$4,690	$8,842	$4,040	$6,500	$0	$1,070	$44,480	$69,622	1
Windsor	$3,140	$15,380	$7,795	$9,816	$2,528	$1,759	$27,000	$67,418	2
Cotati	$8,306	$14,529	$250	$12,106	$0	$5,510	$23,400	$64,101	3
Rohnert Park	$8,858	$12,202	$14,000			$3,250	$9,022[2]	$47,332	4
Cloverdale	$2,948	$2,506	$2,084	$1,820	$168	$3,546	$32,239	$45,311	5
Healdsburg	**$7,213**	**$14,242**	**$2,991**	**$2,057**	**$3,222**	**$193[4]**	**$10,940**	**$40,858**	**6**
Santa Rosa	$5,721	$9,560	$4,728	$8,736	included in traffic fee		$11,278	$40,023	7
Sonoma County[3]	$7,000	$6,060	$8,691	$2,830	$0	$0	$11,360	$35,940	8
Petaluma	$1,700	$3,770	$5,424	$7,113	$1,500	$2,249	$9,022	$30,778	9
Sonoma	$5,900	$10,119				$1,580	$9,022[2]	$26,621	10
							Average	**$46,800**	

Source: Healdsburg Public Works Department, December 2007

[1] Assumes a 4 bedroom, 2 bath single-family detached home of 2,000 square feet on a 6,000-square foot lot valued at $650,000. Does not include fees resulting from special assessment districts for fire, sewer, utilities, traffic, etc.

[2] The Cities of Rohnert Park and Sonoma do not have an Affordable Housing in-lieu fee for fractional units. In order to compensate for this inconsistency, the least expensive Affordable Housing fee for the various jurisdictions (i.e., $9,022) was used.

[3] Sonoma County development impact fees estimated by averaging the lowest and highest cost districts.

[4] Fire impact fee

As an alternative to providing the inclusionary units on the project site, the developer may construct them elsewhere at the discretion of the City Council. Additionally, if the Planning Commission or City Council finds that the construction of the units is not feasible or appropriate, the developer may be allowed to pay in-lieu fees, dedicate land or other equivalent methods.

There has been extensive debate over the question of who bears the cost of an inclusionary requirement. Depending on the relative strength of the housing market, the costs may be incurred by:

- Land owners, who may receive a lower price for their land if developers are expecting a lower profit margin from the inclusionary requirement
- Developers, who may have to accept lower profits, if housing prices cannot be raised.
- The purchasers of market-rate units, who may have to pay higher housing prices if the local and regional housing supply is limited and prices are at least as high in areas outside the city.

In a strong housing market, it is possible that all three groups will share the costs of the inclusionary housing requirement.

This requirement does not act to divert residential development to other Sonoma County jurisdictions, since inclusionary requirements have been adopted by all of its cities as well as the County of Sonoma.

By limiting the inclusionary requirement to 15 percent of a project's units and providing alternative means of compliance, such as land dedication, in-lieu fees and other equivalent means, the program is not seen as an undue or onerous constraint on the provision of market-rate housing. Additionally, the City has adjusted the program over time to facilitate its use, maximize its effectiveness and respond to changing market conditions. For example, the period of price restriction for an affordable ownership unit was reduced recently from 45 years to 20 years. An exception to the requirement that purchasers of inclusionary units be first-time homebuyers was recently added for homeowners who owned a home during the previous three years but have been displaced and have or are expecting one or more minor children. The City has also helped the potential purchasers of inclusionary units secure affordable financing, such as through the CalHFA program.

Furthermore, fulfillment of the inclusionary housing requirements usually qualified a project for a density bonus, which helps to offset the subsidy needed for the affordable prices or rents.

4.4.2 Nongovernmental Constraints

Nongovernmental constraints are those that are not created by local governments, but may be lessened through their actions.

- Construction Costs

Housing prices are influenced partly by the types of construction materials used. Homes in Healdsburg are generally of wood frame construction and finished with stucco or wood siding. This type of construction is the least expensive conventional method (brick, stone and concrete block are more costly). Composition shingle and built-up roofs, which are found on a large

share of the community's homes, are also the least expensive, followed by wood shingle, wood shake, concrete tile, metal tile and clay tile.

The cost of lumber and wood products accounts for one-third of the costs of materials used to build a home. A typical 2,000-square foot home uses nearly 16,000 board feet of lumber and 6,000 square feet of structural panels, such as plywood[23], and every $1 increase in the average wholesale price of 1,000 board feet of lumber increases the cost of a typical home about $20[24]. Due to the recent downturn in the housing construction industry, the average price for framing lumber is at its lowest level since 1995, and structural panel composite prices are the lowest since 2002[25].

At the beginning of the decade, the booming housing construction trend led to tremendous shortages in insulation, drywall, cement and concrete. The downturn in housing construction has helped to alleviate the high prices for these materials and the constraints on their availability.

Labor costs are the single biggest expense after land. Up until recently, in addition to a shortage of building materials, builders had been unable to fill the high demand for housing in Sonoma County due to a shortage of skilled labor. The area lost many construction workers during the recession of the early 1990s.

Over the long term, direct construction costs (including materials and labor) have decreased as a proportion of total costs due to a dramatic drop in the number of person-hours required to construct a unit, and the use of less-skilled (and therefore, lower-paid) workers because of a greater use of pre-fabricated materials.

The City can minimize construction costs by not requiring more costly kinds of building materials on residences, such as clay tile roofs. However, there is little within the city's power to affect the availability and cost of skilled labor.

- Design and Location Preferences

Housing costs are affected in part by a residence's design, including the number and type of amenities, location and size.

There has been a dramatic change over the last 20 to 30 years in the size of housing units and the amenities provided to them, which has resulted in higher prices for housing. According to the U.S. Census,[26] in 2007:

- The average single-family house completed had 2,521 square feet, 801 more square feet than in 1977.
- 38% of new single-family homes completed had four or more bedrooms, almost double the rate of 20 years ago, despite the drop in average household size. The larger number of rooms was partly due to the rise of specialty rooms such as home offices, sunrooms, media rooms and exercise rooms.

[23] National Association of Home Builders

[24] Ibid.

[25] RandomLengths.com, accessed October 13, 2008.

[26] U.S. Census, *Highlights of Annual 2007 Characteristics of New Housing*.

- In single-family homes with four or more bedrooms, over half (57%) had three bathrooms or more.
- 27% of new single-family homes sold had three or more bathrooms, nearly triple the rate from 1987.
- 90% of all single-family homes completed had air conditioning, compared to 36% in 1971.
- Nearly 20% of new single-family homes sold had at least a three or more car garage.
- Across the country, half of all single-family homes sold had at least one fireplace, compared to 36% in 1971.

In a recent nationwide survey[27], potential homebuyers considered "green" building features more important than luxury amenities. Almost half of those surveyed said features such as solar panels and energy-saving appliances were "important," compared to just 31 percent who rated luxury amenities important.

Proximity to work and shopping was rated as a major factor by survey respondents in choosing a neighborhood. While potential buyers were willing to cut personal spending and sacrifice comfort to purchase a home, few respondents were willing to take on a longer travel time or give up proximity to public transportation.

- Land Costs

Approximately 25 percent of housing costs are attributable to land costs in most real estate markets. A major component of this cost is land speculation. Land costs are also affected by such factors as zoning density, the availability of infrastructure, the existence or absence of environmental constraints and the relative amount of similar land available for development.

Countering higher construction costs is a trend towards smaller residential lots. The average lot size for new homes nationwide has dropped nearly 5,000 square feet over the last 20 years.

The cost of land is a major factor in the cost of housing. The City has facilitated the development of affordable housing in the past through the donation or sale of project sites to non-profit developers, and it is likely that similar assistance in the future could prove useful to the development of such housing. In 2003, the City of Healdsburg purchased 3.2 acres of property at a cost of $1.554 million for the 64-unit Eden Family Housing project, which equates to more than $24,000 per unit in land costs for high-density rental housing.

Over the past four years, individual vacant lots appropriate for the development of a single-family home sold for an average of $1.03 million per acre. Prices for vacant single lots ranged from $235,000 to $787,500 (for a one-quarter acre lot three blocks from the Plaza). The average cost per acre for lots currently on the market is significantly lower (i.e., by more than $233,000) than in previous years and the average price for a single lot has also dropped by more than $128,000[28].

The land cost per developed unit can be lowered through the development of high-density housing.

[27] Harris Interactive poll commissioned by Move, Inc., operator of Realtor.com

[28] MLS CMA Report, Listings as of 11/3/08.

- Financing Costs

Rising foreclosures are pushing more homes onto the market at the same time tighter lending standards squeeze out potential buyers.

Home Financing

Mortgage credit is the most difficult to obtain for first-time buyers and tighter lending standards also hinders the ability of households at the low and middle tiers to move up.

The average rate on a 30-year fixed mortgage had dropped a full percentage point, to 5.04 percent, at the end of February 2009. Besides lowering monthly interest payments for new buyers, low interest rates allow existing homeowners to refinance their homes, thereby lowering monthly housing costs and perhaps preserving their ownership status.

However, mortgages for homes above the half-million-dollar mark are more difficult to obtain, even for well-qualified buyers. The use of so-called "jumbo" mortgages, defined as over $417,000, has plummeted since the credit crunch hit in August 2007, making jumbo loans more expensive and harder to obtain. In August 2008, mortgages over $417,000 made up 32.3 percent of all home purchase loans, down from 58.6 percent a year before[29]. The interest rate for a 30-year, fixed-rate jumbo mortgage, which would be required for many home purchases in Healdsburg, stood at 6.89 percent at the end of February 2009, nearly two points higher than a conventional loan.

During the 1999-2006 planning period, the City of Healdsburg assisted first-time homebuyers in the Palomino Court project as well as school, hospital and city employees by providing low-interest second mortgages. The interest charge is due upon resale, or is completely forgiven if the purchasers remain in the homes longer than 10 years.

Many major financial institutions and mortgage lenders that finance housing have offices in Healdsburg. Additional financial institutions and mortgage lenders that lend in Healdsburg have offices located in nearby Santa Rosa or Petaluma. The large number of active real estate lenders in Healdsburg indicates a strong real estate market. The Bank of America has listed the Healdsburg area as one of the most attractive places in the world in which to live, and tabbed the area as a prime real estate investment opportunity. Consequently, a relatively large number of financial institutions invest in local real estate. Homes sales are occurring in all parts of the community, and there is no evidence of mortgage-deficient areas in the community for new construction or rehabilitation loans.

The ability to accumulate a down payment remains a formidable barrier to many potential homebuyers. Low-income households find it difficult to make the transition from rental to ownership units because they cannot accumulate a down payment while renting. While the recent trend of requiring minimal or no down payments aided these households in purchasing a home, this practice is likely to end, given the overwhelming number of foreclosures.

Similarly, very low-income households may be unable to obtain rental housing because they cannot accrue the necessary security deposits and first and last months' rents.

[29] DataQuick Information Systems, www.DQNews.com, *Bay Area Home Sales Near Bottom Again, Median Price Plunges*, September 18, 2008.

Construction Financing

Overall, construction financing usually represents a small contribution to total housing costs (for example they represent only 4.5% of the total unit cost for the Eden Family Housing Apartments project). Financing costs for construction are affected partly by how early in the development process loans must be taken out and how long the loans must be carried. Project delays can increase total interest payments, as well as create greater financial risk for a project.

Construction financing for higher-density in-fill projects is generally harder to obtain than for conventional single-family construction. According to the National Association of Home Builders, builder confidence in the rental apartment market dipped in the second quarter of 2008 amid concerns of a slowing overall economy and continuing trouble in other sectors of the housing market. On the supply side, builders reported fewer multi-family starts than during the previous year's second quarter. Even in markets where demand for rental units is relatively strong, problems in the financial markets are making it difficult for multifamily developers to get the capital they need for new apartment construction30.

- Community Acceptance of Residential Development

Public resistance to residential development proposals, especially affordable, multi-family and/or in-fill projects, can result in lengthy and expensive review processes as well as the loss of potential units. In general, Healdsburg residents are accepting of development if such concerns as privacy impacts and additional traffic are addressed. None of the residential projects approved during the previous or current planning periods lost units because of public opposition. During the review and approval process for the Eden Family Housing project – consisting of 64 very low-income apartments on an in-fill site – the developer and city staff met early in the process with neighbors to identify and address their concerns. This process resulted in the unanimous approval of the project by the Planning Commission, with no loss of units or an appeal of their decision to the City Council.

4.5 Housing Opportunities and Resources

The City of Healdsburg is fortunate to have many resources that will be used to accomplish its housing goals:

- A City Council that strongly supports affordable housing and community development activities to assist persons of low and moderate incomes.
- A large established redevelopment area that generates revenues available to fund the development and preservation of affordable housing (see Figure 10).
- Few residents who present the view of "Not in My Backyard!"
- A spirit of collaboration and cooperation among the governmental jurisdictions and non-profit agencies.
- Multiple and diverse funding sources with which to address problems.

The City's housing accomplishments have been possible because of the Council's far-sighted decision to develop collaborative partnerships with professional, experienced, highly-skilled

[30] National Association of Home Builders (www.nahb.org), *Rental Apartments Conditions Weaken in Second Quarter*, August 18, 2008.

non-profit housing developers and service providers. Through partnerships with Healdsburg Shared Ministries, Burbank Housing Development Corporation and Eden Housing, 279 affordable and special needs housing units have been constructed or are under construction.

4.5.1 Revenue Sources

The City's Housing Program utilizes the following primary sources of revenue to fund its projects and programs. Affordable and special needs projects and programs are almost always made feasible by utilizing funding in a combination of ways.

- Local Funding

Healdsburg In-Lieu Housing Fund

The Healdsburg In-Lieu Housing Fund is generated by payments from the developers of small residential projects in-lieu of providing inclusionary affordable units and is used to subsidize affordable housing. The Fund's balance stands at approximately $120,000.

Healdsburg Redevelopment Agency Low/Moderate Income Housing Fund

State law authorizes local governments to establish one or more redevelopment project areas to eliminate blight, and to expand and improve the supply of low and moderate-income housing. Redevelopment agencies may use the power of eminent domain to assemble and acquire sites for housing, both within and outside of a project area. They may also issue revenue bonds to finance infrastructure and provide long-term, low-interest loans for construction and rehabilitation. Funds may also be generated by tax increment financing, which captures, for a time, all or a portion of the increased tax revenue that results from greater private investment in a project area.

The Redevelopment Agency of the City of Healdsburg was created in 1980 and established the Sotoyome Project Area shown in Figure 10 that encompasses approximately 1,000 acres of the city. The Agency's powers and funds generation represent an important resource for housing, not only in the redevelopment project area, but outside of its boundaries as well. Since its establishment, the Healdsburg Redevelopment Agency has undertaken numerous programs and expended significant funds to support the development and conservation of housing. Actions taken by the RDA in support of affordable housing development and maintenance during the previous planning period are described in detail in Appendix A.

According to state law, 20 percent of the Agency's gross tax increment (less certain adjustments) must be transferred to the Housing Fund each year. This allocation must be spent on housing-related programs within five years of their deposit into the fund. The RDA has the authority to increase this set-aside to 21 percent of the annual tax increment with the stipulation that the one percent be used to meet special housing needs of senior citizens, the mentally and physically handicapped, the homeless and large families. Approximately $12.75 million will accrue in the fund during the planning period and will be used to support housing programs.

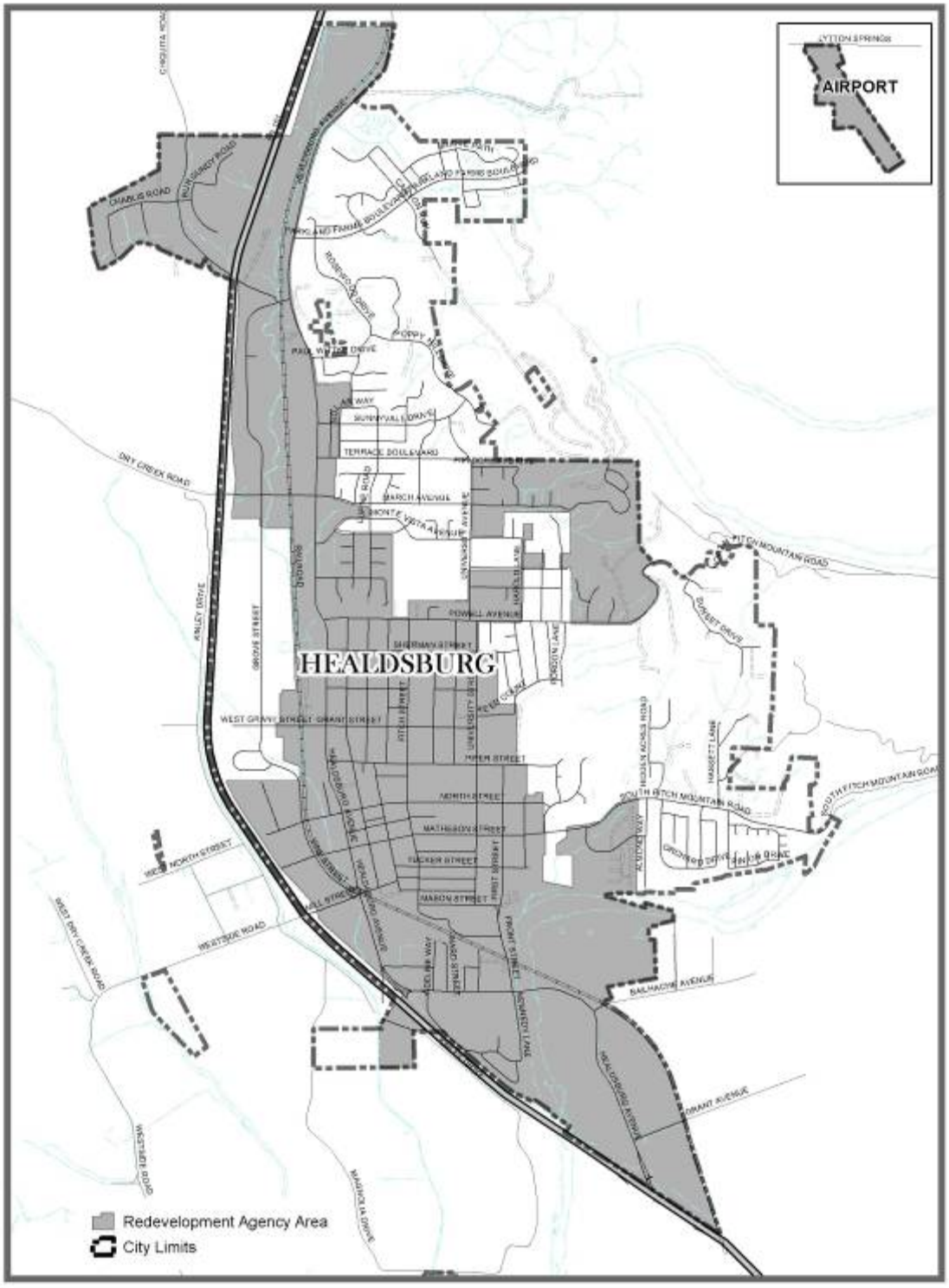


Figure 10 Sotoyome Project Area Boundary

California community redevelopment law specifies that at least 30 percent of all new or rehabilitated dwelling units developed by the Agency must be affordable to low- or moderate-income households. Additionally, not less than 50 percent of the affordable dwelling units developed by the Agency must be affordable to very low-income households. The Healdsburg RDA has complied with this requirement since its establishment.

In addition to the 20 percent set-aside, the RDA receives funding for housing largely from the sale of bonds. More than $1.1 million in bond proceeds were used to purchase 10.69 acres for four affordable housing projects in Parkland Farms, as well as pay for infrastructure and on-site improvements, specific plan and EIR and annexation fees. Bond proceeds were also used to purchase the 40-62 W. Grant Street and 308 East Street sites. References to how these funds are used in other ways by the City are found throughout this document.

- State and Federal Funding

Funding available from the State of California and the federal government is in a constant state of flux. The three programs described below are long-standing sources. Appendix F includes details of state funding programs that are currently available and may be used in the development of affordable and special needs in Healdsburg.

Community Development Block Grant Program

The Community Development Block Grant Program (CDBG) is the largest federal housing-related program for affordable housing. It is a "pass-through" program that allows local governments to use federal funds to alleviate poverty and blight.

The U.S. Department of Housing and Urban Development allocates CDBG funding based on a formula that takes population, poverty and housing distress into account.

CDBG funds are used for a variety of housing efforts, including activities aimed at reducing costs for private development, housing acquisition and rehabilitation through short- and long-term loans, and fair housing activities. The City has used CDBG funds in the past in combination with other subsidy sources for such projects as Riverfield Homes, Harvest Grove Apartments and Park Land Senior Apartments. The City has applied for $200,000 of CDBG funding for FY 2009-2010 for housing rehabilitation. However, the amount of CDBG funding available during the remainder of the planning period is unknown, as the City must compete with other small jurisdictions in Sonoma County.

California HOME Investment Partnership Act

The California HOME Investment Partnership Act is a formula-based block grant program similar to CDBG. HOME funds are intended to provide incentives for the acquisition, construction, and rehabilitation of affordable rental and ownership units. The City is required to provide matching funds. HOME funds were used in Healdsburg for the Riverfield Homes, Park Land Senior Apartments and Canyon Run Apartments projects.

Low Income Housing Tax Credit (LIHTC) Program

The Low Income Housing Tax Credit (LIHTC) Program is a federal and state housing subsidy program that provides tax credits to the private sector for the construction or acquisition and rehabilitation of very affordable rental housing. To be eligible for a tax credit, 20 percent of the units in a housing development must rent to very low-income households earning less than 50

percent of area median income, or 40 percent of the units must rent to households with incomes of less than 60 percent. State law also requires that developments retain these levels of affordability for at least 55 years. To be successful, tax credit projects require an additional subsidy that can include no- or low-cost land, local government contributions, or density bonuses and other concessions. Affordable housing projects to which tax credits were awarded include Fitch Mountain Terrace II, Riverfield Homes, Park Land Senior Apartments, Oak Grove Apartments and Canyon Run Apartments. The State awarded $15 million in tax credits to the Eden Family Housing apartment project, one of only two projects in the eastern and northern portions of the San Francisco Bay Area to receive such funding for 2009.

Unfortunately, the availability of tax credit funding was significantly reduced in 2008 because of the mortgage crisis. Fannie Mae and Freddie Mac, which have historically been the largest purchasers of the tax credits, stopped buying them. Other potential purchasers are scarce because the credits are currently less valuable as income tax reductions in a time of significantly-reduced profits[31].

4.5.2 Residential Development Opportunities

This section summarizes residential units that have been constructed or are under construction since the beginning of the planning period, approved residential development projects, and vacant and underdeveloped sites that are available for residential development during the planning period. Appendix C identifies all residentially-designated properties within the Healdsburg Sphere of Influence that are available for residential development during the planning period.

- New Construction

Since the beginning of the Housing Element planning period on January 1, 2007, 76 units have been added to the city's housing stock, including 5 secondary residential units and 4 live/work units (see Appendix C, Table C-1). Sixteen of the new units are affordable to low- or moderate-income households.

An additional 95 units are currently under construction, more than three-quarters of which are affordable units, including 2 secondary residential units, a 7-unit transitional housing project and a 64-unit apartment project. The latter will be entirely affordable to extremely low-, very low- and low-income households and will include 5 transitional housing units, 5 units for those with a mental health disability and 10 senior units (see Appendix C, Table C-2).

- Approved Projects

As shown in Table 29, a number of housing projects totaling 215 units have been approved and will be or could be constructed during the planning period that ends on June 30, 2014. More than one-third of these would be affordable to lower- and moderate-income households.

[31] James Temple, *Tax-credit market freeze hurts building industry,* San Francisco Chronicle, December 28, 2008.

Table 29 Approved Residential Units[1]

Project	Unit Type	Household Income Group				Total Units	Notes	Map No(s).[2]
		Very Low	Low	Mod-erate	Above Mod.			
Chiquita Grove	Condos		2	64		66	Approved project	D-14
Grant Street Village - Phase II	Duets	2	2	6	13	23	6 inclusionary + 4 afford. units	F-1
Powell Place	SFD		1	1	10	12	2 inclusionary units	E-17
Sub-Area A	SFD				44	44	Approved subdivisions	A-1/A-8, A-11/A-13
Saggio Hills Market Rate	SFD				70	70	Approved project	C-1
Totals		**4**	**5**	**71**	**137**	**215**		

[1]Units with discretionary or building permit approval
[2]See Figure C-1 and Table C-3

- Potential Development of Vacant and Underdeveloped Sites

A summary of the vacant and underdeveloped acreage for sites designated as residential by the General Plan Land Use Element is provided in Table 30. (Refer to Appendix C for a listing of potentially-developable parcels and their land use designations.)

Table 30 Acreage of Residentially-Designated Vacant and Underdeveloped Sites

General Plan Land Use Designation	Density Range (units/acre)	No. of acres	% of total acres	Potential Units	
				Low end of range	High end of range
Very Low Density Residential (VLR)	up to 1	97.00	55.0%	69	100
Low Density Residential (LR)	1 – 3	16.12	9.1%	8	15
Grove Street Mixed Use (GMU)	up to 3.5	12.18	6.9%	38	62
Medium Density Residential (MR)	3 – 6	27.99	15.9%	93	148
Downtown Residential (DR)	3 – 8	0.84	0.5%	8	8
Medium High Density Residential (MHR)	6 – 10	14.16	8.0%	85	150
High Density Residential (HR)	10 – 16	7.09	4.0%	55	107
Office/High Density Residential (O/HR)	10 – 16	0.97	0.6%	11	15
Totals		**176.35**	**100%**	**367**	**605**

In addition to residential projects that are under construction and those that have received City approval, 66 vacant or underdeveloped, residentially-designated sites could be developed during the planning period (see Appendix C, Table C-3 for a detailed inventory of these sites and Figure C-1 for their locations). Based on the low and high density ranges allowed by the applicable General Plan land use designations, approximately 367 to 605 units could be developed on these sites. These units would be evenly divided between single- and multi-family units.

The actual timing of development will depend on a number of factors, including:

- Market demand for housing
- Preparation and approval of specific plans, and
- Annexation approval.

One of the potential development sites (identified as B-1 in Appendix C, Table C-3) is currently located outside of the Healdsburg city limits but inside of its sphere of influence (SOI), the probable ultimate city boundary. However, relatively few units could be constructed on the site due to multiple environmental constraints.

No additional residential development is anticipated in Sub-Area K, known as the Fitch Mountain area. Although located within the Healdsburg SOI, this area has significant utility, slope stability and access constraints and the City may seek to have it excluded from its SOI.

The potential units identified in Appendix C, Table C-3 do not include the secondary units that could be developed on many existing city lots, particularly in the older neighborhoods where properties tend to be larger in area. Based on the fact that 35 secondary units were constructed in the city during the last planning period, approximately as many are anticipated to be added during the current period. In fact, five secondary units have already been constructed since January 2007 and two are under construction.

According to a survey conducted of existing secondary units, slightly more than half are rented out and relatives or guests occupy the remainder. Of those that are rented, approximately one-third are rented at prices affordable to moderate-income households and two-thirds are rented at levels affordable to low-income households (including one that was rented at a very low-income level). Therefore, approximately 16 lower-income units could be added during the planning period through the construction of secondary units.

- Potential Redevelopment

The city has seen the continuous re-use of properties over the past 150 years and an increase in its housing stock through the redevelopment of lots originally used for non-residential purposes and/or lower-density residential. A recent example is the development of the 16-unit Healdsburg Commons project on a site that was created by combining three lots that were developed with a gas station and seven units. The Eden Family Housing affordable apartments project under construction is the former site of a propane storage operation.

An example of the type of intensification that could occur in the future is the potential redevelopment of a 1.25-acre site at the southwest corner of Healdsburg Avenue and Kennedy Lane, which is currently developed with five single-family homes. The property is designated by the Healdsburg General Plan as High Density Residential, which could allow up to 15 additional units on the property. This property is currently listed for sale and the City has received several inquiries regarding its potential for higher-density development.

Since residential uses are allowed in most of the city's commercial zoning districts and both of the industrial zoning districts, there are also a number of sites within the city that could be redeveloped with residential uses in combination with commercial or industrial uses. However, this potential is too hypothetical to quantify.

- Potential Development of City-Owned Land

The RDA owns a 20,000-square foot site at 627 Healdsburg Avenue, just north of the fire station. An architect has been hired to develop a plan and budget for the construction of affordable housing that would be owned by the City and rented to volunteer firefighters. The adjoining Grant Street Village project that is currently under construction was required to rough grade the site and provide road and utility access to the parcel.

4.5.3 Adequacy of Public Facilities

According the Environmental Impact Report for the Healdsburg 2030 General Plan,[32] buildout under the General Plan, including the potential residential development described in the previous section, will be adequately served by all utilities. This includes a sufficient supply of water, electricity and natural gas, and adequate wastewater treatment and solid waste disposal capacity.

- Water Supply

The City's water system is supplied from three well fields: one on Dry Creek with three operational wells and two on the Russian River (Fitch and Gauntlett well fields) with a total of eight operational wells. Distribution system facilities include eight storage tanks serving six separate pressure zones within the distribution system, five pump stations and the necessary water mains and appurtenances for purveying water within the service area. Storage capacity now totals 7.9 million gallons. Total water use in Healdsburg's urban service area during 2007 was approximately 2.15 million gallons per day (mgd).

The Gauntlett/Fitch Water Treatment Facility provides micro-filtration for water produced from the Gauntlett wells, allowing the wells to be used year-round. Improvements to the facility scheduled for 2010 will route water from the Fitch well through there as well.

The City presently holds three water right permits: two on the Russian River and one on Dry Creek for up to 3,665 acre feet per year (afy). The City also has petitions pending with the State Water Resources Control Board (SWRCB) for its two Russian River Water Right Permits to extend the deadline for putting the water to full beneficial use. The Board has determined that the water for these rights falls under a 10,000 acre-foot per year reservation of "project water" made available from Lake Mendocino. Satisfying upstream demands that fall under this reservation is a condition of the Sonoma County Water Agency's (SCWA) water rights permits. Approval of the petitions is likely and the City's environmental analysis and planning forecast assume full beneficial use under the permits.

In addition to these rights, the City has a contractual agreement with the SCWA that allows the City to divert up to 4,440 afy under the Agency's water rights permits if appropriated water is not available under the City's own water rights. However, the City has no plans to rely on the agreement in the near future because its own water rights are adequate.

Supply availability to the City's water customers is not expected to decrease in single- or multiple-year drought scenarios, primarily because the SCWA is required to meet minimum flows at three points on the Russian River, all downstream of the Dry Creek and Russian River

[32] Christopher A. Joseph & Associates, Environmental Impact Report, Healdsburg 2030 General Plan Update, July 2009.

confluence; therefore, downstream of all City well fields. The water rights permits held by the City presently do not require diversion reductions during droughts. Notwithstanding that fact, in past dry years, the City has achieved significant water use reductions through voluntary conservation efforts.

Buildout of the Healdsburg SOI under the General Plan could increase the SOI population to 14,468, which is less than the 14,900 population projected for 2025 by the 2003 Water System Master Plan and the 2005 UWMP. The projected population includes the increase that could occur in association with the development of housing affordable to lower-income households. Assuming that the same proportion of water demand among residential, commercial, industrial and landscape uses occurring in 2004 occurs in the future, the UWMP concluded that with a total projected 2025 water supply of 4,179 acre-feet/year, the total 2025 projected water demand (3,372 afy) would leave a surplus of 807 afy (19 percent).

Even if no additional water rights were approved, the City's existing water rights total 3,665 afy, which is more than adequate to meet the projected water demands described above. Therefore, there is adequate water supply to accommodate the increased demand associated with additional residential development during the Housing Element planning period (i.e., 2007 - 2014). Further, it is not anticipated that the City would have grounds to deny water service to a proposed development that includes affordable housing because of an insufficient water supply, a water shortage, insufficient water treatment or distribution capacity, or a compliance order issued by the State Department of Health Services prohibiting new water connections.

A number of pumps boost water from the well fields to eight reservoirs and tanks, located in six different locations. Besides providing a combined storage capacity of 7.9 million gallons, the tanks and reservoirs, due to their elevations, create water pressure for users, including pressure for fire hydrant flows. The older and smaller Sunset and Cadoul tanks can supply fire flows of up to 1,000 gallons per minute by a combination of pumping and use of storage. This capacity does not currently meet Insurance Service Office guidelines. Although the tanks are inadequate, they would not serve potential development areas.

Portions of Sub-Areas B and C are above the highest elevation that can be served by the City's Gauntlett reservoirs. The construction of a pump station to serve certain portions of the Saggio Hills project site (Sub-Area C) was required as part of the Saggio Hills Area Plan. Any future development in Sub-Area B will be assessed at a project level at the time of application for such development and/or annexation to identify pumping and storage requirements that are adequate to provide the pressure and flow capacity needed to meet health and safety requirements.

Existing water distribution mains are adequately sized to accommodate all anticipated growth in the city's north area and along Grove Street. The Grove Street corridor includes an existing 16-inch water main. The Parkland Farms area is also connected directly to the Gauntlett Reservoirs by a 12-inch main, which feeds water to the subdivision. In addition, the recent Rosewood Drive extension provided another water line connection to the Parkland Farms area, completing a looped main. These two water mains are expected to be adequate for the development of Sub-Areas B and C.[33] Section 6.2 recommends a number of distribution system

[33] *Healdsburg 2030 General Plan Background Report*, page 109.

improvements, consisting mostly of water main replacements, to improve the system's ability to deliver water during peak demand and fire flow conditions. Several are designed to improve the delivery of water from the Gauntlett/Fitch Water Treatment Facility. These replacements will occur over time and do not affect the City's ability to supply water to existing or potential development.

- Wastewater Service

The sewage collection, treatment, and disposal facilities that serve the city are owned and operated by the City of Healdsburg. The City's wastewater treatment plant was recently upgraded to the Advanced Waste Treatment level and is designed for an average daily flow of 1.6 mgd. The equalization basins and wet-weather treatment capacity together are sized to accommodate a storm event producing wet weather flows of up to 9.3 mgd.

The wastewater treatment plant has a permitted dry-weather capacity of 1.4 mgd, and the City has not requested an increase in this permitted capacity. Taking the highest dry weather flow between 2000 and 2008 (0.98 mgd) as the base year, the unused capacity available to accommodate development and growth under General Plan buildout is a minimum of 0.42 mgd.

The wastewater collection system encompasses a network of collector lines of various sizes, nine small lift stations in various locations throughout the city, and a major lift station on Magnolia Drive that conveys the entire city's wastewater to the treatment facility on Foreman Lane. Local lift stations have been upgraded one by one as part of the City's Capital Improvement Program. All of these lift stations are located in areas that are nearly built-out, and therefore can be expected to have adequate capacity for any in-fill projects.[34]

The Magnolia Lift Station has recently been upgraded to replace aging and outdated electrical equipment and to improve its overall reliability. Daily wet weather flows, which include inflow and infiltration, have peaked at approximately 5.7 mgd over the past three years. The lift station has a capacity of approximately 6.2 mgd and experiences maximum daily flows of about 5.5 mgd. Therefore, the system has the hydraulic capacity to accommodate the peak wet weather flows as well as additional flows.

Recent major upgrades to the sewer collection system included replacement of a critical section of trunk sewer main on the south end of Healdsburg Avenue. One existing sewer line along Grove Street between Dry Creek Road and Chiquita Road is operating at near capacity, and may need to be replaced to accommodate future development in the area.

Buildout under the General Plan is anticipated to generate an estimated wastewater flow of .428 mgd within the city. The projected demand includes the increase that could occur in association with the development of housing affordable to lower-income households. When added to the highest historic dry weather flow (0.98 mgd) as the base year, the total sewage average flow would increase to approximately 1.41 mgd, which is less than one percent above the treatment plant's permitted capacity.

However, there are several mitigating factors regarding the treatment plant's actual capacity. For the purpose of measuring permitted dry weather capacity, average dry-weather flow (adwf) is defined as the average flow when inflows to the treatment plant have reached their annual

[34] Ibid.

minimum, which typically occurs in late fall. The ADWF is intended to be a measure of the true load connected to the sewer system, after the influence of any infiltration has diminished. The City of Healdsburg average dry-weather flow is defined in its National Pollutant Discharge Elimination System permit as the minimum running 30-day average. While a treatment plant may be nominally designed for a certain average dry-weather flow, the actual capacity is typically much greater because it must be able to accommodate peaking events, including higher wet-weather flows in the winter, and higher solids loadings that can occur at any time of the year.

The estimated additional wastewater generation associated with potential future development is derived from unit flow factors that are intended to estimate flows for an individual customer during the summer peaking period (July through October). Peak uses for individual users throughout the system never occur simultaneously, and flows during the period when average dry-weather flow is determined are typically far lower, typically at least 15 percent below the summer peaking period. For this reason, the aggregated peak demand could not be expected to cause a corresponding increase in average dry-weather flow. The expected average dry-weather flow generation would reasonably be expected to be at least 15 percent lower (i.e., .364 mgd). The total resulting flow of 1.34 mgd at buildout would leave an unused capacity of .06 mgd.

Therefore, there is adequate wastewater treatment capacity to accommodate the increased demand associated with additional residential development during the planning period. Further, it is not anticipated that the City would have grounds to deny sewer service to a proposed development that includes affordable housing because of insufficient treatment or collection capacity, or an order issued by the regional water quality control board that prohibits new sewer connections.

- Electric Service

The City owns and operates its own electric distribution system. The City's Electric Department is responsible for the operation and maintenance associated with the reliable distribution of electricity to residential and commercial customers within the Planning Area except for the Grove Street neighborhood and the Fitch Mountain area, which are served by Pacific Gas & Electric (PG&E). In the summer of 2007, the system's peak demand was 20.6 megawatts.

The City acquires wholesale-priced power through the Northern California Power Agency (NCPA). The City's electrical system is linked to its power sources through an interconnection with the PG&E 60,000-volt transmission line at the City's Badger Electric Substation. The substation is currently operating at about one-half of its capacity. The Electric Department has initiated planning for the addition of a new transformer and additional supportive equipment to increase the capacity and reliability of the substation by 2010.

Two main feeders extend from the substation south along First Street and south to the industrial area along Healdsburg Avenue. Two additional feeders extend northerly to the main part of the City through Tayman Park Golf Course. The main feeders are adequately sized for all potential infill in the City's developed areas. As part of the City's Capital Improvement Program, the City is in the process of creating one more main feeder for the north development area to serve future growth areas included in the proposed General Plan.

Energy demand in Healdsburg could grow by 15 to 20 percent in the next few years, primarily because of growth in the northern area of the City. After buildout of this area, however, growth will be more limited. Sufficient electric power is available to serve future development through purchase power contracts with the NCPA, possible future additional NCPA generation projects, conservation and load management programs, small self-generation projects, and purchase power contracts through private qualifying facilities.

The City's electric utility provides a 20 percent rate subsidy to lower-income households and all affordable residential projects.

4.5.4 Progress Towards Fulfilling Regional Housing Needs

- Constructed and Approved Units

Table 31 compares the City's regional housing needs by income category for the planning period to the residential units constructed since January 2007 and those currently under construction. The table also shows that if all approved projects were constructed, the housing needs in the very low-, moderate- and above-moderate income categories would be met without additional construction or approvals.

Table 31 Comparison of Housing Needs[1] to Constructed and Approved Units

	Household Income Category				
	Extrem. Low Income	**Very Low Income**	**Low Income**	**Moderate Income**	**Above-Mod. Income**
Regional Housing Need	**35**	**36**	**48**	**55**	**157**
Units Constructed Since 1/2007[2]	0	0	10	6	62
Units Under Construction[3]	26	34	15	4	20
Approved Units[4]	0	2	5	71	137
Subtotals	**26**	**36**	**30**	**81**	**219**
Remaining Housing Need	**9**	**0**	**18**	**(26)**	**(64)**

[1] For period of 1/1/07 – 6/30/14
[2] From Table C-1
[3] From Table C-2
[4] From Table 29

- Available Housing Sites

The remaining need for 9 extremely low-income units and 18 low-income units can be readily accommodated on the properties identified in Table 32, all of which are located within the city limits, are designated High Density Residential by the Healdsburg General Plan and are zoned Multi-Family Residential (RM). The potential total of 107 units that could be developed on these properties could be increased significantly through the granting of density bonuses. An overview of each site follows. In addition to the development of these sites, low-income units will also be provided during the planning period through the City's inclusionary housing requirement and the construction of secondary residential units.

Table 32 Potential Affordable Housing Sites Summary

Address	Map No.[1]	GP Designation/ Zoning	Allowable Density (units/acre)	Acres	Potential Units
1135 Healdsburg Ave.	E-2	High Density Residential / RM	10 - 16	3.18	25 - 50
1034 Healdsburg Ave.	E-4	High Density Residential / RM	10 - 16	1.52	12 - 24
88 & 90 Front Street	F-11	High Density Residential / RM	10 - 16	1.14	11 - 18
3 Healdsburg Ave.	I-9	High Density Residential / RM	10 - 16	1.25	7 - 15
				Totals	**55 - 107**

[1]See Figure C-1

1135 and 1034 Healdsburg Avenue

The City approved a preliminary development plan in 1989 for these 4.7 acres to allow the development of 32 townhomes and 20 apartments; however, they were never constructed. The sites front Healdsburg Avenue, the city's primary thoroughfare, and are located less than one-half mile from a large neighborhood commercial center (including a grocery store) and within easy walking distance of the Healdsburg Elementary, Junior High and High School campuses. The properties' frontages are fully improved and utilities are readily available. A stop for Sonoma County Transit is located in front of the northern site. The sites are vacant and support no significant vegetation.

88 and 90 Front Street

These two properties front on the Russian River and are located between a mobilehome park and an apartment complex. They are owned by the same property owner, with a single-family home on the southern lot. Development of the lots would be subject to a 100-foot setback from the top of the river bank; however, it is likely that a reduced setback would be approved, given the lack of riparian vegetation within most of the setback and the shorter setbacks approved for the adjoining properties. These properties are located less than one-quarter mile from the Healdsburg Intermodal Transit Center and one-half mile from the downtown.

3 Healdsburg Avenue

This 1.25-acre site at the southwest corner of Healdsburg Avenue and Kennedy Lane is currently developed with five single-family homes. However, the property could be redeveloped with up to 15 additional units.

- Potentially Available Housing Sites

As part of the recent approval of the Saggio Hills Area Plan, the developer is required to convey title to 14.16 acres to the City for the construction of up to 150 affordable units. The site is designated by the General Plan as Medium-High Density Residential (6 - 10 units per acre) and zoned R-1-3,500. Other developer requirements include a $1 million contribution to the City's in-lieu housing fund to assist in the development of housing on the site and preparation of the site for construction, including grading, the installation of a 12-inch water main and an 8-inch water main, and the provision of joint trench improvements for gas, electricity, communications and cable television services. The developer is also required to reimburse the City for costs (up to $50,000) associated with the preparation of a site

development analysis to determine the appropriate type, density and related characteristics of the housing to be developed. The City Council recently directed Staff to begin the preparation of this analysis and the Sonoma County Local Agency Formation Commission has approved the project's annexation to the city.

The City will support the development of this property with affordable housing by exempting the developer from paying annexation fees for the site and reimbursing the developer for up to $1million of the infrastructure costs. Priority will also be given to employees of the project's resort for the purchase or rental of the units.

4.6 Opportunities for Energy Conservation

4.6.1 State Energy Conservation Requirements

The City has implemented the provisions of Title 24, Part 6 of the State Building Code that require new residential buildings to meet a comprehensive set of standards for energy conservation. Builders of these units may achieve compliance either by calculating energy performance in a prescribed manner or by selecting from alternative component packages that prescribe a fixed method of compliance. All proposed residential units are checked by the Building Department to ensure that their design and construction complies with Title 24 energy standards. Additions and alterations must also meet these standards if they increase the heated or cooled floor space of a building. The City has not adopted any restrictions on the design or placement of photovoltaic energy systems on residential property.

Opportunities for improving energy conservation in the design of residential development include ensuring the consistency of tentative tract maps with Section 66473.1 of the Subdivision Map Act, which requires the designs of subdivisions to provide for future passive or natural heating or cooling opportunities. The City also requires the planting of trees along streets and in parking lots to reduce heat island effects. Funding for tree planting is available from the City's Tree Planting and Maintenance Fund, which collects in-lieu fees for the planting of heritage tree replacements and is designated for the purpose of planting and maintaining trees throughout the city.

4.6.2 Healdsburg Green City Program

The City of Healdsburg recently adopted a "Green City Program," in part to promote energy conservation.

The green building component of the Green City Program requires:

- New dwellings of 3,000 square feet or less to achieve a minimum of 50 Green Points based on the New Home Construction Green Building Guidelines checklist promulgated by Build It Green. Larger homes are required to achieve 80 Green Points.
- Conditioned space additions to residential dwellings of 500 to 1,000 square feet to achieve 15 green points. Larger additions are required to achieve an additional 5 Green Points for each additional 500 square feet.

City- and RDA-sponsored residential projects are required to include "green" features in their design. For example, the Victory Studios transitional housing project will achieve 142 points under the Build It Green multi-family guidelines, in part by installing Energy Star-qualified appliances, low-flow showerheads and faucets, and operable windows that are placed to induce

cross ventilation in at least one room. The Habitat for Humanity homes will be equipped with rooftop solar panels.
The development agreement for the Saggio Hills project requires at least 100 Build It Green points for each of its 70 single-family residences. In addition, the landscaping plans for the residences must incorporate native and drought-resistant plantings within their landscaped areas.

To promote energy conservation, the City also offers to homeowners and residents:

- Free energy audits of homes
- Rebates for energy-efficient lighting fixtures and light bulbs, electric water heaters, air conditioners, heat pumps and appliances (including refrigerators, dishwashers and clothes washers); photovoltaic systems and weatherization of existing homes, including insulation, window sun screens/window films and duct insulation/sealing.

4.6.3 Transit-Oriented Development and Smart Growth

Voters in Marin and Sonoma Counties recently approved funding for a passenger train that will run along a 70-mile corridor between Cloverdale, in northern Sonoma County, and Larkspur, where the Golden Gate Ferry connects Marin County to San Francisco. It will serve 14 stations along the corridor, including the historic train depot in Healdsburg, beginning in 2014. Sixteen north- and south-bound trains would stop in Healdsburg on weekdays, and eight on weekends Approximately 413 Healdsburg residents are expected to patronize the train each weekday for commuting (approximately 43 percent of total riders) and other purposes; of these, approximately 72 percent are expected to walk to the depot from surrounding neighborhoods[35]. The Sonoma County Transit Authority will begin construction in 2009 on a 48-space parking lot at the depot for carpoolers, and eventually train passengers. A second lot with 26 parking spaces may be added in the future. County and local bus transit will stop at the depot as well.

There may be an opportunity to encourage transit-oriented development (TOD) in the vicinity of the Healdsburg depot. TOD refers to the creation of a compact, walkable community centered on a high quality passenger train system that reduces the need for driving. Most of these types of developments have high residential densities and include commercial uses that serve the residents. There may be an opportunity to redevelop some of the industrial properties within one-half mile of the depot with these types of uses. There are a number of factors to consider in planning TOD in Healdsburg, including the large number of older, single-family development in the vicinity and the Growth Management Program, which limits building permits for market-rate housing to an average of 30 per year. However, following the preparation and adoption of a detailed station area plan, there may be community support for amending the Program to allow the issuance of additional building permits for the area.

The city has recently seen a number of "smart growth" projects that reduce reliance on personal vehicle travel by being located near transit and services. For example the Healdsburg Commons and Eden Family Housing projects are located on in-fill sites near the downtown and are within easy walking distance to local and regional bus lines, shopping, personal services and schools.

[35] SMART Revised Travel Demand Forecasting Report, June 2006.

5 Transportation

This chapter discusses Healdsburg's transportation system and services, including streets and roads, pedestrian facilities, bicycle facilities, transit service, rail service, air service, and taxi service.

5.1 Street and Road System

- Physical Constraints

A city is defined and at the same time constrained by the network of highways, roads, streets, sidewalks, and transit services by which its residents and goods are moved through, in and out of the city. Healdsburg is a compact city defined by a number of man-made and natural features that both act as a framework for the city's street and road system and constrain its expansion and improvement. Due to Healdsburg's size, mobility within the city is still relatively easy.

U.S. 101 acts as a physical barrier along the city's west side, limiting westerly access because there are few grade-separated crossings. This freeway barrier is pierced by underpasses at only four points within the city: Chiquita Road, Dry Creek Road, Mill Street-Westside Road and Old Redwood Highway.

The Russian River and Foss Creek also restrict access, requiring bridges wherever they are crossed. The two major city-owned bridges are along Healdsburg Avenue east of Front Street. Memorial Bridge, which crosses the Russian River, is planned for replacement or rehabilitation. A second bridge that spans the Russian River overflow area east of the main bridge and north of Bailache Avenue, was rebuilt in 1987 as a three-lane bridge with sidewalks.

The railroad tracks also act as a constraint on the street and road system because of the need to provide crossing protection, or preferably, grade separation, wherever roadways cross it.

Because of these physical barriers, the city has only a few "gateway" intersections through which flows much of the city's traffic. These are the intersections at Healdsburg Avenue/Mill Street-Vine Street, Healdsburg Avenue/Dry Creek Road-March Avenue, Healdsburg Avenue/Old Redwood Highway and Healdsburg Avenue/Front Street (the east leg of which is the Memorial Bridge over the Russian River). In addition to providing access to and from the community, these intersections also carry a significant amount of the city's internal traffic.

These constraints limit circulation alternatives within and between the existing and developing areas of the city. Continuous travel routes through the city are limited to a few, already well-used, roadways. The existing street network has discontinuities, particularly in the north-south direction, which cannot easily be overcome. Grove Street provides an alternative route to Healdsburg Avenue for the limited areas on the west side of the city, but only University Street serves a similar purpose and extends both north and south of Powell Street on the east side of the city.

Connections should be made where possible between the existing street system and new development to provide multiple circulation options and disperse traffic impacts over as wide an area as possible.

It should be noted that the physical boundaries described above generally coincide with the Healdsburg Urban Growth Boundary and no expansion of roads beyond this boundary is necessary to serve future development within it.

- Functional Classifications

Healdsburg's street and road system can be classified according to four basic functional types of roadways, as follows.

Local Streets provide immediate access to properties and generally carry very low traffic volumes. Those streets not otherwise classified as any of the following three types of roadways fall into this class.

Collector Streets are fed by local streets, provide local circulation options connections to other roadways, and carry light to moderate traffic volumes.

Arterial Streets are fed by local service and collector roadways, provide intra-city circulation and connection to regional roadways, and carry relatively heavy traffic volumes. Arterials within the city include Dry Creek Road, Mill Street west of Healdsburg Avenue and Healdsburg Avenue.

Freeways are fed by arterial streets, provide intra-city travel and connections to other regional highways, and are capable of carrying heavy traffic volumes. U.S. 101 serves this function through the City of Healdsburg.

For a community of the size and scale of Healdsburg, it is not unusual for some roadways to serve dual functions, such as providing both arterial and collector service. It is, therefore, difficult to clearly classify every roadway. Furthermore, the width of a roadway does not always directly correspond to its function in the overall circulation system. Generally, however, the wider the roadway, the more regional its function.

- Roadway Widths and Physical Characteristics

Most of the streets within the city have one travel lane in each direction, or a total of two lanes. The principal exceptions are wider segments on Healdsburg Avenue north of Powell Avenue to Parkland Farms Boulevard and south of Mill Street to Exchange Avenue, Dry Creek Road, some east-west streets at their intersection with Healdsburg Avenue, and portions of Vine Street and Grove Street. Roadways within the older portion of the city are generally narrower than in newer areas. There are several street segments where parking has been prohibited on one side of the street to facilitate two-way traffic flow. There are no one-way streets in the City of Healdsburg.

- General Plan Circulation Plan Diagram

The Circulation Plan included in the General Plan Policy Document depicts the official classification of existing and proposed streets and roads within the Urban Service Area.

- General Plan Street Standards Cross-Sections

The General Plan Policy Document contains standard cross-sections for various street classifications. The City also has adopted different cross-sections for streets within the Sub-Area A Specific Plan area and the Saggio Hills Area Plan, as well as Grove Street between Grant

and Dry Creek. Healdsburg Avenue, within the developed portions of the city, has right-of-way widths ranging from 60 to 84 feet and street pavement widths ranging from 40 to 64 feet.

Streets in the area east of Healdsburg Avenue and south of Powell Avenue have right-of-way widths generally within the range of 40 to 66 feet. Street widths vary from 28 to 48 feet, although there are some streets with even narrower pavement widths. In the area east of Healdsburg Avenue and north of and including Powell Avenue, right-of-way widths are generally in the range of 50 to 60 feet and the street pavements are between 35 and 45 feet wide. The streets on the west side of Healdsburg Avenue generally have right-of-way widths of 60 feet or more.

Current operational philosophies indicate that wide residential streets result in a less desirable environment due to higher travel speeds and a scale that is not inviting to pedestrians. In order to allow development that is more "livable," standards that allow narrower residential streets could be considered for the entire city.

- Intersection Operation

The capacity of a street system is typically dependent upon the operation of intersections rather than the segments connecting them since this is where conflicting movements are concentrated. Traffic analyses therefore usually focus on the points where two arterial or collector streets intersect. Level of Service (LOS) is used to rank traffic operation based on traffic volumes and capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions, but not failure. The LOS designation is accompanied by a measure that indicates a level of delay. The ranges of delay associated with the various levels of service are indicated in Table 33.

Twenty-eight intersections were analyzed using methodologies from the *Highway Capacity Manual, 2000*. This source contains methodologies for various types of intersection control, including signalized, all-way stop-controlled, and unsignalized (stop-controlled on the minor street approaches), all of which are related to a measurement of delay in average number of seconds per vehicle.

The intersections used as the basis for determining the status of traffic operation in the city were selected to include nearly all of the signalized intersections as well as most of the locations where an arterial intersects another arterial street or a collector street. The locations contained in Table 34 and shown in Figure 11 were evaluated. The right-of-way controls are indicated for each location in parentheses as well as on Figure 12, which also indicates the lane configurations.

Traffic volumes were measured for the 28 study intersections between November 1999 and August 2007. Machine counts obtained in 2007 were compared to older volumes, and it was determined that volumes have generally remained fairly consistent, though factors were applied to counts as appropriate to replicate current 2007 volumes for all 28 study intersections. Since traffic congestion tends to be most severe during the evening commute period, only the p.m. peak hour was evaluated. The p.m. peak hour is the highest volume hour between 4:00 p.m. and 6:00 p.m.

Table 33 Intersection Level of Service Criteria

LOS	Signalized Intersections	Unsignalized and All-Way Stop-Controlled Intersections
A	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase and do not stop at all.	Delay of 0 to 10 seconds. Gaps in traffic are readily available for drivers exiting the minor street.
B	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.	Delay of 10 to 15 seconds. Gaps in traffic are somewhat less readily available than with LOS A, but no queuing occurs on the minor street.
C	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.	Delay of 15 to 25 seconds. Acceptable gaps in traffic are less frequent, and drivers may approach while another vehicle is already waiting to exit the side street.
D	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.	Delay of 25 to 35 seconds. There are fewer acceptable gaps in traffic, and drivers may enter a queue of one or two vehicles on the side street.
E	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.	Delay of 35 to 50 seconds. Few acceptable gaps in traffic are available, and longer queues may form on the side street.
F	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.	Delay of more than 50 seconds. Drivers may wait for long periods before there is an acceptable gap in traffic for exiting the side streets, creating long queues.

Reference: *Highway Capacity Manual 2000,* Transportation Research Board, 2000

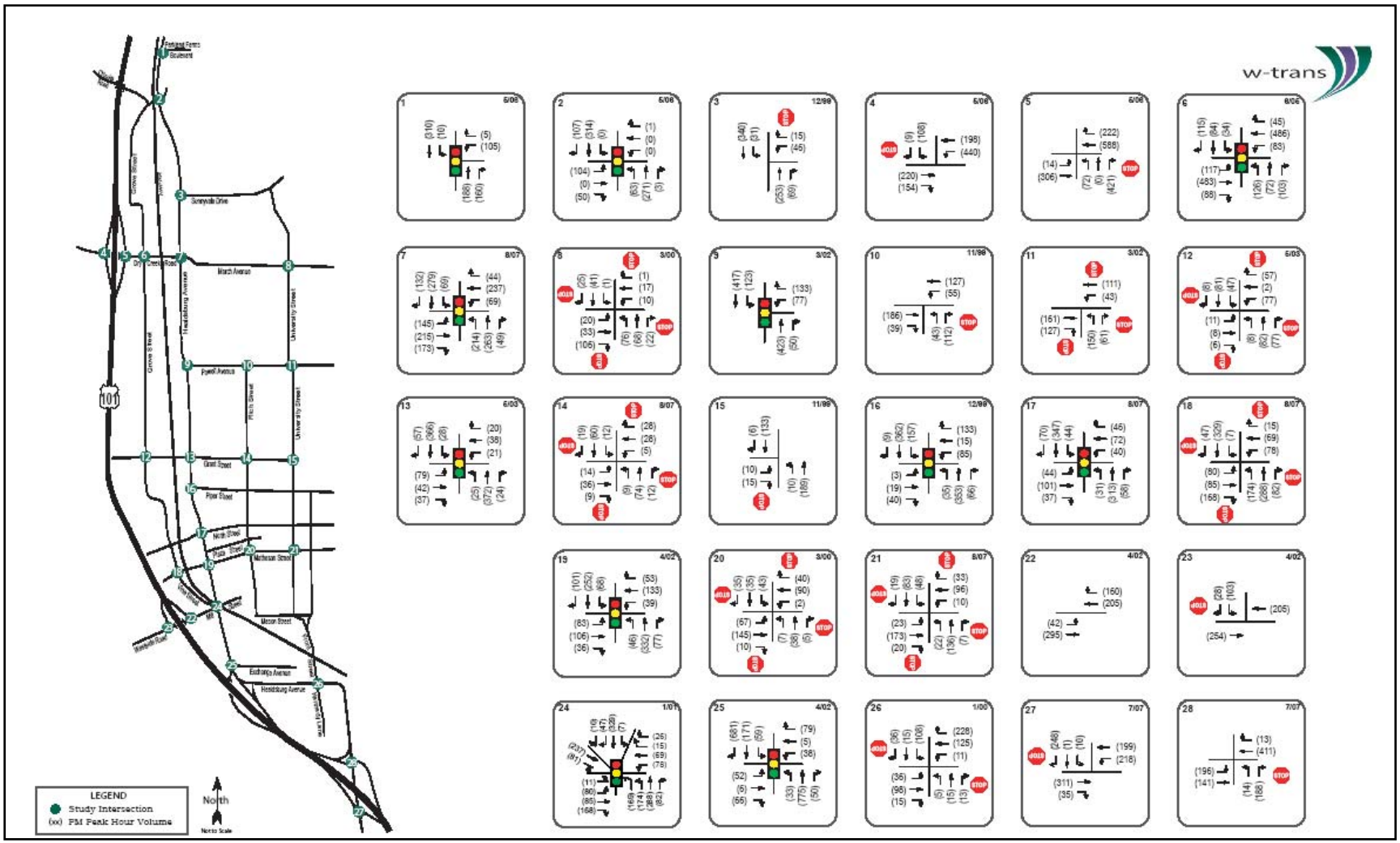
Table 34 Study Intersections

1	Healdsburg Avenue/Parkland Farms Boulevard (signalized)
2	Healdsburg Avenue/Grove Street (signalized)
3	Healdsburg Avenue/Sunnyvale Drive (unsignalized – stop on Sunnyvale)
4	U.S. 101 South Ramps/Dry Creek Road (unsignalized – stop on off-ramp)
5	U.S. 101 North Ramps/Dry Creek Road (unsignalized – stop on off-ramp)
6	Grove Street/Dry Creek Road (signalized)
7	Healdsburg Avenue/Dry Creek Road-March Avenue (signalized)
8	University Street/March Avenue (all-way stop)
9	Healdsburg Avenue/Powell Avenue (signalized)
10	Fitch Street/Powell Avenue (unsignalized – stop on Fitch)
11	University Street/Powell Avenue (all-way stop)
12	Grove Street/West Grant Street (all-way stop)

13	Healdsburg Avenue/Grant Street (signalized)
14	Fitch Street/Grant Street (all-way stop)
15	University Street/Grant Street (unsignalized – stop on Grant)
16	Healdsburg Avenue/Piper Street (signalized)
17	Healdsburg Avenue/North Street (signalized)
18	Vine Street/Matheson Street (all-way stop)
19	Healdsburg Avenue/Matheson Street (signalized)
20	Fitch Street/Matheson Street (all-way stop)
21	University Street/Matheson Street (all-way stop)
22	U.S. 101 South Ramp/Westside Road (unsignalized – stop on off-ramp)
23	U.S. 101 North Ramp/Westside Road-Mill Street (uncontrolled)
24	Healdsburg Avenue-Vine Street/Mill Street (signalized)
25	Healdsburg Avenue/Exchange Avenue (signalized)
26	Healdsburg Avenue/Front Street-Kennedy Lane (unsignalized – stop on Front-Kennedy)
27	U.S. 101 South Ramps / Old Redwood Hwy (unsignalized)
28	U.S. 101 North Ramps/Healdsburg (unsignalized)

All of the study intersections were operating at LOS C or better overall and on stop-controlled minor street approaches during the p.m. peak period except for the following intersections:

- U.S. 101 South Ramps/Dry Creek Road is experiencing LOS F operation on the off-ramp approach. Installation of traffic signals is planned at the Dry Creek Road intersections with the U.S. Highway 101 ramps. In addition to the signals, the improvements would include left-turn lanes on Dry Creek Road, a slip lane from the northbound off-ramp to eastbound Dry Creek Road and extension of the second westbound through lane from Grove Street to U.S. Highway 101 North where it would become a right-turn only lane. The improvements have a total estimated cost of $1.5 to $2.0 million. The City of Healdsburg collects traffic impact fees from development projects fund various projects, including the partial funding of traffic signals at the Dry Creek Road/U.S. 101 interchange. Because the interchange falls under the jurisdiction of Caltrans, the City does not have control over the timing or implementation of these improvements.
- Healdsburg Avenue/Vine Street-Mill Street is operating at LOS D and presents a confusing entrance to the City. Two options for achieving acceptable operating conditions under build out traffic volumes are being considered – a roundabout and modifications to lane configurations and signal phasing. Based on projected volumes, the roundabout would need to have two circulating lanes from northbound Healdsburg Avenue to Vine Street and a right turn slip lane from southbound Vine Street to westbound Mill Street.



Source: W-Trans, November 2007

Figure 11 Traffic Volumes

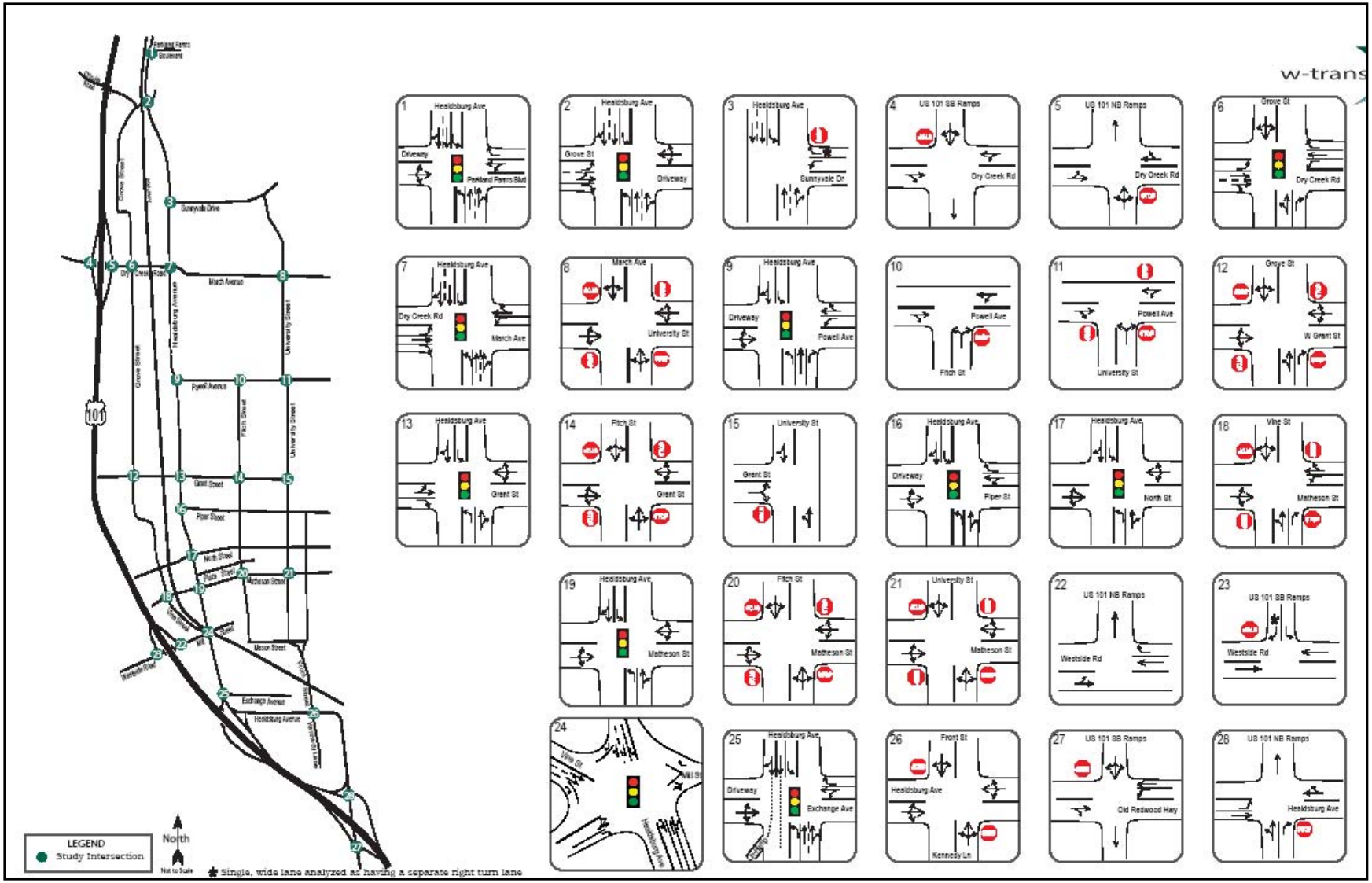


Figure 12 Existing Lane Configurations

With this configuration LOS B operation would be expected under future conditions. Since conversion to roundabout control requires approvals by agencies external to the City due to the presence of the railroad tracks through the intersection, this may prove to be an infeasible option. If instead the existing signalized configuration is to be maintained, the center lane on northbound Healdsburg Avenue (currently the through lane) would need to be converted to a left-turn lane directed toward Vine Street, with the curb lane (currently a right-turn only lane) used for through and right-turn movements. The existing northbound left-turn lane would be dedicated to westbound left turns on to Mill Street. Phasing of the intersection would need to be adjusted to allow the northbound turn to Vine Street to occur simultaneously with the southbound movement from Vine Street, while maintaining a red indication for left-turns to Mill Street. This would require use of programmed visibility signal heads and potentially other specialty signing as this would be an unusual configuration. Additionally, the lanes on the eastbound Mill Street approach would need to be reassigned to a left-turn lane and a shared through/right-turn lane. These changes would also allow the intersection to operate acceptably at LOS D.

- Vine Street/Matheson Street is operating at LOS E.

- Traffic Collision Patterns

Traffic collision data for the city was obtained from the California Highway Patrol's Statewide Traffic Integrated Records System for the period 1998 through 2001. The data includes all reported collisions submitted by the City's Police Department and the Highway Patrol. During the four-year period, 708 reported collisions occurred within the city, including two fatality collisions and 129 collisions that resulted in injuries to 168 persons.

The California Office of Traffic Safety monitors collision records for key safety indicators. These indicators provide a reference for cities, towns and counties throughout the state to evaluate the relative severity of safety issues compared to other jurisdictions of similar size. Summarized in Table 35 is information on how the city ranks versus similar-sized communities in California. In 2000, there were 109 communities in the same population group as the city. The rankings are from high to low with number 1 being the highest severity. Ranking in the top one-third is considered, for the purposes of this analysis, to be of primary concern.

Table 35 indicates that the city had substantially fewer collisions reported than most communities its size, with rankings in the lowest one-third for half the categories reported. The only category in which the city occupied a ranking in the top one-third in 2000 was for bicycle collisions, and that is only in the ranking by population.

A comparison of the total number of collisions reported in 2000 versus the other four years in the study period indicate that the number of collisions annually has varied from 158 in 1999 to 193 in 2001, with the 183 in 2000 being the second-highest. The ranking indicated in Table 35 would therefore appear to be fairly typical of the safety record from year to year.

The time frame during which the highest numbers of collisions occurred was 2:00 to 4:00 p.m., with substantially more of these collisions occurring on weekdays than weekends. This could potentially indicate a trend of collisions involving school-related trips.

Table 35 Traffic Safety Rankings (2000)

	Ranking*	
Collision Type	**By Vehicle Miles**	**By Population**
Fatal and Injury	51	38
Alcohol Involved	63	55
Speed Related	75	59
Nighttime	61	54
Hit and Run	106	104
Drinking Driver under 21 years of age	57	104
Drinking Driver 21-34 old	58	50
Pedestrian (all)	97	95
Pedestrian over 65 years of age	88	93
Pedestrian under 15 years of age	100	104
Bicyclist	48	30
Bicyclist over 15 years of age	98	99

*Ranking out of 109 communities, with 1 being most severe
Source: California Office of Traffic Safety

The overwhelming majority of collisions (415 of 708) involved two or more moving motor vehicles, followed by 127 collisions with parked vehicles and 102 with fixed objects. There were 19 collisions involving bicyclists and 15 involving pedestrians.

A review of the primary collision factors indicates that the highest causative factor was right-of-way violations (130 of 708 collisions), while the cause was unknown in 128 reported collisions. The factor stated next most often was "other improper driving," indicated for 80 collisions, followed by unsafe starting or backing for 79 collisions. Driving under the influence of alcohol or drugs was listed as the primary factor for 57 collisions, unsafe speed for 45 collisions and improper turning for 44 incidents.

Based on the collision records for 1998-2001, the ten locations with the highest incidence of crashes were determined. The rankings and number of collisions during the study period are indicated for each intersection in Table 36. The highest concentration of collisions has occurred at Healdsburg Avenue/Mill Street/Vine Street. Although signalized, this intersection has five approaches so may be somewhat confusing to unfamiliar drivers such as the numerous tourists that come to Healdsburg. The City is considering options for improving both the safety and efficiency of this intersection, including a roundabout.

Table 36 Highest Collision Incidence Locations (1998-2001)

Ranking	Intersection	Collisions
1	Healdsburg Ave./Mill St./Vine St.	34
2	Dry Creek Rd./Grove St.	18
3	Matheson St./Center St.	17
4	Healdsburg Ave./Grant St.	16
5	Healdsburg Ave./Exchange Ave.	14
5	North St./Center St.	14
5	Healdsburg Ave./U.S. 101 North	14
8	Healdsburg Ave./Matheson St.	13
9	Healdsburg Ave./North St.	12
9	Center St./Plaza St.	12

5.2 Pedestrian Facilities

Pedestrian facilities in Healdsburg consist of sidewalks, typically located on both sides of all public streets. Gaps in the system exist on some of the arterial and collector streets, including Dry Creek Road, Grant Street, Grove Street (which has sidewalk on its east side between Dry Creek Road and Healdsburg Avenue and a pathway on its east side between Dry Creek Road and Grant Street), Healdsburg Avenue, one block of Matheson Street, Mill Street, Monte Vista Avenue, Powell Avenue, and University Street. There are no sidewalks or other pedestrian amenities on Chiquita Road, North Fitch Mountain Road or South Fitch Mountain Road. Pedestrian crossings are provided at most signalized intersections, including pedestrian signals. There are a number of unprotected crosswalks on Healdsburg Avenue. However, additional protective have been provided at the mid-block crosswalk between North Street and Piper Street, including signage, striping and brick pavers. Similar treatment should be considered for the crossing at Plaza Street.

5.3 Bicycle Facilities

The City of Healdsburg's Bicycle & Pedestrian Master Plan includes a network of bicycle amenities that includes Class I (off-street paths), Class II (bicycle lanes) and Class III (bicycle routes) facilities. The bulk of the system is comprised of Class III routes; however, there is a Class I path adjacent to the west side of the railroad tracks between Vine Street/Mill Street to Norton Slough north of City Hall and Class II bike lanes are provided on Parkland Farms Boulevard, Rosewood Drive and sections of Grove Street and Poppy Hill Drive. Signs are posted along the bicycle route that utilizes local collector and arterials streets. The Foss Creek Pathway, when completed, will provide a 4.1-mile long, off-street bicycle and pedestrian path running from the northern city boundary to just north of the Russian River bridge.

5.4 Rail Service

A railroad line located between U.S. Highway 101 and Healdsburg Avenue runs north-south through the City. It is owned by the North Coast Railroad Authority north of the intersection of Healdsburg Avenue with Mill Street-Vine Street, and by the Sonoma Marin Area Rail Transit Commission (SMART) south of the intersection. There is currently no service on this line;

however, use for freight hauling may resume in the future. Additionally, planning is progressing to provide passenger rail service, though there is not currently an anticipated start up date for this service.

5.5 Air Service

Air transportation for the city's residents includes layers of service that are similar to the roadway system. Limited service is available at the Healdsburg Municipal Airport located on Lytton Springs Road north of the city. This airport has a 3,100-foot runway capable of handling small jets. Facilities at the airport include hangars, maintenance buildings, commercial buildings, and fuel storage and pumps. However, there is no tower, nor is the airport regularly staffed. The airport primarily serves the needs of the wine and geothermal industries and recreational flyers. It is occasionally used when the Sonoma County Airport is fogged in and for medical emergencies. Within the Healdsburg Planning Area, only a few lots of the Vintage Hills subdivision west of the freeway are located within the Municipal Airport's referral area and its Traffic Pattern and Outer Safety Zones, as defined in the Sonoma County Comprehensive Airport Land Use Plan. These lots are developed with single-family residences.

Sonoma County Airport, located approximately eight miles south of Healdsburg, is a commercial service airport with facilities for airline passenger service, business and recreational aircraft plus law enforcement, emergency medical service, and fire-fighting aircraft. Horizon Air is currently providing service to Los Angeles, Las Vegas, Portland and Seattle on a daily basis.

Three major airports - San Francisco, Oakland and Sacramento International Airports - are all within a two-hour drive of the city.

5.6 Taxi Service

Healdsburg Taxi Cab Company provides taxi service in Healdsburg.

5.7 Transit Service

Healdsburg Transit (HT) operates within city limits on a variable fixed route system. Bus service runs weekdays and Saturday from 8:30 a.m. to 4:20 p.m. Door-to-door Dial-A-Ride service is available on weekdays with scheduled pickups starting at 9:15 a.m. and ending at 1:15 p.m. All the HT buses are equipped with wheelchairs lifts and are disabled accessible.

Sonoma County Transit (SCT) Route 60 provides daily regional fixed-route bus service to the city. It operates between the Downtown Transit Mall in Santa Rosa and the City of Cloverdale City Hall, traveling through the city along Healdsburg Avenue north of Exchange Avenue (due to weight limitations on the Russian River bridge) and sections of Grove Street and Dry Creek Road. Scheduled stops are made at 11 locations in the city, depending on whether the particular route ends in Healdsburg or passes through. Weekday service operates on variable headways of between fifteen minutes and one hour. Weekend service operates with headways that vary from one to three hours. All routes serving the city have substantial remaining capacity for additional passengers.

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6 Utilities and Services

The City of Healdsburg is dependent on a network of utilities. Each type of utility has a unique set of constraints and must adapt to growth differently. Healdsburg is unique in that it provides most of the key facilities and services required to support growth. This chapter reviews key utilities and facilities, primarily focusing on water, sewage collection and treatment, electrical distribution, and solid waste collection and disposal.

6.1 Sewage Collection and Treatment

The sewage collection, treatment, and disposal facilities that serve the city are owned and operated by the City of Healdsburg. The City's wastewater treatment plant (WWTP) is located approximately one mile southwest of the city limits, on Foreman Lane just south of the confluence of Dry Creek and the Russian River. The plant was recently upgraded to the Advanced Waste Treatment level and utilizes a membrane bio-reactor process. Its components include influent screening, grit removal, extended aeration with biological nutrient removal, microfiltration through hollow membrane fibers, and ultraviolet light disinfection. The new treatment plant also includes two flow equalization basins, two digestion tanks, and centrifuge equipment for biosolids dewatering. The treatment plant is designed for an average daily flow of 1.6 million gallons per day (mgd). The equalization basins and wet-weather treatment capacity (4.0 mgd) together are sized to accommodate a storm event producing wet weather flows of up to 9.3 mgd.

The City does not currently use or provide recycled water to customers. However, the City will be constructing a seasonal irrigation reuse system as an additional component of the WWTP Upgrade Project.[36]

The wastewater treatment plant has a permitted dry-weather capacity of 1.4 mgd, and the City has not requested an increase in this permitted capacity. The average dry weather flows (adwf) between 2000 and 2008 is shown below:

Table 37

Wastewater Treatment Plant Average Dry Weather Flow

Year	ADWF
2000	0.84 mgd
2001	0.81 mgd
2002	0.98 mgd
2003	0.88 mgd
2004	0.98 mgd
2005	0.92 mgd
2006	0.95 mgd
2007	0.81 mgd
2008	0.86 mgd

[36] *Final Healdsburg Urban Water Management Plan*, 2005.

Taking the highest adwf (0.98 mgd) as the base year, the unused capacity available to accommodate development and growth under General Plan buildout is a minimum of 0.42 mgd.

The permitted capacity at the WWTP, 1.4 mgd, is contained in the City's NPDES permit from the NCRWQCB. However, the physical capacity of the WWTP is far greater because the WWTP must be sized to accommodate peak loads for both hydraulic (flow) and solids loadings. The WWTP was designed for an annual average daily flow of 1.6 mgd and peak wet weather flows of 4.0 mgd. In addition, the critical components in the WWTP, such as the membrane filter tanks, have been constructed and plumbed so that capacity can be expanded by simply adding additional filter modules. This alone would increase capacity by 11 percent. In addition, membrane technology is constantly improving, and in the time since the WWTP was completed in 2008, retrofittable membrane filters with considerably higher capacity have become available. Increasing the permitted capacity, therefore, will be a matter of preparing an engineering study demonstrating higher capacity, possibly combined with minor equipment retrofits.

The wastewater collection system encompasses a network of collector lines of various sizes, nine small lift stations in various locations throughout the city, and a major lift station on Magnolia Drive that conveys all of the city's wastewater to the treatment facility on Foreman Lane. Local lift stations have been upgraded one by one as part of the City's Capital Improvement Program. All of these lift stations are located in areas that are nearly built-out, and therefore can be expected to have adequate capacity for any in-fill projects.

The Magnolia Lift Station has recently been upgraded to replace aging and outdated electrical equipment improve its overall reliability. Daily wet weather flows, which include inflow and infiltration, have peaked at approximately 5.7 mgd over the past three years. The lift station has a capacity of approximately 6.2 mgd and experiences maximum daily flows of about 5.5 mgd. Therefore, the system has the hydraulic capacity to accommodate the peak wet weather flows as well as additional flows.

Recent major upgrades to the sewer collection system included replacement of a critical section of trunk sewer main on the south end of Healdsburg Avenue. The replacement sewer was adequately sized to allow an eventual tie-in for the industrial development in Area J east of the Russian River. That tie-in is not scheduled to occur in the near future because it needs to span the Russian River. Development of Sub-Area J, which is presently unsewered, will also require construction of collection facilities and a new sewer lift station to pump wastewater from the east side of the River. In addition, one existing sewer line along Grove Street between Dry Creek Road and Chiquita Road is operating at near capacity, and may need to be replaced to accommodate future development in the area.

6.2 Water Service

The city's water system is supplied from three well fields: one on Dry Creek with three operational wells; and two on the Russian River with a total of eight operational wells. At each of the well fields, water is treated with chlorine, fluoride and orthophosphate for corrosion control.

Distribution system facilities include eight storage tanks serving six separate pressure zones within the distribution system, five pump stations and the necessary water mains and

appurtenances for purveying water within the service area. Storage capacity now totals 7.9 million gallons. The system also includes several pump stations and distribution mains.

Until late 2005, the Gauntlett and Fitch well fields could only be used between May 1 and October 31 because of water quality-based restrictions imposed by the California Department of Health Services. During the winter months, these wells experienced turbidity increases during storm events. In 2004 and 2005, the City constructed the Gauntlett/Fitch Water Treatment Facility, which now provides micro-filtration for water produced from the Gauntlett wells, allowing the wells to be used year-round. The second phase of the project, scheduled for 2010, will route water from the Fitch well through this treatment facility as well.

The City presently holds three water right permits: two on the Russian River and one on Dry Creek, as shown in Table 38. In addition, the City has a pending application with the State Water Resources Control Board for additional Dry Creek water. The City's water rights and corresponding diversion limits are listed in the table below:

Table 38 City of Healdsburg Water Rights

Location	Max. annual use (acre feet)	Peak diversion in 2005 (cfs)	Diversion rate limit (cfs)
Dry Creek	420[1]	2.9	1.0
Russian River (Fitch Well Field)	1,385	1.9	3.0
Russian River (Gauntlett Well Field)	1,860	2.5	4.0
Total	**3,665[3]**	**9.7**	**8.0**

Source: City of Healdsburg Public Works Department

[1]There is no explicit annual diversion limit; this estimate is based on a 1 cfs diversion from April through October, which equates to 420 AFY/year.

[2]Total does not include pending applications

The City currently has petitions pending with the State Water Resources Control Board for its two Russian River Water Right Permits (Nos. 7847 and 11039). The petitions are to extend the deadline for putting the water to full beneficial use. Concurrent with revisions to the General Plan, the City is also seeking approval from the State Water Resources Control Board for approval of these petitions. The State Water Resources Control Board has determined that the water for these rights falls under a 10,000 acre-foot per year reservation of "project water" made available from Lake Mendocino. Satisfying upstream demands that fall under this reservation is a condition of the Sonoma County Water Agency's Water rights permits. Approval of the petitions is likely and the City's environmental analysis and planning forecast assume full beneficial use under the permits.

In addition to these rights, the City has a contractual agreement with the Sonoma County Water Agency that allows the City up to 3.9 mgd of diversions under the Agency's water rights permits if appropriated water is not available under the City's own water rights. However, the City has no plans to utilize the agreement in the near future because its own water rights are adequate.

Minimum flows in the Russian River are reduced in dry and critically dry years. These reductions are addressed in the terms of the water rights permits for the Sonoma County Water Agency that regulate summertime flows in the Russian River. However, it is important to note that these minimum flows must be met after first satisfying the needs of lawful and even unlawful diverters of water. Reductions in minimum flows do not translate to a reduction in the City's legal entitlement to water from the Russian River. Conversely, minimum flows are reduced in dry and critically dry years as a means to protect beneficial uses, including instream flows for fisheries, as well as diversions by water users. Therefore, the Urban Water Master Plan (UWMP) drought assessment referenced in the City's Water Supply Assessment (WSA) is correct in its assessment that sufficient water flows must be maintained to meet the City's existing water right entitlements.

Supply is the amount of water that can be provided to the City's water customers based on water rights, water quality, delivery system capabilities, and the physical availability of the water.[37] Currently, the system is designed to meet both peak and annual demand. Each of the three well fields that supply the City's water has been shown to derive its recharge from surface water provided by either the Russian River or Dry Creek flows.

Supply availability to the City's water customers is not expected to decrease in single- or multiple-year drought scenarios, primarily because the Sonoma County Water Agency is required to meet minimum flows at three points on the Russian River, all downstream of the Dry Creek and Russian River confluence; therefore, downstream of all City well fields. The flows are controlled by releases from the Warm Springs and Coyote Valley Dams. Additionally, the water rights permits held by the City presently do not require diversion reductions during droughts.

The Sonoma County Water Agency and the State Water Resources Control Board are expected to consider reductions to these minimum flows as a result of a Biological Opinion (BO) issued by the National Marine Fisheries Service in September of 2008 for listed species of salmon and steelhead[38]. Among other "reasonable and prudent alternatives" considered in the BO is a recommendation to reduce summertime flows to improve rearing habitat conditions for juvenile steelhead and salmon. The BO requires the Sonoma County Water Agency to formally request a reduction in minimum summertime flows in Dry Creek and the Russian River. Although minimum summertime flows may eventually be reduced, the BO explicitly notes that the demands of existing legal water diverters will be met.

Total water use in the urban service area during 2007 was approximately 2.15 mgd; approximately 13 percent was derived from the Dry Creek well field, 23 percent from the Fitch well field, and 64 percent from the Gauntlett well field. With completion of the Gauntlett/Fitch Water Treatment Facility in late 2005, most of the City's water production shifted from the Dry Creek to the Gauntlett and Fitch well fields.

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[37] *Final Healdsburg Urban Water Management Plan*, 2005.

[38] Biological Opinion for Water Supply, Flood Control Operations, and Channel Maintenance conducted by the U.S. Army Corps of Engineers, the Sonoma County Water Agency, and the Mendocino County Russian River Flood Control and Water Conservation Improvement District in the Russian River watershed, U.S. Army Corps of Engineers, San Francisco District, September 24, 2008

The City water system currently serves a population of approximately 12,200. The Fitch Mountain water system is part of Sonoma County Service Area #41, and receives its water from the City of Healdsburg water system through two meters. That system services a population of approximately 950, with 333 residential connections.

A number of pumps boost water from the well fields to eight reservoirs and tanks, located in six different locations. Besides providing a combined storage capacity of 7.9 million gallons, the tanks and reservoirs, due to their elevations, create water pressure for users, including pressure for fire hydrant flows. The older and smaller Sunset and Cadoul tanks can supply fire flows of up to 1,000 gpm by a combination of pumping and use of storage. This capacity does not currently meet Insurance Service Office guidelines.

Portions of Sub-Areas B and C are above the highest elevation (320 feet) that can be served by the City's Gauntlett reservoirs. The construction and environmental effects of a pump station needed to serve certain portions of the Saggio Hills project site (Sub-Area C) were analyzed as part of the Saggio Hills project and its certified EIR. Any future development in Sub-Area B will be assessed at a project level at the time of application for such development and/or annexation to identify pumping and storage requirements that are adequate to provide the pressure and flow capacity needed to meet health and safety requirements.

Existing water distribution mains are adequately sized to accommodate all anticipated growth in the city's north area and along Grove Street. The Grove Street corridor includes an existing 16-inch water main. The Parkland Farms area is also connected directly to the Gauntlett Reservoirs by a 12-inch main, which feeds water to the subdivision. In addition, the recent Rosewood Drive extension provided another water line connection to the Parkland Farms area, completing a looped main. These two water mains are expected to be adequate for the development of Sub-Areas B and C.

6.3 Electrical Service

The City owns and operates its own electric distribution system. The City's Electric Department is responsible for the operation and maintenance associated with the reliable distribution of electricity to residential and commercial customers within the Planning Area except for the Grove Street neighborhood and the Fitch Mountain area, which are served by Pacific Gas & Electric (PG&E). In December 2005, the City's electrical system had 5,461 customers. In the summer of 2007, the system's peak demand was 20.6 megawatts.[39]

Wholesale-priced power for distribution is acquired through the Northern California Power Agency (NCPA). As part of the NCPA, the City owns shares in geothermal and hydroelectric power plants, providing approximately 80 percent of the City's power by "green" sources and natural gas combustion turbine power plants. The City has also installed solar panels on City Hall and is studying the feasibility of using solar power for other city facilities.

The City's electrical system is linked to this generation mix through its interconnection with the PG&E 60,000-volt transmission line at the City's Badger Electric Substation located on Heron Drive.[40] The substation is currently operating at about one-half of its capacity.[41] The

[39] Peter Frates, Senior Electrical Engineering Technician, City of Healdsburg Electric Department, personal communication, 12/28/2007

[40] Ibid.

Electric Department has initiated planning for the addition of a new transformer and additional supportive equipment to increase the capacity and reliability of the substation by 2010.[42]

Two main feeders extend from the substation south along First Street and south to the industrial area along Healdsburg Avenue. Two additional feeders extend northerly to the main part of the City through Tayman Park Golf Course. The main feeders are adequately sized for all potential infill in the City's developed areas.[43] As part of the City's Capital Improvement Program, the City is in the process of creating one more main feeder for the north development area to serve future growth areas as outlined by the General Plan. Table 39 shows the annual usage by land use type in megawatt hours. As shown in Table 39, the City has maintained a fairly constant rate of energy usage.

Table 39 Electric Usage (MWH)

Land Use Type	2003	2004	2005	2006	2007
Residential	25,015	25,892	26,235	26,208	26,500
Commercial	40,304	42,224	43,467	43,842	36,706
Industrial	3,528	3,235	3,662	2,628	11,380
Totals	**68,847**	**71,351**	**73,364**	**72,678**	**74,586**

Note: Commercial includes municipal; Industrial includes outdoor lighting
Source: Electric Utility Department, City of Healdsburg.

Electric service in Healdsburg is supported by monthly user charges as well as by annexation fees and development fees. At the time of development, the City charges an electric development fee based on electrical panel size, plus the actual cost of upgrading the electrical distribution system or installation of additional transformers.

Energy demand in Healdsburg could grow by approximately 15 to 20 percent in the next few years, primarily because of growth in the northern area. After build out of this area, however, growth will be more limited. With the recent expansion of the Badger Substation and on-going maintenance efforts, existing facilities are expected to be adequate to meet demand. Sufficient power is available through purchase power contracts with the NCPA, possible future additional NCPA generation projects, conservation and load management programs, small self-generation projects and purchase power contracts through private qualifying facilities. The City is studying the feasibility of using solar power for some city facilities and has installed solar panels on City Hall.

To encourage energy conservation, the City gives rebates for energy-efficient residential and commercial lighting, appliances, heat pumps, air conditioning, weatherization and photo voltaic systems.

41 Ibid.
42 Ibid.
43 Ibid.

6.4 Gas Service

Natural gas service is provided to the city by Pacific Gas & Electric (PG&E) through portions of their 46,000 miles of natural gas pipeline. There is a natural gas pipeline located on Healdsburg Avenue and within the right-of-way of the Parkland Farms neighborhood. Information regarding the location of pipelines and the quantity of natural gas provided to the city is considered by PG&E to be proprietary information under the Homeland Security Act and is therefore not included.

6.5 Solid Waste

The City contracts its solid waste services to North Bay Corporation and Redwood Empire Disposal. Services include a single-stream recycling system that allows paper, plastic, metals, and glass to be co-mingled rather than requiring separation. Other services include weekly yard waste pick-up, a free bulk waste pick-up that includes e-waste (computers, electronic equipment, etc.) and food waste collection from restaurants.

The waste collection franchise agreement requires public education and community outreach to encourage source reduction and recycling. It also places limits on collection hours and maximum noise that can be generated by collection vehicles.

Solid waste transfer and disposal facilities are owned by the County and serve the cities and unincorporated portions of the county. These facilities include four transfer stations (Healdsburg, Annapolis, Guerneville, and Sonoma), the Central Disposal Site, and the Sonoma Compost Facility. The County's system is managed by the Sonoma County Waste Management Agency of the Department of Transportation and Public Works.

Once collected, solid waste in Healdsburg is hauled to the Healdsburg Transfer Station at 166 Alexander Valley Road, north of the city limits. The Healdsburg Transfer Station serves the unincorporated areas of northern Sonoma County, Cloverdale, Healdsburg, Windsor, and Geyserville. The transfer station is permitted to accept 435 tons per day of solid waste.[44] In July of 2007, the transfer station accepted an average of 241.9 tons per day of solid waste.[45] From this transfer station, solid waste is transported to any of four landfills, depending on the size of loads, time of day, and season. Table 40 shows the permitted daily throughput and permitted and remaining capacities of these four landfills.

Disposal of recyclable materials generated during construction, such as soil, brush and other vegetative growth, dimensional lumber, metal scraps, and cardboard packaging is prohibited at any disposal area in the county. Inspection stations are located at the Healdsburg Transfer Station, Sonoma Transfer Station, and Sonoma County Central Landfill, and loads containing more than 10 percent recyclable materials are subject to surcharges. Recyclable materials can be disposed of at the Healdsburg Transfer Station Reuse and Recycling, Sonoma Transfer Station Reuse and Recycling, the Central Disposal Site, and other local recycling centers.[46]

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[44] Sonoma County Integrated Waste Management Plan, October 13, 2003

[45] Ken Wells, Director of Sonoma County Waste Management Agency, personal communication, September 24, 2007

[46] Sonoma County Waste Management Agency. 2003. Builders' Guide to Re-Use & Recycling.

Table 40 Disposal Facility Capacities

Facility Name	Permitted Daily Throughput (TPD)	Permitted Capacity (tons)	Remaining Capacity (tons)
Redwood Sanitary Landfill	2,300	4,136,885.4	2,794,022
Potrero Hills Landfill	4,330	4,656,703.4	1,776,045
Vasco Road Sanitary Landfill	2,518	6,918,389.6	2,659,707
Keller Canyon Landfill	3,500	16,248,273.0	14,788,752

**Note: TPD - tons per day*

Source: California Integrated Waste Management Board, Facilities/Site Search, website: http://www.ciwmb.ca.gov/SWIS/Search.asp, October 2, 2007.

6.6 Cable Services

Healdsburg receives television and broadband services from Comcast. In addition to residential and commercial cable services, Comcast provides the City with a channel that has been used as a community bulletin board. The contract also provides for an interconnect to the Media Center (located at Healdsburg High School), which is run by "Access Healdsburg," a non-profit corporation made up of local residents. An interconnect from the HHS Media Center to the Media Center located at Santa Rosa Junior College is also provided, which would allow the broadcasting of on-line Junior College classes.

7 Public Safety

This chapter reviews fire, medical emergency and police services.

7.1 Fire Services

- Fire Protection

Fire protection and emergency response services are provided by the City of Healdsburg Fire Department (HFD) for all areas within the incorporated limits of the city and City-owned properties outside of the city limits.

The HFD, in conjunction with the California Department of Forestry and Fire Protection (Cal Fire), the Geyserville Fire District and the Sonoma County Dept. of Emergency Services established a Mutual Threat Zone (MTZ) in 1996 for those areas that encompass the Fitch Mountain area, including the ridgeline to its north. For any fire calls within the MTZ during fire season, aid is provided by all three agencies. The HFD also has a contract to provide fire protection to the County Service Area #40 to the west of the city. Since much of these lands are also within Cal Fire's State Responsibility Areas, the HFD works closely with Cal Fire on any response.

The only HFD fire station is located at the northwest corner of Healdsburg Avenue and Grant Street. The HFD currently has three Type 1 fire engines, two Type 3 engines, one ladder truck, one reserve unit and three utility vehicles. Staff resources include eleven full-time firefighters and a reserve of approximately 32 volunteer firefighters.[47] The ratio of firefighters to population is currently 0.94 per thousand. The HFD has historically relied upon reserve firefighters to meet the demand for service created by call volume. However, this has become more difficult as the training requirements have grown and most persons have less time to dedicate to the HFD.

The Department has two Type 1 fire engines, one Type 2 engine, one ladder truck and three utility vehicles. Staff resources include 11 full-time firefighters and a reserve of approximately 32 volunteer firefighters. The Department has strived to maintain an equivalent of one firefighter per 1,000 persons. This ratio is currently .94 firefighter per 1,000 persons. The Department has historically relied upon Reserve firefighters to meet the demand for service created by our call volume. However, this has become more difficult as the training requirements have grown, many potential volunteers have less time to dedicate to the Department and the high cost of housing discourages those who generally are most interested in volunteering (i.e., young persons). Therefore, it is anticipated that within 10 years, there will not be sufficient Reserve staff available to meet the demands for fire protection services in the general plan area.

To offset this loss, a minimum of six additional full time personnel would be necessary. These findings are consistent with a *Facilities Option Report* prepared in 1989 by Jones & Stokes Associates. In that report, it was determined the Department would need between six and

[47] Randy Collins, City of Healdsburg Fire Chief, personal communication, April 2009.

eight additional full-time firefighters by 2015 (based on an anticipated call volume of 1471). However, this figure has almost been reached in recent years when the department experienced 1455 and 1454 calls in 2005 & 2006 (respectively). This has been in part, due to a marked increase in calls related to medical emergencies and hazardous materials.

The Department's services include fire suppression, fire prevention, building inspection for fire safety, public safety education, weed abatement, disaster preparedness, emergency medical services, fire hydrant maintenance, public assistance, and hazardous materials management.

The City currently maintains an overall insurance rating (ISO) of 4 on a scale of 1 to 10, with 1 being the best.

The Department maintains a standard response goal of less than five minutes and averages a four-minute response time for medical and fire emergencies within the city limits. Response time to the Parkland Farms area in the northern part of the city is close to the five-minute threshold. The Fire Department projects that the response time to development in the northern- and eastern-most areas of the city will exceed the five-minute benchmark unless a north station is constructed.

A Facility Options Report was prepared for the Department in 1989 that evaluated projected conditions in 2015 and presented recommendations to improve fire fighting capabilities. The report findings were based on an increase in projected call volumes to 1,471 by 2015. However, as of 2007 this call volume has been exceeded. This has been, in part, due to a marked increase in medical emergencies and hazardous materials calls. The 1989 report also noted that a northern substation could be needed, depending upon development in Sub-Areas B and C. In fact, a northern substation will be constructed as part of the Saggio Hills project that was approved by the City Council in 2008.

- Fire Hazards

Figure 13 depicts areas of high fire hazard as identified by Cal Fire. The zone of high fire hazard includes much of Fitch Mountain, particularly its western and southern slopes, and the wooded and brush-covered ridges in Sub-Areas B and C. The concern in these zones is primarily for fire equipment accessibility, and the interface between flammable wildland vegetation and residential structures. Existing streets in the Fitch Mountain area, both within city limits and within County jurisdiction, are relatively narrow and include sharp turns and dead ends. Because of these constraints, the City uses smaller apparatus to respond to fires in this area. In addition, the existing water system in the area has limited storage capacity, particularly the zones served by the Cadoul and Sunset water storage tanks.

- Risk Reduction Measures

The City has required the installation of sprinkler systems in all new buildings since 1987 and encourages them in existing structures. Sprinklers reduce the overall amount of water needed to control structural fires by 50 to 75 percent. The City's requirement for fire sprinklers in all new development also reduces fire risks, since the systems are extremely effective in extinguishing structure fires.

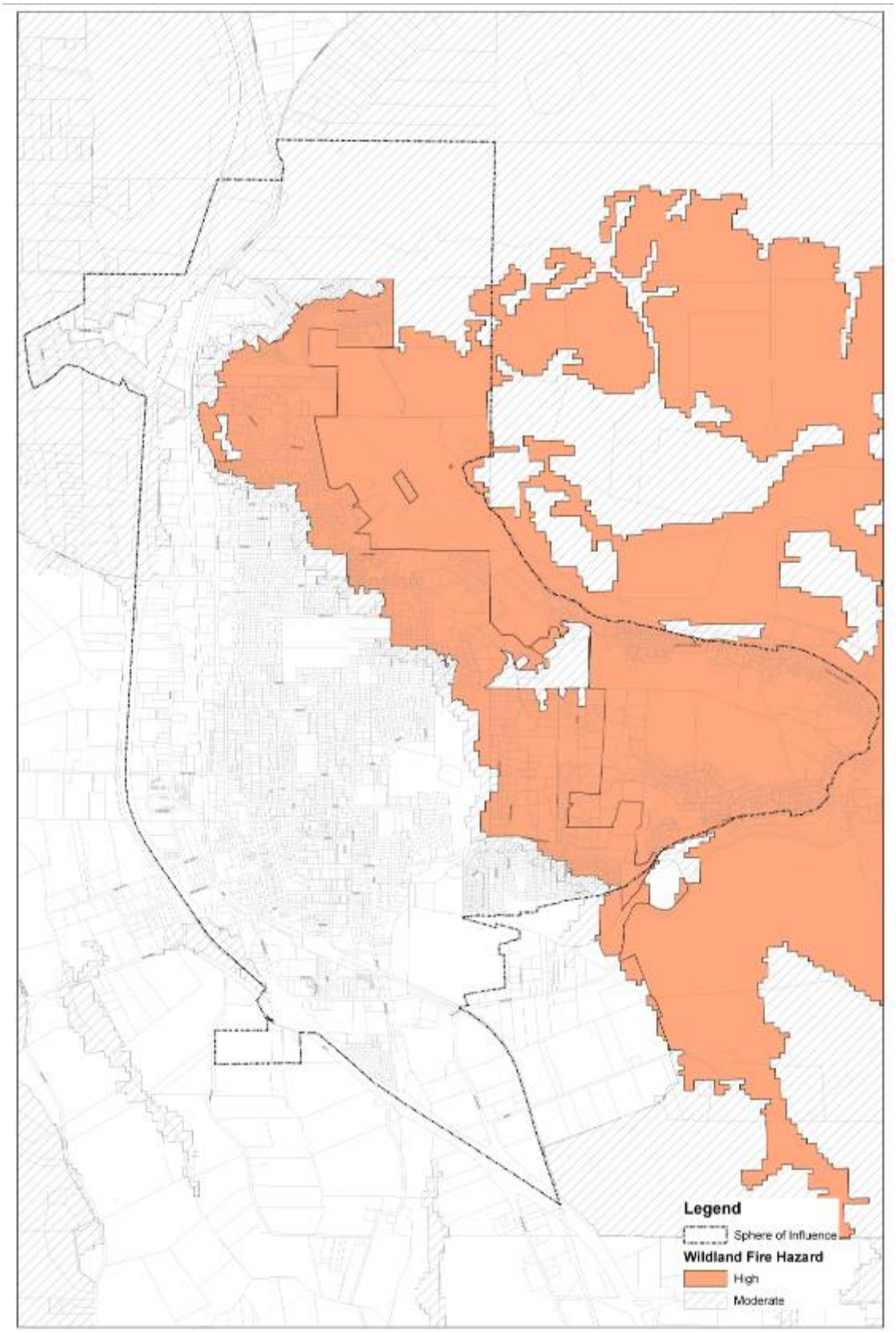

Figure 13 Wildland Fire Hazard Zones

Other requirements under the City fire code include fire-resistant roofing, minimum hydrant spacing, the provision of more than one access road into new development, and vegetation clearance around structures and along roads in areas with wildland fire hazards, as well as the provisions of the International Wildland Urban Interface Code, Phase I. [48] Phase II of this code will go into effect in mid-2008.

Fire reduction measures have also been adopted by the City in the specific plan for Sub-Area A, the Ridgeline North Area Plan and the Saggio Hills Area Plan. These include construction and maintenance of fuel breaks, management of fire-prone vegetation along streets, maintenance of clearances around structures, providing minimum street widths and turning radii, limiting the lengths of cul-de-sacs and dead end streets, limiting excessive street grades, and requiring at least two access roads in and out of developed areas.

- Emergency Operations

The City of Healdsburg Emergency Operations Plan, adopted in December 2007, specifies roles and responsibilities during an evacuation. A draft Emergency Operations Center operations manual has been prepared and is anticipated to be adopted in early 2009.[49]

7.2 Medical Emergency Response Services

Medical emergency response is provided by both the Fire Department, which provides basic life support, and Bell's Ambulance Service, which provides advanced life support and transport to medical facilities. Bell's Ambulance Service is a private company located in town, which serves both the city and the surrounding area. As with fire emergencies, four to six minutes is considered the maximum acceptable response for most medical emergencies.

7.3 Hazardous Materials

The Fire Department has been delegated responsibility for dealing with hazardous materials within two respective disciplines: response to hazardous materials releases and administration of a variety of State regulatory programs for controlling risks from hazardous material use, storage, and disposal.

The Department responds to all reported releases of hazardous materials and has been assigned the authority as *Incident Scene Manager* pursuant to City Ordinance 871. In accordance with State training requirements, all Department personnel are trained to the *First Responder Operational* level, while Department officers are trained to the *Incident* Commander level. Although the City contracts with the County of Sonoma for a Hazardous Materials Entry Team when required, the department performs multiple roles such as Incident Commander, Safety Officer, Decontamination, and perimeter security.

Due to the extended nature of releases, hazardous materials incidents can be very taxing upon the resources of the Department. In 1999, a release of a corrosive solution into Foss Creek involved the resources of the Department for almost a week. As an agency that depends heavily upon reserve personnel, it has become difficult to maintain the staffing necessary for incidents with such duration.

[48] Ibid.

[49] City of Healdsburg Fire Department, personal communication, January 5, 2009.

As part of its administrative responsibility, the Fire Department has been certified as a Certified Unified Program Agency (CUPA). The CUPA consists of six programs: Hazard Material Business Plan (HMBP - also part of the California Fire Code); Risk Management Plan (California Accidental Release Prevention Program); Underground Storage Tank Systems; Hazardous Waste Generator Program (control of persons or businesses generating hazardous waste), Hazardous Waste Treatment, and Above Ground Storage of Petroleum Products.

The CUPA is responsible for issuing permits, performing inspections, issuing reports, enforcement orders, citations, pursuing criminal and civil actions as necessary and collecting penalties for any required mitigation of violations. In addition, certain reporting and auditing requirements must be performed and forwarded to the State each year.

The program is required to be self-supporting by fees collected from issuing permits under the program. An analysis of the program costs has been performed to establish the current fees that are periodically re-evaluated and raised as needed.

The Department issued its most current annual report/audit of the program in January 2008. At that time, the city had 151 regulated businesses. Of that number, all fell into the HMBP Program, 65 into the Hazardous Waste Generator Program. Eighteen were subject to the Underground Storage Tank Regulations, one to the CalARP program and two to the Waste Treatment requirements. Of the 151 regulated businesses, 86 had received an annual inspection; while 34 of the regulated businesses were permitted to perform self-inspections.

In addition to commercial/industrial hazardous materials, household hazardous materials are generated in the city. Hazardous waste generated in homes includes products such as paint, batteries, fertilizers, and used motor oil. Wastes can be disposed of two ways - at the Household Hazardous Waste Collection Facility at the Central Landfill and through local collection events held by the Sonoma County Waste Management Agency program. In 2007, three such events were held in Healdsburg at the City Corporation Yard.

A serpentine knoll was identified in the southwest corner of the Saggio Hills project site in the area planned for the community park. Laboratory analysis determined that the serpentinite contains the chrysotile form of naturally-occurring asbestos (NOA) in concentrations ranging from trace amounts (less than 0.25%) to 1.40%. NOA is regulated by the Air Resources Board (ARB), and concentrations of NOA above 0.25% are considered by ARB as hazardous levels for residential development. Therefore, NOA on the project site could pose a health hazard to construction workers and future residents if fragments were to become airborne and inhaled.

7.4 Police Services

The Healdsburg Police Department (HPD) is located at 238 Center Street. According to the Police Chief[50], this facility is considered adequate for existing needs. The HPD currently employs 18 sworn officers, including the Chief of Police, and 12 civilian employees. The HPD has one detective, one school resources officer, one downtown foot patrol officer, one administrative sergeant, four patrol sergeants, and ten patrol officers. The HPD currently maintains an officer-to-population ratio of 1:644. The HPD has six marked patrol vehicles all equipped with AR-15 rifles, Automated External Defibrillators (AED), and a first aid kit. The HPD also has one unmarked detective vehicle, and two administrative unmarked vehicles. All

[50] Susan Jones, City of Healdsburg Police Chief, January 4, 2005

unmarked vehicles are equipped with AEDs. There is also one Go-4 Parking Enforcement vehicle and an Emergency Services Unit van which houses a mobile communications center. All 18 sworn police officers and two reserve officers are issued portable radios and tasers. The two Community Service Officers carry their own portable radios. Thirteen officers carry their own sidearm, and five officers were issued a sidearm.[51]

Between 2000 and 2005, there was an overall decrease in crimes committed in the city, except for a slight increase in burglaries and arsons. There was a 100 percent decrease in aggravated assaults. Overall, crime in the city dropped 1.5 percent between 2004 and 2005. After receiving funding from the Indian Gaming Committee in 2006, the HPD concentrated their efforts on traffic enforcement. Traffic citations and driving under the influence arrests increased, while there was a decrease in traffic collisions.

The Department receives approximately 16,000 annual calls for service (889 calls per sworn officer). It maintains an emergency response time of two to three minutes throughout the Urban Service Areas for emergency calls through the use of mobile units. Annexation and development of outlying areas within the Urban Service Area is not expected to significantly alter this response time, provided that adequate access is provided.

[51] Susan Jones, City of Healdsburg Police Chief, email dated September 14, 2007.

8 Schools

Healdsburg Unified School District (HUSD) operates two campuses of its elementary school: Healdsburg Elementary (grades K through 2) and Fitch Mountain Elementary (grades 3 through 5) as well as Healdsburg Junior High School (grades 6 through 8), Healdsburg High School (grades 9 through 12), and one continuation high school, Marce Becerra. HUSD enrollment in Fall 2007 included 390 students at Healdsburg Elementary, 391 students at Fitch Mountain Elementary, 534 students at Healdsburg Junior High, 890 students at Healdsburg High, and 52 students at Marce Becerra.

There are four additional schools that are not part of the HUSD, but whose students attend the District's junior high and high school. Alexander Valley Elementary School and the Westside Elementary school contribute students to Healdsburg Junior High and Healdsburg High School. St. John the Baptist Catholic School and the Healdsburg School are both private schools and contribute students to Healdsburg High School. The District has open enrollment, which means any student wishing to enroll in the District's schools may do so after filling out an application. It accepts students from other districts as well after they have submitted an inter-district transfer application.

Enrollment in Fall 2007 at Alexander Valley Elementary School was 119 students, 163 students at Westside Elementary School and 277 students at St. John the Baptist Catholic School (grades K-8). The Healdsburg School, which opened in August 2007 with grades 7 and 8, had 15 students. Beginning August 2008, they will serve grades K through 8.

Student enrollment in the District has declined steadily during the past decade. Reasons for the decline in enrollment have included the soaring real estate costs in Healdsburg, which prices many younger families with children out of the local housing market, and the opening of Windsor High School in 1995. Up until then, Windsor students were educated in elementary schools in Windsor but then transferred to Healdsburg High School, due to a lack of such a facility in Windsor. Students have also been transferring to Cloverdale schools. The District had 149 fewer students for the 2007-8 school year than the previous year.

As shown in Table 41, total student enrollment for school year 2007-2008 for HUSD schools was 2,257 students, which was 1,705 students less than their capacity. The four Healdsburg area schools that not a part of the HUSD, but that contribute students to the junior high and high schools, had a total enrollment of 574, which was 238 students less than their capacity.

Table 41
Enrollment and Capacities, Healdsburg Area Schools 2007-08

School Name	2007-08 Enrollment	2007-08 Capacity
Healdsburg Elementary[1]	390	750
Fitch Mountain Elementary[1]	391	700
Healdsburg Junior High[1]	534	750
Healdsburg High[1]	890	1,710
Marce Becerra[1]	52	52
Sub-total public schools	**2,257**	**3,962**
Alexander Valley Elementary[2]	119	160
Westside Elementary[3]	163	175
St. John the Baptist[4]	277	317
The Healdsburg School5	15	160
Sub-total private schools	**574**	**812**

Sources:

[1] Patti Jobson, Administrative Assistant to Superintendent, September 25, 2007 and January 31, 2008.
[2] Zara Raab, Alexander Valley Elementary School, October 29, 2007.
[3] Margret Ross, Westside Elementary School, November 15, 2007.
[4] Noelle Brown, Receptionist, St John the Baptist Catholic School, October 29, 2007.
[5] Deanna Fontanes-Halliday, Admissions Director, The Healdsburg School, October 29, 2007.

9 Parks and Recreation

9.1 Existing and Proposed Park Facilities

The City of Healdsburg's Community Services Department (CSD) operates and maintains a variety of parks and recreational facilities throughout the regional area. The CSD's service area is coterminus with that of the Healdsburg Unified School District (HUSD).

In addition to the Healdsburg Plaza and West Plaza Parks, Villa Chanticleer, Tayman Park Golf Course, Municipal Pool, and Senior Center, there are seven neighborhood and community parks within the city. Dog parks are also provided at Badger Park and Villa Chanticleer. In addition, Sonoma County operates and maintains the Veterans Memorial Beach Park, located on the east side of the Russian River just south of Healdsburg Avenue. Both City-and County-owned park facilities and associated acreages are shown in Table 42; the locations of parks in Healdsburg are shown in Figure14.

Table 42 Parks in Healdsburg

Property Name	Acreage
Barbieri Brothers Park	3.5
Byron Gibbs Park	2.5
Villa Chanticleer	16.7
Tayman Park / Golf Course	60.0
Giorgi Park	3.0
Recreation Park	4.0
Tilly Park	0.6
Plaza	1.0
Railroad Park	1.0
Badger Park and community garden	11.0
Carson Warner Memorial Skate Park	1.0
West Plaza Park	1.5
Veterans Memorial Beach Park	11.0

Including the City's seven neighborhood and community parks as well as Healdsburg Plaza, West Plaza Park, Carson Warner Memorial Skate Park, and the County's Veterans Memorial Beach Park, but excluding the Tayman Park Golf Course, Villa Chanticleer, Municipal Pool, and Senior Center, the city currently has total public park acreage of 43.32 acres. A joint use agreement with the HUSD provides another 25 acres of school athletic fields that are also available for limited community use.

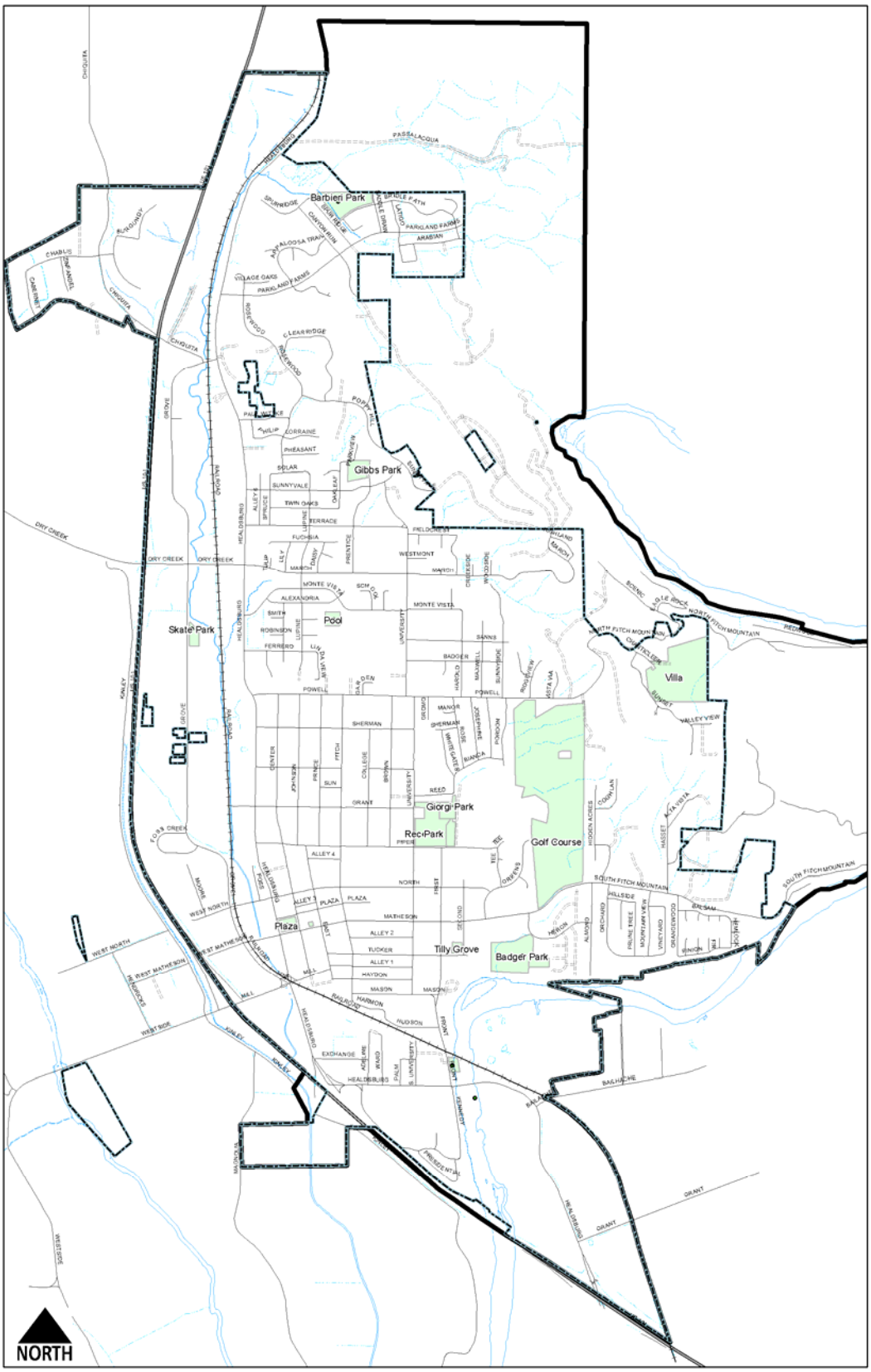

Figure 14 Healdsburg Area Parks

The City's goal is to provide 5 acres of developed neighborhood and community parkland per 1,000 residents. Based on a current approximate population of 11,706 residents, the city should have approximately 59 acres of developed neighborhood and community parks. However, as noted above, including the County Veterans Memorial Beach Park, the city has a total of 43.32 acres of community and neighborhood parks. Therefore, the city currently is deficient by almost 16 acres in meeting this goal in terms of developed neighborhood and community park acreage relative to population. In addition to a deficiency of regional park acreage, there remains a strong need for more play fields for organized team sports in Healdsburg. Other high-priority recreation needs identified in the 2006 Recreation Needs Assessment include fitness and wellness programs; nature programs; adult art, dance and performing arts programs; water fitness programs; city-wide special events and youth sports programs.

The City recently approved a 36.15-acre community park that will be constructed as part of the Saggio Hills project. The park will provide two lighted soccer fields, a multi-use field, picnic areas, basketball courts, playgrounds, a volleyball court and a trail network that will link to off-site recreation areas and scenic overlooks. The Saggio Hills project will also construct a public hiking trail encircling the hill at the northwest corner of the site. A 10-foot wide pedestrian and bicycle trail will also extend from Healdsburg Avenue through the community park and affordable housing site, connecting to the Healdsburg Ridge Open Space Preserve and the Parkland Farms neighborhood.

9.2 River Recreation

The Russian River is a significant recreational resource in the city. Currently public access to the river is limited to the Veterans Memorial Beach Park, while Railroad Park on the opposite bank north of Healdsburg Avenue provides a scenic overlook. Besides swimming, the river is also heavily used for canoeing and kayaking. With the summer dam and the year-round fish ladder in place, canoeists must portage around this obstacle and use private land owned by the Syar Company.

While the California Department of Fish and Game owns the bank of the river opposite from the Veterans Memorial Beach Park, this area is also informally used by persons and families for picnics adjacent to the river. This area suffers from trash problems since it is not maintained routinely by the Department of Fish and Game and is closed during the summer.

9.3 Public Recreational Trails

Presently, there are approximately two miles of public hiking trails in the 161-acre Healdsburg Ridge Open Space Preserve, which will be expanded to 3.5 miles in 2009. Existing unpaved roads in the southern portion of Sub-Area B are also utilized by local residents for recreational walking and to enjoy excellent views over the city and the Diggers Bend area of the Russian River.

The City is now working with property owners in Sub-Area B to secure trail easements. These easements would include irrevocable offers for public trails although the exact locations have yet to be established. Land for trails could also be acquired by either the City purchasing land outside the city limits to serve a public purpose, or as part of an annexation.

A plan for the multi-modal (i.e., accommodating both pedestrians and bicycles) Foss Creek Pathway alongside the Northwestern Pacific Railroad and Foss Creek has been adopted and two segments have been constructed.

10 Health Services

This chapter of the background report reviews health services in Healdsburg.

10.1 Healdsburg District Hospital

The North Sonoma County Healthcare District, dba as Healdsburg District Hospital (HDH), is a public agency with an elected board of directors. HDH is located at 1375 University Street in Healdsburg and serves an area with a population of approximately 65,000 in Healdsburg, Windsor, Geyserville and Cloverdale, as well as the surrounding unincorporated areas.

HDH is a full-service critical access hospital offering the following services:

- A medical staff of 122 physicians and 25 specialties, located in Healdsburg, Windsor, Cloverdale and Santa Rosa.
- A newly-opened emergency room offers specialties such as general surgery, orthopedics, anesthesia, urology and pulmonary care.
- A four-bed intensive care unit that cares for the general medical needs of critically ill patients. Additionally, a wide range of specialists are available to the hospital by way of remote presence technology (robotics).
- Inpatient medical-surgical and sub-acute services that provide care for general medical and surgical patients. The sub-acute unit is one of only a few in the state caring for long term patients with particular needs, such as brain injuries or other serious injuries or illnesses.
- An imaging center that utilizes state of the art radiology equipment and offers the following services:
  - X-ray
  - Mammography
  - Ultrasound
  - High-speed helical CT scanning
  - DEXA scans (bone density screening for osteoporosis)
- Occupational medicine services that provide pre-employment services to local employers.
- A clinical laboratory that performs common blood tests and offers an outpatient draw station, so patients can have blood drawn without having to enter the hospital.
- Surgery services, which besides providing general surgery, offers:
  - Endoscopy with anesthesia stand-by
  - Orthopedic procedures, including joint replacement
  - Laparoscopic work, including gall bladder and reflux correction
  - Hernia repairs

  - Cataract surgery
  - Full range of gynecological services
- Rehabilitation services, including occupational therapy, physical therapy and speech therapy.
- The Ayudante Program, which offers:
  - Bilingual hospital welcoming and guidance, available seven days a week.
  - Spanish translation assistance throughout the hospital.
  - Education outreach programs in both English and Spanish on health promotion and disease prevention topics identified by patients.

HDH's physical plant is expected to be functional until 2030. Further analysis is underway as to the need for a building replacement after 2030. Potential acquisition of adjacent land and building a new hospital, medical campus, medical offices and parking will be a priority for the North Sonoma County Healthcare District.

10.2 Alliance Medical Center

Alliance Medical Center (AMC) was founded in 1971 by community volunteers to address the lack of health care resources for migrant Hispanic farm workers and their dependents in Healdsburg and the surrounding areas.

AMC is a non-profit organization that serves patients from throughout northern Sonoma County, primarily those in three rural census tracks that are designated as Medically Underserved Populations (MUP). Of the patients served, over 90% are living at or below 200% of the poverty level; 85% are Hispanic, a majority of whom are monolingual Spanish speaking. The AMC staff and governing board are bilingual and bicultural.

AMC has maintained a commitment to serve all who come "knocking at the door" in need of care regardless of ability to pay. In addition to typical health services, AMC offers complete dental services, diabetes case management, hypertension case management, and specialties including podiatry, pediatrics, dermatology, ear, nose and throat, psychology, chiropractic and acupuncture.

10.3 Private Medical Practices

A wide range of private medical practices provide service to the residents of Healdsburg, including family doctors, specialists, chiropractors, dentists and orthodontists and plastic surgeons. A cluster of medical offices is located on March Avenue, adjacent to the hospital.

11 Cultural Resources

This chapter of the background report addresses cultural resources (i.e., archaeological and historical sites and buildings) in Healdsburg.

11.1 Archaeological Resources

The area that now comprises Healdsburg and its Urban Service Area was originally inhabited by Native Americans. This included an unusually dense Southern Pomo and Wappo tribes in the Dry Creek and Alexander Valleys, respectively. Their population once numbered close to 10,000 before it was decimated by small pox epidemics and hostility from the Mexican and later by secondary Euro-American settlement in the 1850's. Those who survived were displaced to missions or rancherias (reservations).

After the demise of local Native American settlement in the area, there nevertheless remain many village or midden sites and individual artifacts throughout the Healdsburg area, particularly on terraces close to creeks and the Russian River, which was a rich source of food. Many of these sites or artifacts have been recorded as part of the environmental process required for projects, or have been unearthed accidentally during construction.

11.2 Historical Resources

Euro-American settlement began in the Healdsburg area began when it became a part of the Rancho Sotoyome, a large land grant to Henry Fitch in 1841. Fitch hired Cyrus Alexander to manage the ranch that now includes Healdsburg. After 1848 and the Gold Rush, Euro-American settlement in the area increased sharply. Harmon Heald built the first general store in 1852, and officially laid out the town in 1857, which includes today's plaza. The population swelled from 300 in 1857 to almost 2,000 in 1887, then stabilized until the 1940s. After World War II, there was rapid growth in both Sonoma County and Healdsburg, with new suburbs being built extending mostly to the north and east from the city's original core.

Reflecting its earlier history, Healdsburg contains many historic buildings representing a broad range of architectural styles, including Queen Anne, Italianate, Homestead, Greek Revival, and Neo-classical. In 1983, an extensive Cultural Resource Survey was published, documenting 450 historic properties in the city.

The former Carnegie Library, which now houses the City Museum, is the only building in the Urban Service Area listed on the National Register of Historic Places. However, other buildings in the Healdsburg area may be eligible for the National Register, based on the historical significance of the building. A building's historic significance is generally related to the age of the building, whether it has been moved from its original location, its association with historically important persons, its architectural styling and integrity, and the degree to which modifications have been made.

11.3 Historical Preservation Efforts

The City of Healdsburg adopted an ordinance in 1987 establishing procedures for the designation of historic districts, landmarks, and buildings. Properties may be designated

following a public hearing (unless upon petition of the property owner) and upon recommendation of the Planning Commission acting as the Historic Committee. Individual buildings or landmarks so designated, or buildings within a designated historic district, require permits for any proposed demolition or alteration involving more than 25% of existing floor area (over a 24-month period of time) or accessory buildings over 400 square feet in floor area, as well as any new construction in historic districts.

To date, the Historic District Overlay Zone has been applied to the properties on both sides of Johnson Street, several blocks of Matheson Street, and 10 individual buildings and properties.

Many historic buildings in the Healdsburg area are not within historic districts or are not designated buildings or properties. The most serious threat to historic buildings in the Healdsburg area, other than demolition, is alterations or additions which can adversely impact the architectural integrity and historic significance of a building.

11.4 Paleontological Resources

Paleontology is the study of the forms of life existing in prehistoric or geologic times, as represented by the fossils of plants, animals, and other organisms. Paleontological remains are fairly common in Sonoma County. They include the fossilized remains of plants, invertebrates, and vertebrates ranging in age from approximately 140 million years to less than 8,000 years before the present.

Rocks of the Franciscan Assemblage, which have been known elsewhere to contain paleontological remains, underlie a small area in the northern portion of the city.

12 Agricultural Resources

The California Department of Conservation operates the Farmland Mapping and Monitoring Program (FMMP), which monitors the conversion of the state's farmland to and from agricultural use. The Healdsburg Sphere of Influence includes eight FMMP classifications of land capability, which are shown in Figure 15 and described below.

- Prime Farmland

Prime Farmland is land that has the best combination of physical and chemical characteristic for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Prime Farmland must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

- Farmland of Statewide Importance

Farmland of Statewide Importance is land other than Prime Farmland which has a good combination of physical and chemical characteristics for the production of crops. It must have been used for the production of irrigated crops at some time during the two update cycles prior to the mapping date. It does not include publicly-owned lands for which there is an adopted policy preventing agricultural use.

- Unique Farmland

Unique Farmland is land which does not meet the criteria for Prime Farmland or Farmland of Statewide Importance, that has been used for the production of specific high economic value crops at some time during the two update cycles prior to the mapping date. It has the special combination of soil quality, location, growing season, and moisture supply needed to produce sustained high quality and/or high yields of a specific crop when treated and managed according to current farming methods. Examples of such crops may include oranges, olives, avocados, rice, grapes, and cut flowers. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

- Farmland of Local Importance

Farmland of Local Importance is either currently producing crops, has the capability of production, or is used for the production of confined livestock. Farmland of Local Importance is land other than Prime Farmland, Farmland of Statewide Importance or Unique Farmland. This land may be important to the local economy due to its productivity or value. It does not include publicly-owned lands for which there is an adopted policy preventing agricultural use.

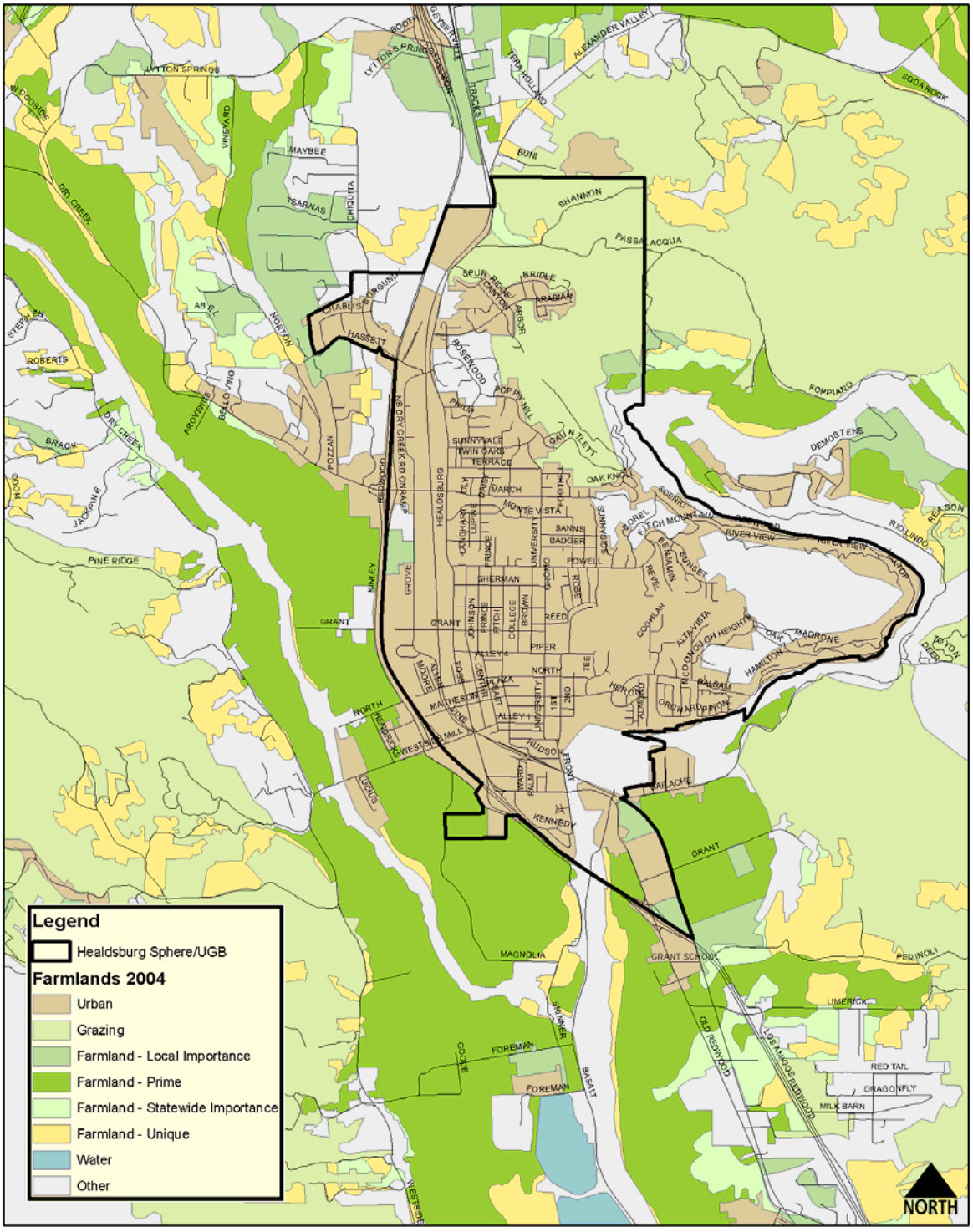

Figure 15 Agricultural Resources

- Grazing Land

Grazing Land is defined in Government Code §65570(b)(3) as, "...land on which the existing vegetation, whether grown naturally or through management, is suitable for grazing or browsing of livestock." The minimum mapping unit for Grazing Land is 40 acres. Grazing Land does not include land previously designated as Prime Farmland, Farmland of Statewide Importance, Unique Farmland, or Farmland of Local Importance, and heavily brushed, timbered, excessively steep, or rocky lands which restrict the access and movement of livestock.

- Urban and Built-Up Land

Urban and Built-up Land is used for residential, industrial, commercial, construction, institutional, public administrative purposes, railroad yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment plants, water control structures, and other development purposes. Highways, railroads, and other transportation facilities are mapped as a part of Urban and Built-up Land if they are a part of the surrounding urban areas.

Units of land smaller than ten acres are incorporated into the surrounding map classifications. The building density for residential use must be at least one structure per 1.5 acres (or approximately 6 structures per 10 acres). Urban and Built-up Land must contain man-made structures or buildings under construction, and the infrastructure required for development (e.g., paved roads, sewers, water, electricity, drainage, or flood control facilities) that are specifically designed to serve that land. Parking lots, storage and distribution facilities, and industrial uses such as large packing operations for agricultural produce will generally be mapped as Urban and Built-up Land even though they may be associated with agriculture. Within areas classified as Urban and Built-up Land, vacant and nonagricultural land which is surrounded on all sides by urban development and is less than 40 acres in size will be mapped as Urban and Built-up. Vacant and nonagricultural land larger than 40 acres in size will be mapped as Other Land.

- Other Land

Other Land is that which is not included in any of the other mapping categories. The following types of land are generally included:

- rural development which has a building density of less than one structure per 1.5 acres, but with at least one structure per ten acres;
- brush, timber, wetlands, and other lands not suitable for livestock grazing;
- government lands not available for agricultural use;
- road systems for freeway interchanges outside of Urban and Built-up Land areas;
- vacant and nonagricultural land larger than 40 acres in size and surrounded on all sides by urban development,

Most of the Planning Area is classified as Urban and Built Up Land. However, as shown in Table 43, there are approximately 140 acres of land classified as Prime Farmland, Farmland of Statewide Importance, Farmland of Local Importance, or Unique Farmland within the Planning Area.

Table 43 Agricultural Resources in the Planning Area

Land Capability Classification	Acres
Prime Farmland	41.2
Farmland of Statewide Importance	10.2
Farmland of Local Importance	80
Unique Farmland	6.8
Total	138.2

Source: State of California, Department of Conservation, Division of Land Resource Protection, Farmland Mapping and Monitoring Program, Sonoma County, City of Healdsburg, and Christopher A. Joseph and Associates, 2007.

Areas classified as Prime Farmland within the Planning Area include the 16.33-acre parcel currently planted as a vineyard located between Magnolia and Kinley Drive (Carraro property), 18.8 acres currently used for non-agricultural purposes located in the southern part of the city between Healdsburg Avenue and the Russian River, and 0.7 acres located west of U.S. Highway 101 between West North Street and West Grant Street. A vineyard located in Sub-Area B includes 5.4 acres classified as Prime Farmland and 18.7 acres classified as Farmland of Local Importance. This area is separated from the rest of the city by permanently-protected open space through a conservation easement held by the Sonoma County Agricultural Preservation and Open Space District, and is therefore unlikely to be annexed or developed.

A vineyard located in Sub-Area C includes 10.2 acres classified as Farmland of Statewide Importance and 4.1 acres classified as Unique Farmland. There are also 2.7 acres classified as Unique Farmland located in the southernmost part of the city between Healdsburg Avenue and the Russian River that are currently used for non-agricultural purposes.

In addition to Sub-Area B, Farmland of Local Importance includes 15.4 acres currently planted as a vineyard between Grove Street and U.S. Highway 101, 14.9 acres currently used for non-agricultural purposes located between Healdsburg Avenue and the railroad south of the Russian River bridge, 12.5 acres located in the southernmost part of the city between the railroad and U.S. Highway 101 south of Grant Avenue, and 18.5 acres between Foreman Road and Foreman Lane east of Healdsburg Avenue adjacent to the wastewater treatment plant.

13 Mineral Resources

13.1 Gravel Extraction Activities

The stretch of the Russian River in the vicinity of Healdsburg has been mined extensively for gravel resources, dating back to the 1800's. In recent times, the area used for gravel mining was under the ownership of the Basalt Rock Company, which maintained "vested rights" from 1984 to 1985. Vested rights allow the owner, by law, to proceed with mining operations without acquiring a permit from the City or County. Syar Industries acquired Basalt's lands and vested rights in 1986. However, vested rights do not exist for the portion of the river within city limits.

Gravel mining has recently resumed along a section of the Russian River just upstream from city limits at a site that is one of seven (including one within city limits) for which an Environmental Impact Report and Environmental Impact Statement (EIR/EIS) was completed in 1993. This site, known as the Healdsburg Bendway site, is adjacent to both rural residences within the County on the south side of the river, and existing residential areas (i.e., River View) within the city. A use permit and a mining and reclamation plan were approved by the City for this operation in 1983, but its approval has subsequently lapsed. The City has determined that another environmental document pursuant to the compliance with the California Environmental Quality Act (CEQA) will be needed if and when another application is submitted for mining at this site[52].

13.2 Surface Mining and Reclamation Act

Gravel mining operations in the Planning Area, and throughout the State, are subject to the California Surface Mining and Reclamation Act (SMARA). The purpose of SMARA is to identify and protect areas containing significant mineral resources. In doing so, SMARA a) regulates surface mining operations to assure that adverse environmental effects are prevented or minimized, b) requires reclamation of mined lands to a usable condition that is readily adaptable to alternative land uses, c) produces and conserves minerals, and considers values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment, and d) eliminates residual hazards to the public health and safety. Mining must comply with SMARA through all phases of a project, including the reclamation process.

13.3 Mineral Resource Zone

According to the California Department of Conservation, a state-designated Mineral Resource Zone-2 (MRZ-2) is located in the southeastern area of the city as shown in Figure 16.[53] These mineral resources are primarily located along the banks of the Russian River.

[52] Personal communication, Richard Spitler, City of Healdsburg Planning Director, October 29, 2002

[53] California Department of Conservation, Division of Mines and Geology, Special Report 146, Part III, Classification of Aggregate Resource Areas, North San Francisco Bay Production-Consumption Region, 1987.

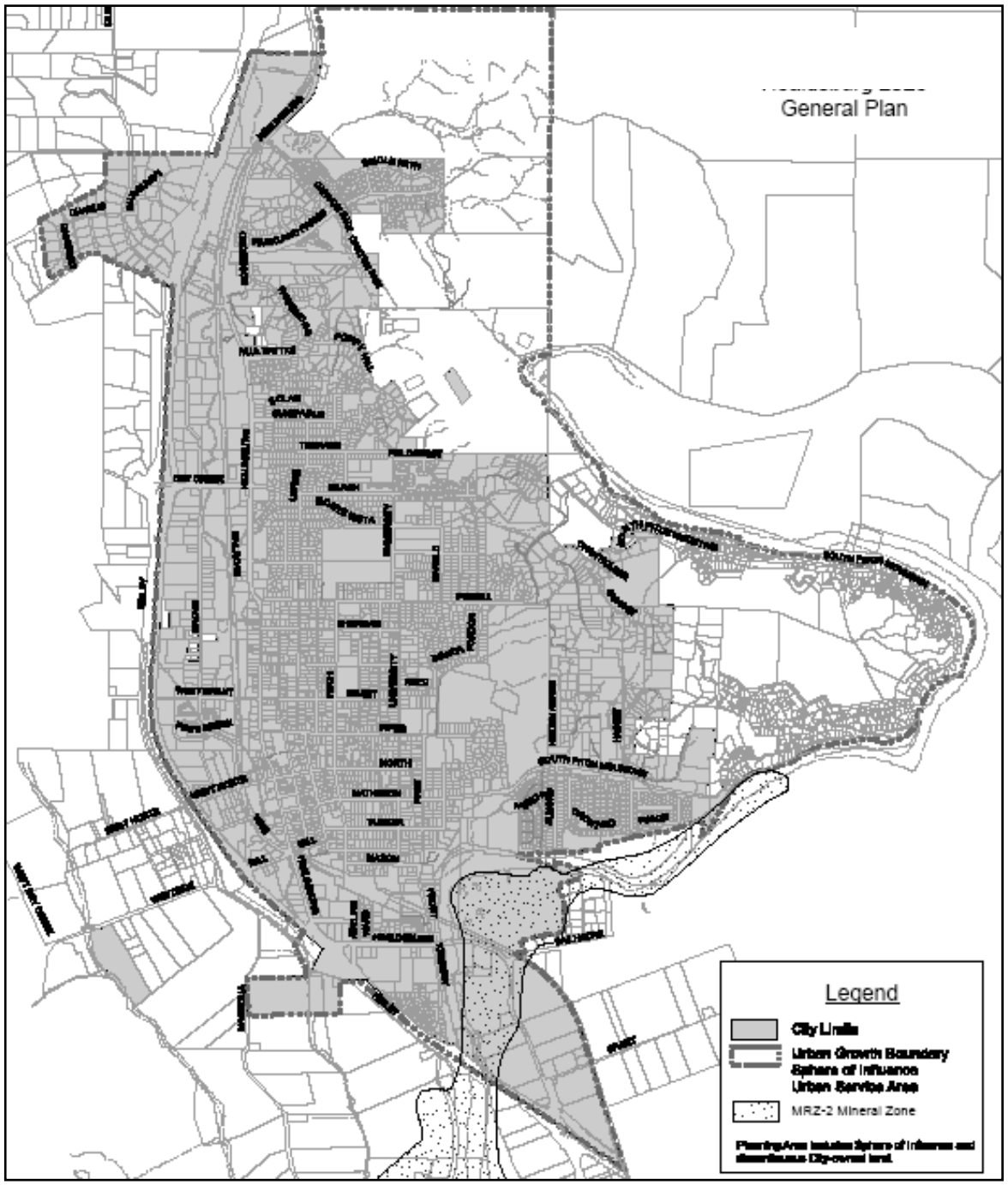

Figure 16 Mineral Resource Zone

Classification of an area as a MRZ-2 indicates the existence of a deposit that meets certain criteria for value and marketability.

13.4 Sonoma County Aggregate Resources Management Plan

The Sonoma County Aggregate Resources Management (ARM) Plan currently serves as the regulatory document providing guidelines for sound management of aggregate mining in the County. This plan was first adopted by the County in 1980 and later updated in 1994. A programmatic EIR was certified by the County at that time for addressing potential impacts from gravel mining in the area subject to the plan. This includes the stretch of the Russian River in the Planning Area that is within the County's jurisdiction.

In addition to compliance with the County ARM Plan, proposed new gravel operations require County approval of a Mining and Reclamation Plan, and a use permit pursuant to County Ordinance 3437, which sets forth local implementation of SMARA.

13.5 City Mining and Reclamation Regulations

Article 22 of the City's Zoning Ordinance regulates mining and reclamation of mined lands within the city pursuant to SMARA. Provisions of this article require the approval by the City of a conditional use permit, a reclamation plan, and financial assurances for reclamation. It sets forth the standards for plans and operations, and the procedures for the review and approval of mining and reclamation plans as well as the issuance of permits to assure that the intent of SMARA is followed.

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14 Air Quality

The City of Healdsburg is enriched by its natural setting that includes generally good air quality. This chapter of the Background Report describes existing conditions regarding air quality within the Planning Area.

14.1 Local Climatological Factors Affecting Air Quality

Local topography plays a significant role in affecting weather patterns throughout the Coastal Range, including the Planning Area. The Russian River drainage basin extends from Mendocino County into the northern portion of Sonoma County. This air basin extends into the Santa Rosa Plain to the south. The Planning Area lies between the Mayacama Mountains to the north and east and the Coast Range to west. These mountain ranges tend to buffer the Healdsburg area from the marine weather systems that originate over the Pacific and area drawn inland by the jet stream. Air layer temperature inversions also occasionally occur in the region trapping pollutants such as ozone and particulates in the air basin between the higher mountain ranges.

The climate of the Planning Area is typically polarized between summer and winter seasons. The winter season is characterized by overcast days and lengthy periods of rain and drizzle. Winter temperatures range from an average low of 37° F to an average high of 62° F, with occasional overnight freezing temperatures. Annual precipitation averages 30 inches; 81 percent falls from November through March. Summer temperatures range from an average low of 48° F to an average high of 82° F, with temperatures in excess of 100° F occasionally.

14.2 Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency and the California Air Resource Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants that represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. Table 44 identifies five major criteria pollutants in which most efforts in the United States are directed to improve air quality. This table lists characteristics, health effects, typical source, and related Federal and State ambient air quality standards for each of these criteria pollutants.

14.3 Local Air District and Air Quality Monitoring and Enforcement

The Planning Area is located in northern Sonoma County, which falls within the North Coast Air Basin along with Del Norte, Humboldt, Trinity, and Mendocino Counties. The Northern Sonoma County Air Pollution District (NSAPCD) is the local agency responsible for monitoring air quality conditions in northern Sonoma County, including all of the Planning Area, and for carrying out enforcement activities to maintain air quality with applicable State and Federal standards.

Table 44 Major Criteria Pollutants and Related Federal and State Air Quality Standards

Pollutant	Characteristic	Health Effects	Major Sources	Standard Averaging Time	Federal Primary Standard	State Standard
Ozone	A highly reactive photo-chemical pollutant created by the action of sunshine on ozone precursors, primarily reactive hydrocarbons and nitrogen oxides. Often called smog.	Eye irritation. Respiratory function impairment.	Ozone precursors sources include combustion sources such as automobiles, factories and evaporation of fuels and solvents.	1-Hour 8-Hour	- - 0.08 PPM	0.09 PPM - -
Carbon Monoxide	An odorless, colorless gas that is highly toxic. It is formed by the incomplete combustion of fuels.	Impairment of oxygen transport in the blood-stream. Aggravation of cardiovascular disease. Fatigue, headache, confusion, dizziness. Can be fatal in very high concentrations.	Automobile exhaust, combustion of fuels, combustion of wood in woodstoves and fireplaces	8-Hour 1-Hour	9 PPM 35 PPM	9.0 PPM 20.0 PPM
Nitrogen Dioxide	A reddish-brown gas that discolors the air, formed during combustion.	Increased risk of acute and chronic respiratory disease.	Automobile and diesel truck exhaust, Indus-trial processes, fossil fueled power plants	Annual Average 1-Hour	0.05 PPM - -	0.25 PPM
Sulfur Dioxide	A colorless gas with a pungent, irritating odor.	Aggravation of chronic respiratory disease.	Diesel vehicle exhaust, oil powered power plants, industrial processes	Annual Average 24-Hour 1-Hour	0.03 PPM 0.14 PPM - -	0.05 PPM 0.25 PPM
PM_{10}	Solid and liquid particles of dust, soot and aerosols and other matter that are small enough to remain suspended in the air for a long period of time.	Aggravation of chronic disease and heart and lung disease symptoms.	Combustion, auto-mobiles, field burning, factories and unpaved roads. Also a result of photochemical processes	Annual Average 24-Hour	50 ug/m^3 - -	30 ug/m^3 50 ug/m^3
$PM_{2.5}$				Annual Average 24-Hour	15 ug/m^3 65 ug/m^3	

The air district maintains three monitoring stations for measuring concentrations of criteria pollutants, of which two are located within the Planning Area. One is used for measuring and recording ozone levels and is located at the Healdsburg Municipal Airport. The other is used for measuring and recording particulate levels and is located at the Senior Center near downtown.

The air district regulates and controls air emissions through enforcement of rules and regulations adopted by the district. Proposed emission sources are subject to permit approval by the district, along with applicable standards and any additional conditions that the district may require to protect and maintain air quality.

14.4 Federal and State Air Quality Standard Attainment Status

Pursuant to Clean Air Act requirements, all areas of California have been classified by attainment status with regard to National Ambient Air Quality standards. The federal Environmental Protection Agency has designated northern Sonoma County as an attainment area for all federal standards.

The North Coast Basin is considered "non-attainment" for the state standard for one-hour ozone. However, because no violations have been recorded over the last three years (i.e., 2006, 2007, 2008), the California Air Resource Board is expected to reclassify the basin to "attainment" status for ozone in 2009.

14.5 Local Air Quality Problems

In general, air quality in the Healdsburg is relatively good most of the year due to prevailing wind conditions and since most of the surrounding area remains relatively undeveloped. However, generally short-term seasonal problems involving high ozone and respirable particulate matter concentrations also occur, as discussed below.

- Ozone

Relatively high ozone readings occur in summer on warm sunny days when there is high pressure along with little vertical air mixing or wind dispersion. Ozone is a type of contaminant that is a photochemical byproduct of reactive organic hydrocarbons and nitrogen oxides, in which a primary source is motor vehicular emissions. While local sources provide a contribution, the main cause of high ozone concentrations in the Healdsburg area is transport of this pollution from the south, including the Santa Rosa plain and the Bay Area.

Surrounding mountain ranges, such as found near Healdsburg and throughout the Bay Area, can trap ozone precursors, particularly during air temperature inversion conditions. The potential for ozone standard violations is greatest during long, hot summer and early autumn days. While newer motor vehicle engines are burning cleaner, traffic resulting from regional growth in Sonoma County and the Bay Area. Commuting distances between job locations and available or affordable housing, and vehicle miles traveled per vehicle, have also increased in recent years to offset these cleaner emissions. As in the rest of the nation, locally there has also been an increase in light trucks and larger motor vehicles such as sport utility vehicles, which are not subject to the same fuel efficiency standards as regular passenger vehicles.

The General Plan encourages the use of transit and other alternatives to the automobile. However, for both local and regional trips, most persons in Healdsburg continue to use the automobile rather than walk or use public transit. With the exception of older residential

neighborhoods close to downtown or the Healdsburg Avenue transit corridor, distances are too great for many people to seriously consider walking or using public transit for trips to shop or work. Relatively low density combined with a dispersed pattern of housing and jobs also make creating public transit that could more seriously compete with automobile use less feasible. Arterial streets with relatively high-speed automobile traffic lacking bike lanes or shoulders also pose a constraint for bike use. This holds true for both Healdsburg and the region as a whole.

Land use measures that can reduce automobile use and vehicle miles traveled per vehicle include providing more mixed use (housing, shopping, and/or offices in same building or development), and providing housing, shopping, service and employment centers within walking distance or along transit lines. Other measures include improved pedestrian and bicycle facilities.

- Fine Particulate Matter

Based on studies conducted by the NSAPCD, wood-burning fireplaces and stoves have been identified as the main cause of particulate matter violations. These studies show that the pattern of wood burning in residential fireplaces and stoves is positively correlated on a seasonal basis with increased levels of fine respirable particulates (less than 10 microns in size). Other contributors to seasonal problems with particulate emissions include agricultural burning and operations, construction and road dust, and wildland fires. Agricultural burning reaches its peak in early fall (e.g., grapevine prunings). "No burn" days are declared by the air district when pollutant concentrations are high.

Emissions from wood-burning fireplaces and stoves can be greatly reduced by the use of clean burning fireplace inserts and stoves, such as those now required by the NSAPCD for all new and replacement devices, and/or by using dedicated gas- fired systems instead. The city is subject to the requirements of the NSCAPCD, and enforces the district's regulation by approving permits for new or replacement residential wood-burning devices only if they meet the NSCAPCD's Regulation IV standard to ensure that they are clean burning.

Approvals of major new residential and specific plan projects in Healdsburg have included conditions of approval incorporating recommendations by the NSCAPCD. These have included the requirement that no more than one wood-fired device be allowed per housing unit and that this device be certified to meet the NSCAPCD's Regulation IV standard, and that any more than one device would need to be a gas dedicated system. Furthermore, wood-fire devices have been prohibited in areas with higher residential density and limited to installation of gas dedicated systems, as was done in the R-1 3,500 and R-1 6,000- zoned portion of Specific Plan Area A.

- Diesel Particulate Matter

A more recently-recognized air quality problem is the particulate matter fraction of diesel exhaust identified by the California Air Resources Board (CARB) in 1998 as a toxic air contaminant. It is highly carcinogenic, and accounts for about 80 percent of the cancer risk associated with known ambient air toxins. Cancer risks are typically much higher in areas close to freeways and warehouse operations in highly urbanized areas. Diesel particulate matter (PM) is also linked to increased mortality from acute exposure, decreased lung growth and function, and increased lung and heart disease. Diesel PM emissions in Sonoma County and the

Healdsburg Planning Area can result from use of emergency standby (back-up) engines, river and land-based mining equipment, agricultural pumping engines, trucks, buses, construction equipment, and a variety of other sources.

California has adopted a comprehensive diesel risk reduction program. The U.S. EPA and CARB have adopted low sulfur diesel fuel standards that will reduce diesel particulate matter substantially.

15 Biological Resources

The City of Healdsburg is enriched by its natural setting that includes a broad diversity of vegetation and wildlife communities and habitats.

15.1 Setting Background and Methods

Information regarding the existing environmental setting of Healdsburg in regard to biological resources in this Background Report was prepared using information gathered from available literature sources including the original Background Report prepared in June 1987 (and revised June 1989 and June 1990), the City of Healdsburg General Plan Assessment Report (Final EIR) dated July 1987, the Specific Plan for Area A, the Draft EIR for Specific Plan Area A, the Specific Plan for Area B and C and other General Plans developed for other cities within Sonoma County and the Sonoma County General Plan Update. In addition, the 2002 version of the California Natural Diversity Data Base for the Healdsburg and surrounding USGS quadrangles and the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2001) were reviewed for special status plants and animals known to occur, or with the potential to occur, within the Healdsburg Urban Service Area and Planning Area. The description of the biological resources in the city was based on existing information and no detailed field surveys were conducted as part of this report.

15.2 Regulatory Framework

Various regulations at the local, state and federal levels have been enacted to provide for the protection and management of biological and wetland resources. The U. S. Fish and Wildlife Service (USFWS) is the federal agency responsible for the protection of terrestrial and freshwater plants and animals through implementation of the federal Endangered Species Act (ESA) and the Migratory Bird Treat Act. The National Marine Fisheries Services is the federal agency responsible for protection of anadromous fish and marine wildlife, also under the federal ESA. The U.S. Army Corps of Engineers has primary responsibility for protecting wetlands and waters of the United States under Section 404 of the Clean Water Act. At the state level, the California Department of Fish and Game (CDFG) is responsible for administration of the California Endangered Species Act and for protection of streams and water bodies through the Streamed Alteration Agreement process under Sections 1601-1606 of the California Fish and Game Code. A 401 Water Quality Certification is also required by the California Regional Water Quality Control Board when a proposed activity may result in discharge in waters of the state, pursuant to Section 401 of the Clean Water and EPA Section 404(b)(1) guidelines.

15.3 Habitats Found in the Planning Area

Sonoma County is part of the "North Coast and Montane" Ecological Province as defined in CALVEG, a classification system of California Vegetation developed cooperatively by the U. S. Forest Service, the U.S. Bureau of Land Management, and the CDFG.

Most of the Planning Area within the city limits has been urbanized. As a result, natural habitat conditions have been altered and consist of buildings, paved areas, and landscaping with mostly

non-native ornamental trees, shrubs, lawn and other ground cover vegetation. Individual and groves of native trees and pockets of relatively natural habitat persist in some areas within the city, particularly in the lower density and hillier areas on the north and east sides, such as east of Tayman Park, in the vicinity of Fitch Mountain, and in parts of Area A. The largest areas of relatively wild, undeveloped habitat in the Planning Area remain outside of city limits, such as in Areas B and C, and in the vicinity of Fitch Mountain. The Planning Area also contains a limited amount of land still used for agriculture, as well as various vacant lands comprised mostly of non-native grassland.

While the Healdsburg Planning Area is representative of regional biological resources, the diversity of habitats in these remaining undeveloped areas makes this area unique. At least ten distinct habitat types and natural communities exist within the Planning Area. These include: 1) riparian corridors, 2) pond or river (open water communities), 3) serpentine chaparral, 4) serpentine bunchgrass 5) perennial bunchgrass, 6) oak woodland/forest, 7) mixed evergreen forest, 8) seasonal wetland, and 9) non-native grassland. This diversity of habitats and natural communities in relatively close proximity results in a large number of plant and wildlife species being present.

The following is a description of these habitats and where they are generally found in the Healdsburg Planning Area:

- Riparian Corridors

Riparian habitat consists of mostly deciduous trees such as willow and poplars along the Russian River, Foss Creek and Norton, replaced by more upland species such as valley and coast live oak along tributary creeks. A portion of Foss Creek is underground beneath buildings and parking areas in the vicinity of downtown Healdsburg. Additionally, many of the smaller creeks that are tributary to Foss Creek were made underground storm drains in the city's earlier period of development.

- Pond/River

Pond and river open water communities include Fox Pond in Area C, and the Russian River itself. The Sonoma County Agricultural Preservation and Open Space District has recently acquired the area around Fox Pond, ensuring that it will be protected as permanent open space.

- Serpentine Chaparral

Serpentine chaparral habitat consists of low, dense vegetation of evergreen shrubs and some small trees such as boy and oak. This habitat is limited to a long ridge in Area B extending into Area A. This habitat is restricted to areas with serpentinite soils, derived from a type of gray or bluish green rock that provide conditions that are restrictive or inimical to many types of non-native vegetation. As such, it provides a favorable sanctuary for many native species that are otherwise uncommon in the region. Much of this ridge is now protected as permanent open space under a conservation easement held by the Sonoma County Agricultural Preservation and Open Space District.

- Serpentine Bunchgrass

Like serpentine chaparral, this habitat is restricted to areas with serpentinite derived soils, but is characterized by native bunchgrasses and lacks trees and brush as found in the former. Small, scattered areas of serpentine bunchgrass grassland are found in Areas B and C. The largest of these areas is found on a linear shaped mound in Area C just east of the north detention basin.

- Perennial Bunchgrass

This type of grassland is comprised of mostly native species. Very limited areas of perennial bunchgrass habitat can be found in Areas A, B and C, in places where soil and exposure conditions are present to favor the dominance of native bunchgrass cover rather than the invasive non-native annual grasses and forbs more typically found throughout the region. These areas are biological important because of their relative rarity and because they provide examples of native grassland that existed in this area before non-native grass species took over with European settlement.

- Oak Woodland/Forest

Oak woodlands and forest are found in Areas B and C, and in the vicinity of Fitch Mountain. There are also a few remaining pockets of oak woodland within city limits, notably in Area A, in Tayman Park, and on the west foothills of Fitch Mountain. The predominant tree is coast live oak (*Quercus agrifolia*), although white and black oak are also found. Area C includes significant acreage of oak savannah or woodland dominated by Blue Oak (*Quercus douglasii*) in the northeastern portion of this area, a very slow-growing species that is typically found on drier, warmer sites than the coast live oak. The General Plan encourages the protection of oak woodland.

- Mixed Evergreen Forest

Mixed evergreen forest, consisting of trees species such as bay, madrone, and various oaks, is found mostly on north and east facing slopes in Areas A, B and C and in the vicinity of Fitch Mountain. In some locations on the north side of Fitch Mountain on lower slopes and in alluvial soil pockets along the Russian River canyon are also found scattered small groves of redwoods. The General Plan encourages the protection of mixed evergreen forest.

- Seasonal Wetland

Seasonal wetlands are generally low-lying areas that are saturated or inundated with shallow water for periods of time during the rainy season. In the Planning Area, these include basins within city detention basins, an area in the southwest portion of Area C, and more limited acreages found in Area B, as well as within the banks of various seasonal drainages and creeks. If such areas meet certain vegetation, soil and hydrology conditions, they are subject to jurisdiction by the U.S. Army Corps of Engineers, in which permits may be required prior to filling or excavation.

- Non-native Annual Grassland

Non-native annual grassland, comprised mostly of non-native annual grass and forb herbaceous species, is found throughout the Planning Area, both in developed areas, such as vacant lots, and in undeveloped areas, where it often includes open meadows, lands left over from previous agricultural use, and as an understory in oak savannahs and other wooded areas.

15.4 Sensitive Natural Communities/Wetlands

Sensitive natural communities within the Planning Area include serpentine bunchgrass grassland, serpentine chaparral, riparian corridors, pond or river, seasonal wetlands, and perennial bunchgrass grassland. Serpentine areas are considered to be sensitive because of their potential to support a number of special status plant species Baker's manzanita. Riparian corridor, riverine riparian, pond or river communities, including the Russian River and Foss Creek and all creeks and drainages, and seasonal wetlands are by definition sensitive communities because of their value for wildlife habitat, as well as providing other important functions and values such as ground water recharge, sediment and toxicant reduction, flood flow alteration, and nutrient removal and transformation. The Russian River, Foss Creek and all creeks and drainages, as well as seasonal wetlands, are also considered to be "waters of the United States" and well as being waters of the State and are subject to jurisdiction by the U. S. Army Corps of Engineers. Perennial bunchgrass grassland is a sensitive natural community because this community type has a very limited distribution within the state as most grasslands have been converted to non-native annual grasslands as a result of the invasion of Mediterranean annual grass species, primarily from cattle grazing.

15.5 Special Status Plants and Animals

Special-status plants that may occur in the plan area can be divided into two groups: 10 species restricted to serpentine chaparral and serpentine barrens; and 2 species associated with non-serpentine grassland or woodland habitats. The CNPS Inventory of Rare and Endangered Vascular Plants of California, provides a list of plant species known to occur within Sonoma County. This list is updated periodically and plant species are often added and occasionally dropped from the list. Because the list can change, it is important to review the list for the county prior to conducting surveys to determine what special-status plants may have the potential to occur within the area being surveyed, based on the presence of potential habitat. The California Department of Fish and Game requires that surveys be conducted if there is potential habitat for any special status plants. These surveys must be conducted during the time of year when the species would be most identifiable, which is usually when it is in flower. The only special status plant known to occur within the Planning Area is Baker's manzanita (*Arctostaphylos bakeri* ssp. *bakeri*), which is a State listed rare plant that occurs in broadleaved upland forests and in chaparral, often on serpentine at elevation 75-300 meters. However, numerous other plants could potentially occur within the Planning Area, based on the presence of potential habitat. Two other plant species have records from the Healdsburg area but are presumed extant within the area. These are narrow-anthered California brodiaea (*Brodiaea californica* var. *leptandra*), which occurs in broadleafed upland forests, chaparral and lower montane coniferous forests; and robust monardella (*Monardella villosa* ssp. *globosa*), which occurs in chaparral and cismontane woodland communities.

Special status animals that have been recorded, or could potentially occur within the Healdsburg area are: American peregrine falcon (*Falco peregrinus anatum*); prairie falcon (*Falco mexicanus*); Golden eagle (*Aquila chrysaetos*); Cooper's hawk (*Accipiter cooperii*); sharp-shinned hawk (*Accipiter striatus*); merlin (*Falco columbarius*); black-shouldered hawk (*Elanus caeruleus*); burrowing owl (*Athene cunicularia*); tricolored blackbird (*Agelaius tricolor*); purple martin (*Progne subis*); yellow warbler (*Dendroica petechis*), yellow-breasted chat (*Icteria virens*); great blue heron (*Ardea herodias*); osprey (*Pandion haliaetus*); white-tailed kite (*Elanus leucurus*); pallid bat

(*Antrozous pallidus*); northwestern pond turtle (*Clemmys marmorata marmorata*); California red-legged frog (*Rana aurora draytonii*); foothill yellow-legged frog (*Rana boylii*); and northern spotted owl (*Strix occidentalis caurina*). Special status fish species that occur within the Russian River are: coho salmon (*Oncorhynchus kisutch*); Navarro roach (*Lavinia symmetricus navarroensis*); and Russian River tule perch (*Hysterocarpus traski pomo*).

Foss Creek may also support California freshwater shrimp (Syncaris pacifica), a State and federally listed endangered species. Foss Creek contains suitable freshwater shrimp habitat in several portions of the creek, and in particular downstream of Plan Area A. As with the plant species, the California Department of Fish and Game requires that surveys be conducted if there is potential habitat for any special status animal species. These surveys must be conducted during the time of year when the species would be most identifiable. This varies for each species.

15.6 Heritage Trees

The City protects "heritage trees," defined in the City's Zoning Ordinance as any tree with a diameter of 30 inches measured two feet above ground level. Heritage trees of various species are found throughout the Planning Area, both within already-developed areas and in areas that are potentially developable both within and outside the city limits. Typically, identification of heritage trees in areas proposed for development occurs during the development and environmental review process (see below). The provisions of the Zoning Ordinance pertaining to heritage trees regulate the removal of such trees by requiring the approval of permits prior to removal or encroachment in areas immediately surrounding such trees, with the exception of trees on single-family parcels not capable of being further subdivided.

15.7 Environmental Review and Threshold of Significance

The City conducts environmental review for projects requiring discretionary approval in compliance with the California Environmental Quality Act (CEQA). According to the standard environmental review checklist used for initial studies conducted for projects subject to CEQA, impacts upon biological resources would be significant if the proposed project substantially affected a rare or endangered plant or animal species, or the habitat of the species. Wetland losses can be considered significant depending upon significance or quality of habitat, presence of vernal pool features, and acreage. A substantial loss of riparian vegetation or habitat acreage or value resulting from development would be considered a significant impact. A substantial loss of acreage of other types of habitat identified as biologically unique and of limited distribution on a regional basis (e.g., serpentine chaparral, serpentine grassland, native grassland) may also be considered a significant impact. Mitigation for loss of heritage trees, and to minimize loss of oak woodlands and mixed evergreen forest, have been included in environmental documents prepared to comply with CEQA in conjunction with approval of specific plans for Areas A, B and C by the City.

16 Geologic Hazards

16.1 Topography

Healdsburg is located along the Russian River, at the north end of the Santa Rosa Valley. Elevations within the city range from about 90 feet along the Russian River along the south side of the city, to more than 500 feet on the west side of Fitch Mountain. The area drains to the west and south via intermittent creeks and drainage channels, discharging into the Russian River. The western and central portions of the city are typically low-lying, gently sloping topography. Hilly upland areas characterize the northern and eastern portions of the city.

16.2 Regional Geologic Setting

The City of Healdsburg is located in northern Sonoma County, in the central portion of the Russian River watershed. The region is within the central portion of the Coast Ranges geomorphic province of California, a region characterized by northwest-trending valleys and mountain ranges. This alignment of valleys and ridges has developed in response to uplift, folding and faulting along the San Andreas system of active faults.

16.2.1 Geologic Units

Two principal rock units, referred to as the Great Valley Sequence and the Franciscan Assemblage, underlie the Healdsburg area (Figure 17). Rocks of the Great Valley Sequence underlie the majority of the upland areas. These rocks are of Cretaceous age (the period from about 130 to 65 million years ago) and consist mainly of claystone, siltstone, and sandstone. The Great Valley Sequence is a widespread series of marine sedimentary rocks of Cretaceous age (the period from about 135 million to 65 million years before present) that underlies much of west-central California. In the Healdsburg area, the Great Valley Sequence rocks typically consist of claystone with some interbedded siltstone and sandstone. These rocks are generally thin-bedded, are weak to moderately strong, and moderately to deeply weathered near the ground surface. The Great Valley Sequence rocks are complexly folded and locally sheared.

Rocks of the Franciscan Assemblage underlie a small area in the northern portion of the city. This unit consists of a diverse and structurally complex group of igneous, metamorphic and sedimentary rocks of Upper Jurassic to Cretaceous age (140 to 65 million years old). Within the Healdsburg area, the Franciscan rocks consist mainly of sheared sandstone and shale and are generally similar to the Great Valley Sequence rocks.

- Serpentinite

Areas of serpentinite (a rock composed of serpentine and other minerals) are intermixed with both the Great Valley Sequence and Franciscan rocks. The serpentinite is typically gray to green in color, and ranges from friable to moderately strong and moderately to deeply weathered. Several areas of serpentinite crop out in the eastern and northern portions of the city. Exposures of serpentinite locally contain some veins of chrysotile, a variety of asbestos.

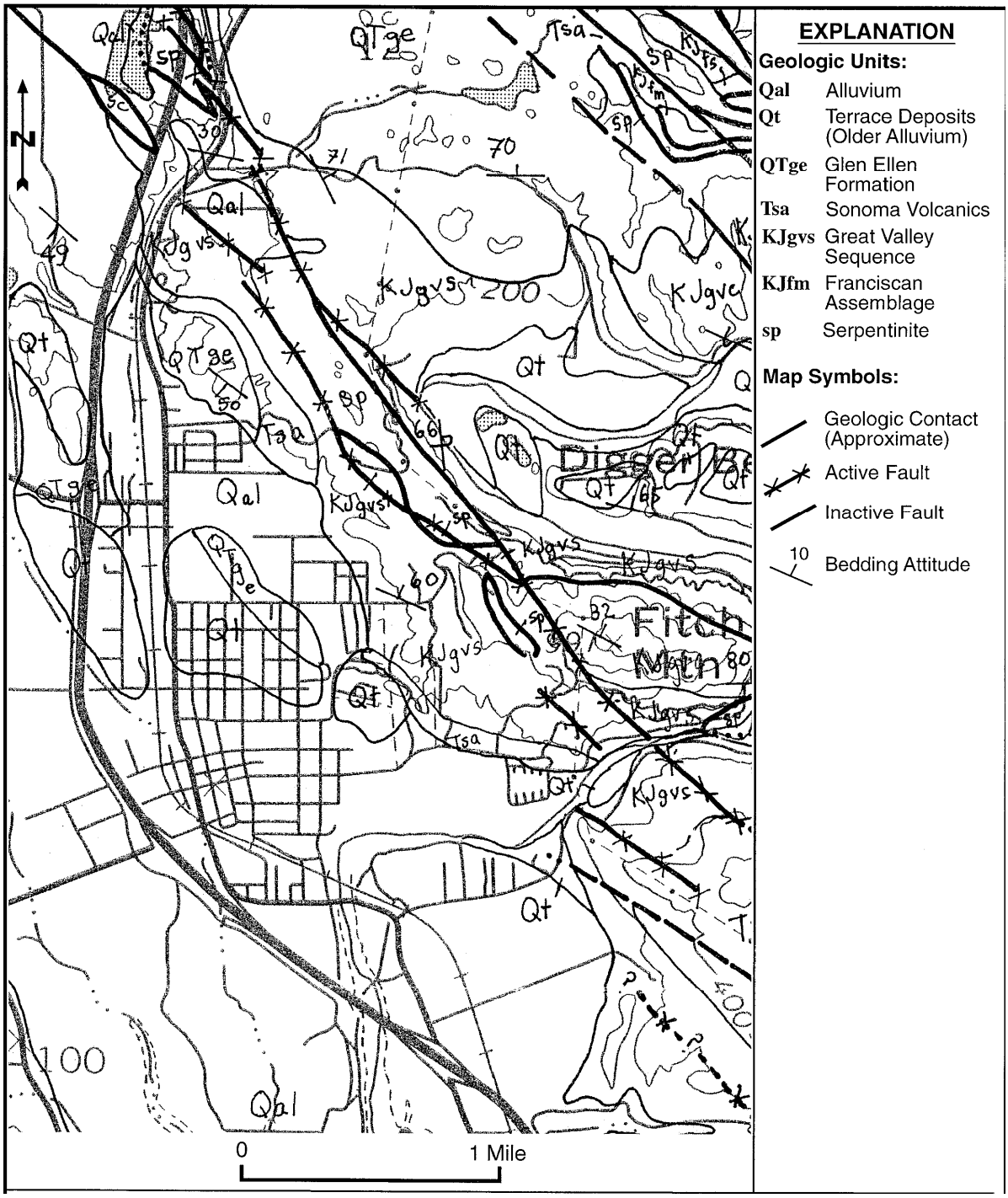

Figure 17 Geologic Units and Local Earthquake Faults

- Sedimentary and Volcanic Deposits

Locally, the Franciscan and Great Valley rocks are overlain by younger sedimentary and volcanic deposits of Tertiary age (the period from about 5 to 2 million years ago). These units include the Sonoma Volcanics and Glen Ellen Formation.

Volcanic rocks, referred to as the Sonoma Volcanics, occur in two broad areas in eastern and northern Healdsburg. The Sonoma Volcanic rocks include tuff (a rock composed of volcanic ash), agglomerate, basalt and andesite. These rocks range from friable to strong and are typically deeply weathered.

Portions of the low hills in central and northern Healdsburg are underlain by sediments of the Glen Ellen Formation of late Tertiary to Quaternary age. These consolidated sediments consist of clay, silt, sand, and gravel and locally contain large numbers of well-rounded pebbles and cobbles.

- Surficial Deposits

Several types of surficial deposits are present in Healdsburg. These include surficial soils, colluvium, alluvium, and landslide deposits. In addition, man-made fills have been placed in many areas. These units are described below.

Surficial soils in the Healdsburg area can be divided into two basic groups, which are associated with the underlying geologic units. The near-level valley bottom areas are blanketed by surficial soils of the Pleasanton, Yolo and Haire soil series. These soils are typically loams and sandy loams with relatively low shrink-swell potential and moderate permeability. Erosion potential is typically moderate to high.

The upland portions of Healdsburg are typically blanketed by soils of the Las Gatos, Speckles, Dibble and Boomer soils series. The majority of these soils are clays and clay loams. Shrink-swell potential is moderate to high and permeability is low to moderate. Erosion potential is typically moderate to high.

Colluvium is a thick soil deposit that accumulates in hillside swales and along the toes of slopes. The composition of these soils varies from sandy silt to clay. Colluvium deposits are generally prone to various types of slope instability including landslides and debris flows.

Alluvium underlies the near-level valley bottoms including much of the downtown area. These sediments were deposited by ancestral streams and consist of clay, silt, sand, and gravel. Older alluvium of similar composition is also present in the Healdsburg area. These deposits form elevated terraces in central Healdsburg and along the Russian River.

16.2.2 Seismic Setting

Seismicity in Healdsburg is directly related to activity on the San Andreas fault system, including major active faults in the region and within the city (Figure 17). The active Healdsburg-Rodgers Creek fault passes through the eastern and northern areas of the city. The Healdsburg-Rodgers Creek fault is a right-lateral strike-slip fault (i.e., the land west of the fault generally moves north with respect to the land east of the fault during large earthquakes), and has been the source of significant earthquakes during historic time.

Other major active faults in the region include the San Andreas, 19 miles to the west, and the Maacama, four miles to the east. Other, more distant, active faults in the region include the

West Napa, Green Valley, Hayward, San Gregorio, Calaveras, Concord, and Greenville faults. Table 45 shows the distance to these faults from Healdsburg and the maximum earthquake each fault is capable of producing.

Table 45 Fault Parameters

Fault[54]	Distance and Direction from Healdsburg[55]	Maximum Moment Magnitude[56]
Healdsburg-Rodgers Creek	Crosses portions of city	7.0
Maacama	4.5 miles north	6.9
San Andreas	19 miles west	7.9
Hunting Creek	29 miles northeast	6.9
West Napa	28 miles southeast	6.5
Concord - Green Valley	40 miles east	6.9
Cordelia	43 miles southeast	6.7[57]
Hayward	46 miles southeast	7.1
San Gregorio	52 miles south	7.3

Healdsburg is not currently within one of the Alquist-Priolo Earthquake Fault Zones (APEFZ) established by the California Division of Mines and Geology (CDMG) around known active faults (CDMG, 1983). The CDMG defines an active fault as one with surface displacement in the last 11,000 years, or one that has experienced historic earthquakes. Several active fault traces have been mapped in the northern and eastern portions of the city. During the 1970s, portions of Healdsburg were included within an APEFZ encompassing the Healdsburg-Rodgers Creek fault, and active fault traces were considered to be present within the city. In 1983, the State of California removed the APEFZ from the area, apparently based on the opinion of the California Division of Mines and Geology that traces of the Healdsburg-Rodgers Creek fault in Healdsburg were no longer active. Subsequent work by consultants has demonstrated the presence of active faults within the northern and eastern portions of the city. It is therefore likely that the APEFZ will be re-established by the State of California in the Healdsburg area sometime in the future.

The San Francisco Bay Region has been affected by several large earthquakes during historical times. A summary of the more significant historical earthquakes felt in the Healdsburg area is presented in Table 46, along with estimated earthquake magnitudes and shaking intensities in Healdsburg. The Modified Mercalli Intensity Scale, that measures the felt effects of ground shaking, is presented in Table 47.

[54] Fault designations, including segment designations, are from CDMG (1996).
[55] Distances measured from Wagner and Bortugno (1982) and Jennings (1994).
[56] Except where noted, Maximum Moment Magnitudes are from CDMG (1996).
[57] Murphy and Wesnousky (1994).

Table 46 Earthquakes Felt in Healdsburg

Name	Year	Fault	Location	Damage in Healdsburg[58]	Richter Scale	MMI Scale - Healdsburg
Hayward Earthquake	1868	Southern Hayward	East Bay	Moderate	6.8	MMI V - VI
Winters Earthquakes	1892	Unknown	Central Valley	Minor to moderate	6.4-7.0, 6.2-7.0, and 5.5	MMI V
(Santa Rosa)	1893	Unknown	8 miles east of Santa Rosa	Chimneys shaken down, plaster fell	5.1	MMI V
Mare Island Earthquake	1898	Rodgers Creek			6.7	MMI V - VI
Great San Francisco Earthquake	1906	San Andreas	Near San Francisco	Extensive; several buildings collapsed or severely damaged (primarily brick)	8.3	MMI VIII - IX
Santa Rosa Earthquakes	1969	Rodgers Creek	Northern Santa Rosa		5.6, 5.7	MMI VI
Loma Prieta Earthquake	1989	Near San Andreas	Near Santa Cruz	Slight	7.1	MMI V

Table 47 Modified Mercalli Intensity Scale

MMI Value	Damage	Detailed Perception and Damage
I	None	Not felt, except rarely under especially favorable circumstances. Marginal and long period effects of large earthquakes.
II	None	Felt by persons at rest, on upper floors, or favorably placed.
III	None	Felt indoors. Hanging objects swing slightly. Vibration like passing of light trucks. Duration estimated. May not be recognized as an earthquake.
IV	None	Felt indoors by many, outdoors by few. Awakens few. Hanging objects swing. Vibration like passing of heavy trucks; or sensation of a jolt like a heavy ball striking the walls. Standing automobiles rock. Windows, dishes, doors rattle; glasses clink; crockery clashes. Wooden walls and frames may creak.
V	None	Felt outdoors; direction estimated. Awakens most. Liquids disturbed, some spilled. Small unstable objects displaced or upset. Doors swing, close, open. Shutters, pictures move. Pendulum clocks stop, start, change rates.
VI	Minor damage	Felt by all. Awakens all. Many frightened and run outdoors. Persons move unsteadily. Windows, dishes, glassware broken. Knickknacks, books, etc., off shelves. Pictures off walls. Furniture moved or overturned. Weak plaster and masonry D cracked. Small bells (church, school) ring.

[58] Toppozada and Parke, 1982a: Wong et al., 1988

MMI Value	Damage	Detailed Perception and Damage
VII	Non-structural damage	Difficult to stand. Frightens all. Noticed by drivers. Hanging objects quiver. Furniture broken. Masonry D cracked, damaged; some cracks in masonry C. Weak chimneys broken at roofline. Fall of plaster, loose bricks, stones, tiles, cornices, unbraced parapets, and architectural ornaments. Waves on ponds; water turbid with mud. Small slides and caving along sand or gravel banks. Large bells ring. Concrete irrigation ditches damaged.
VIII	Moderate damage	Alarm approaches panic. Steering of automobiles affected. Masonry C damaged; partial collapse. Some damage to masonry B; none to masonry A. Fall of stucco and some masonry walls. Twisting, fall of chimneys, factory stacks, monuments, towers, elevated tanks. Frame houses moved on foundations if not bolted down; loose panel walls thrown out. Decayed piling broken off. Branches broken from trees. Changes in flow or temperature of springs and wells. Cracks in wet ground and on steep slopes.
IX	Heavy damage	General panic. Masonry D destroyed; masonry C heavily damaged, sometimes with complete collapse; masonry B seriously damaged. General damage to foundations. Frame structures, if not bolted, shifted off foundations. Frames racked. Serious damage to reservoirs. Underground pipes broken. Conspicuous cracks in ground. Liquefaction.
X	Extreme damage	Most masonry and frame structures destroyed with their foundations. Some well-built wooden structures and bridges destroyed. Serious damage to dams, dikes, embankments. Large landslides. Water thrown on banks of canals, rivers, lakes, etc. Sand and mud shifted horizontally on beaches and flat land. Rails bent slightly.
XI	Extreme damage	Few if any masonry structures remained standing. Rails bent greatly. Underground pipelines completely out of service.
XII	Extreme damage	Damage nearly total. Large rock masses displaced. Objects thrown into air.

Masonry A: Good workmanship, mortar, and design; reinforced, especially laterally, and bound together by using steel, concrete, etc.; designed to resist lateral forces.

Masonry B: Good workmanship and mortar; reinforced, but not designed in detail to resist lateral forces.

Masonry C: Ordinary workmanship and mortar; no extreme weaknesses like failing to tie in at corners, but neither reinforced nor designed against horizontal forces.

Masonry D: Weak materials, such as adobe; poor mortar; low standards of workmanship; weak horizontally.

Source: Modified from Perkins and Boatwright (1995).

Historically, the only earthquake to cause liquefaction in the Healdsburg area was the San Francisco earthquake of 1906 (Youd and Hoose, 1978). As a result of that earthquake, several areas of lateral spreading and one area of sand boils were reported. These areas were all within or adjacent to the flood plain of the Russian River. Overall, damage due to liquefaction in the 1906 earthquake was relatively slight and consisted of cracking and lateral spreading along the riverbanks. Other more recent earthquakes, such as the Santa Rosa earthquakes of 1969 and the Loma Prieta earthquake, have not caused liquefaction in the Healdsburg area.

16.3 Geologic Hazards

Within the city, the most significant geologic hazards are those associated with earthquakes, including landslides, debris flows, and liquefaction. Other less-important geologic hazards include expansive soils, erosion, and the general impact of grading. These and other possible hazards are discussed below.

16.3.1 Seismic Hazards

The Working Group on California Earthquake Probabilities (U.S. Geological Survey, 2003) has estimated that there is 27 percent or higher chance of a large earthquake (magnitude 6.7 or greater) occurring on the Healdsburg-Rodgers Creek fault, or the Hayward fault, in the next 30 years. It estimates a 62 percent or higher chance of a large earthquake occurring in the greater San Francisco Bay region by the year 2032. Such earthquakes are considered most likely to occur on the San Andreas, Healdsburg-Rodgers Creek, or Hayward faults. Assuming that the earthquake epicenter is located on a nearby segment of one of the principal active faults, ground shaking intensities of approximately IX to X, corresponding to violent ground shaking, could be expected in Healdsburg.

- Fault Rupture

The Healdsburg-Rodgers Creek fault is the only fault known to be active within the city. During large earthquakes, fault rupture tends to occur along lines of previous faulting. Ground rupture has occurred in the past and is likely to occur in the future along the Healdsburg-Rodgers Creek fault as a result of a large earthquake on that fault. The risk of fault rupture in other portions of the city is very low.

Several possible active faults traces have been mapped within the city (see Figure 11). Several of these fault traces have been studied in detail and are considered to be active faults. Other possible fault traces have been tentatively identified. However, their specific location and degree of seismic risk has not been evaluated in detail.

Active fault traces can undergo ground rupture during earthquakes. Movement up to several feet may be possible along active fault traces during a major local earthquake. Such movements could severely damage structures built across the fault. Currently, state law restricts placement of residential structures on active fault traces. Typically, occupied structures are required to be set back a minimum of 50 feet from fault traces.

- Ground Shaking

Healdsburg lies within a seismically-active region that includes much of western California. The principal faults in the area are capable of generating large earthquakes that could produce strong to violent ground shaking in Healdsburg. The recent increase in earthquake activity in the San Francisco Bay Region suggests that the region is entering a period of increased seismic activity that could include one or more large and destructive earthquakes.

In the event of an earthquake, seismic risk to a structure will depend on the characteristics of the earthquake, the distance to the earthquake epicenter, the subsurface conditions underlying the structure and its immediate vicinity, and the characteristics of the structure. At present, it is not possible to predict precisely when, where, or exactly what kind and amount of movement will occur on these faults. However, geologic conditions and construction standards are a major factor in seismic response and can be evaluated.

The intensity of ground shaking can be amplified by local geologic conditions. Areas most susceptible to a significant amplification of ground shaking are those areas underlain by thick layers of soft sediments, which are not common in Healdsburg. The alluvium deposits that underlie most of downtown Healdsburg may be somewhat susceptible to ground shaking

amplification. Those areas could experience somewhat stronger ground shaking than nearby areas underlain by bedrock.

The Association of Bay Area Governments has released maps that show the estimated ground shaking from various postulated earthquake scenarios around the Bay Area. For Healdsburg, the scenario that generates the strongest ground shaking is an earthquake of magnitude 7.0 occurring on the Healdsburg-Rodgers Creek fault. They estimate that ground shaking of MMI VIII to IX will occur in Healdsburg during an earthquake of that size located near the city.

Experience gained during previous earthquakes has shown that the structures most susceptible to earthquake damage are older structures (those constructed before about 1950) and unreinforced masonry buildings, i.e., brick, cinder block, or stone buildings without steel reinforcement (URMs). For older wood frame structures, structural damage occurs most frequently as a result of poorly designed foundations or a lack of structural bonding between the foundation and the building. During the recent Loma Prieta earthquake, many such structures in Los Gatos and Santa Cruz were thrown from their foundations and received moderate to severe structural damage as a result. The risk of structural damage can often be significantly reduced by securely attaching the structure to the foundation. Shear walls or other structural reinforcements within the building are also useful in improving resistance to earthquakes.

Unreinforced masonry chimneys often collapse during earthquakes. Collapse may occur during earthquakes of moderate magnitude where the attached building receives little or no damage. Adding structural supports to existing chimneys or incorporating steel reinforcement into new chimneys can reduce the risk of collapse of unreinforced masonry chimneys.

URMs were common in California in the early part of the last century. Structures of this type are prone to collapse during severe earthquakes and should be considered a significant risk to public safety in Healdsburg. Several unreinforced brick structures in downtown Santa Cruz and Los Gatos collapsed during the Loma Prieta earthquake, resulting in several fatalities.

URMs can often be brought up to acceptable earthquake design standards by adding structural reinforcement, which will adequately mitigate the risk of structural collapse in these structures. All but one of the URMs in the city has been brought up to current standards and it is in the design process for structural retrofit.

- Liquefaction

Liquefaction occurs in granular materials as a result of ground shaking, and is often followed by sudden local ground settlement or slope failure. Liquefaction is likely to occur in the Healdsburg area only during large earthquakes occurring in the North Bay region.

Major events occurring on the San Andreas, Maacama, Healdsburg-Rodgers Creek or Hayward faults are the most likely sources for liquefaction in the Healdsburg area.

The potential for liquefaction is considered to be highest in areas underlain by saturated, unconsolidated, granular sediments (Figure 18). Within Healdsburg, the areas most at risk from liquefaction are alluvial areas along the banks of the Russian River and its major tributaries.

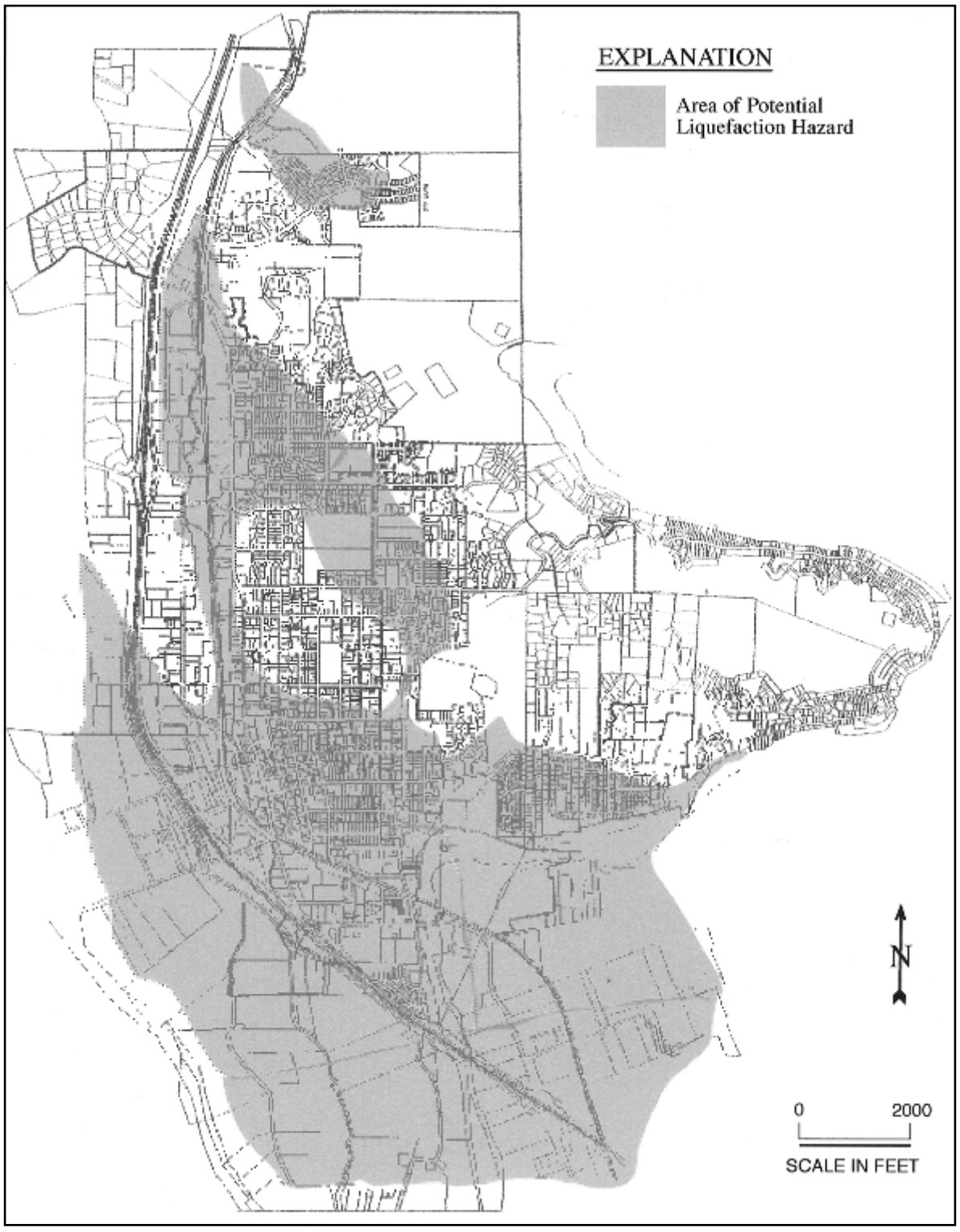

Figure 18 Liquefaction Hazard Locations

The majority of the developed portion of Healdsburg in the downtown area is underlain by alluvial deposits. Within this area, potentially-liquefiable deposits are likely to occur locally. It is likely, however, that liquefiable materials are not continuous or wide spread throughout the area.

Although liquefaction often causes severe damage to structures, structural collapse is uncommon. The risk to public safety from liquefaction, therefore, is relatively low. Structures can be protected from liquefaction through the use of special foundations. Liquefaction hazard is typically evaluated as a part of a development project's geotechnical investigation.

- Earthquake-Related Ground Failure

Various forms of ground failure often occur during or immediately following an earthquake, as a result of ground shaking. The nature and severity of these effects are determined by the magnitude and duration of shaking and the local geologic and groundwater conditions. Earthquake-related ground failures can be divided into several types, including lateral spreading, lurch cracking, and landsliding.

Liquefaction could cause localized lateral spreading or landsliding of developed areas immediately adjacent to the riverbanks. In addition, sand boils, seismically induced settlement, or ground cracking could occur in other areas away from the river.

Lateral spreading is the movement of soft or loose surficial materials over gentle slopes during an earthquake. This phenomenon occurs most often in areas underlain by soft thick soils or unconsolidated sediments adjacent to a slope such as a creek channel. Often, lateral spreading occurs as a result of liquefaction of subsurface materials. Movements of up to several feet are possible. Areas most at risk of lateral spreading are on the banks of the Russian River.

Lurch cracking is the formation of various types of fissures or cracks in the ground surface resulting from the oscillatory motion of the ground during an earthquake. This usually occurs in relatively flat areas underlain by loose, unconsolidated materials, and is exacerbated by the presence of shallow groundwater. The hazard of lurch cracking is relatively minor in Healdsburg, but could occur locally in areas of alluvium.

Slope failure or landsliding most frequently occurs under non-seismic conditions, but can be triggered or accelerated by ground shaking. In the Healdsburg area, the potential for seismically-induced landsliding to occur depends upon a number of factors, including the type of bedrock, type and depth of soils, angle and direction of the slope, and moisture content. The most common type of earthquake-induced ground failures are small sloughs or rock slides in steep slopes. Movement can also occur in pre-existing landslides.

The risk of lateral spreading, lurch cracking, or liquefaction is moderate to low within the low-lying portions of Healdsburg and very low in upland areas. Small rock slides are likely to occur in steep cut slopes such as along roadways during earthquakes and some movement of the larger landslides may occur.

- Tsunamis

Tsunamis are large, long period sea waves generated by earthquakes. Several small- to moderate-size tsunamis have impacted the coast of California during historical times. Because Healdsburg is located well inland, tsunamis are not considered a risk.

16.3.2 Slope Stability Hazards

- Relative Slope Stability

Huffman and Armstrong (1980) prepared a broadly generalized map of relative slope stability for Sonoma County, divided into three zones of relative stability. Virtually all of the hillside areas in the city were mapped as Zone C, the least stable category. The broad, gently sloping ridge crests in the northern portion of the city were mapped as Zone Bf, which consists of near-level areas that are adjacent to potentially unstable slopes. The near-level valley bottoms were mapped as Zone A, the most stable zone.

Figure 19 depicts the overall levels of slope stability hazards within the city.

- Landslides

Landslides can cause extensive damage to buildings, roadways or other facilities located on or below the landslide and can result in property damage. Because these types of landslides are slow-moving, people are rarely injured or killed by landslide movement.

Several types of landslides are common in Healdsburg, and the area has been impacted many times by slope failures in recent years. Numerous landslides have been mapped within the city by the California Division of Mines and Geology and consultants such as Harlan Miller Tait (1989) and Harlan Tait (1990). The larger landslides are shown on Figure 20.

The mapped landslides are mainly slow-moving slump or earthflow landslides that are confined to the soil mantle and shallow, weathered bedrock. Movement on these landslides typically occurs during the winter or spring as a result of heavy rainfall. Movement can also occur during large earthquakes or as a result of improper grading or drainage practices.

Landsliding can also result where excavations (cut slopes) are made into hillsides. The Glen Ellen Formation sediments and both the Great Valley Sequence and serpentinite rock are highly prone to landslides in overly steep cut slopes.

Experience in Sonoma County within similar geologic settings has shown that cut slopes can be unstable if constructed at steep inclinations. Generally slopes inclined at 3:1 (horizontal to vertical) or flatter will perform adequately although failures can occur even in these slopes if unstable geologic conditions are present. If unstable geologic conditions exist, slopes can be effectively stabilized by constructing a compacted fill buttress or retaining wall. Slope repairs of this type require careful geotechnical engineering and geologic investigation to formulate an appropriate design.

Landslides can be stabilized by removing all or part of the landslide and rebuilding the area as a compacted, engineered fill with subdrainage. This type of mitigation has been used widely throughout California. Smaller landslides can also be stabilized by constructing retaining walls.

Within Healdsburg, many of the swales or ravines that occupy the steep hill slopes may be capable of generating debris flows. Debris flows are most likely to originate on slopes underlain by sandstone or Glen Ellen sediments. Areas underlain by mudstone of the Great Valley Sequence are generally characterized by earthflows or slumps and are considered less likely to generate debris flows.

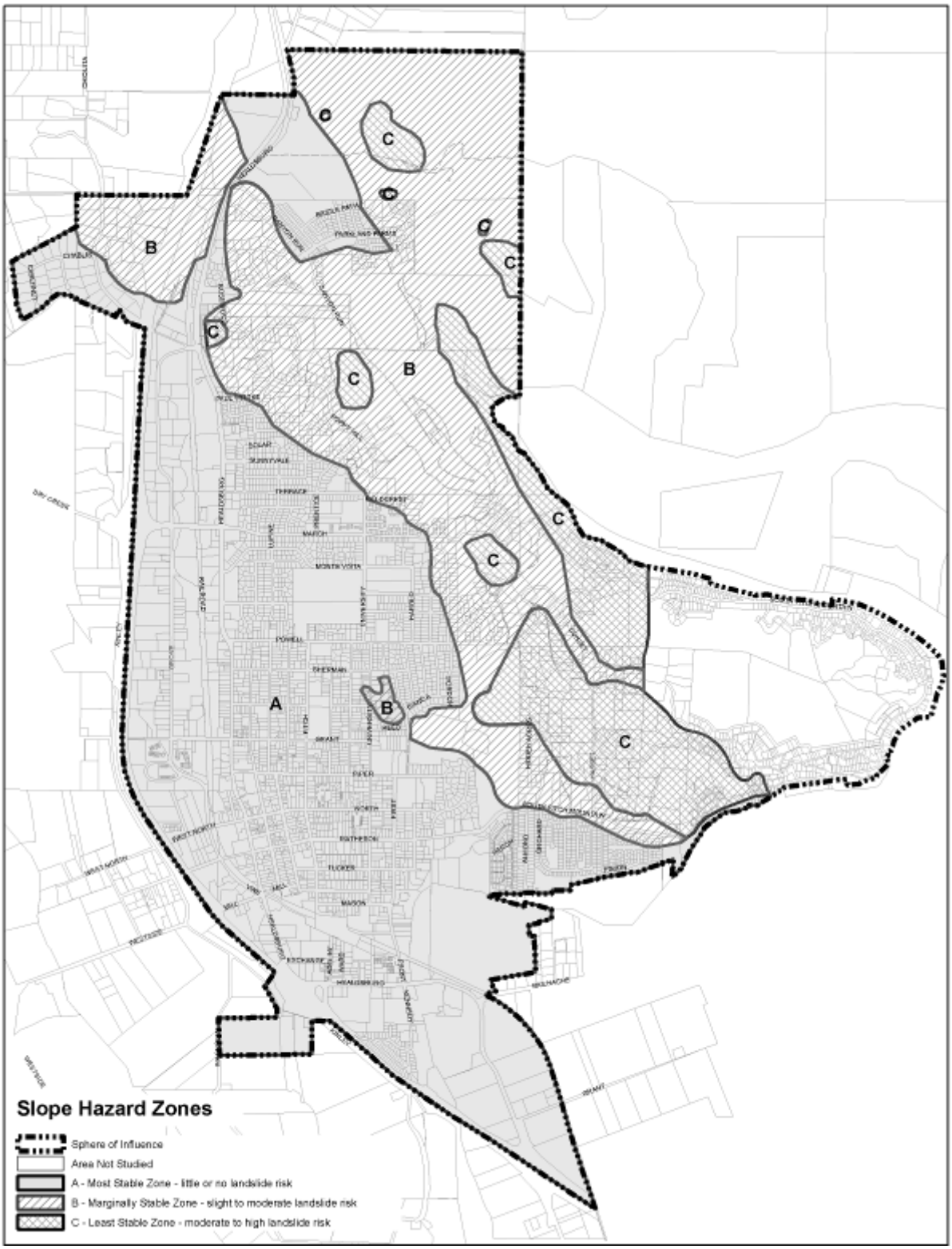

Figure 19 Slope Hazard Zones

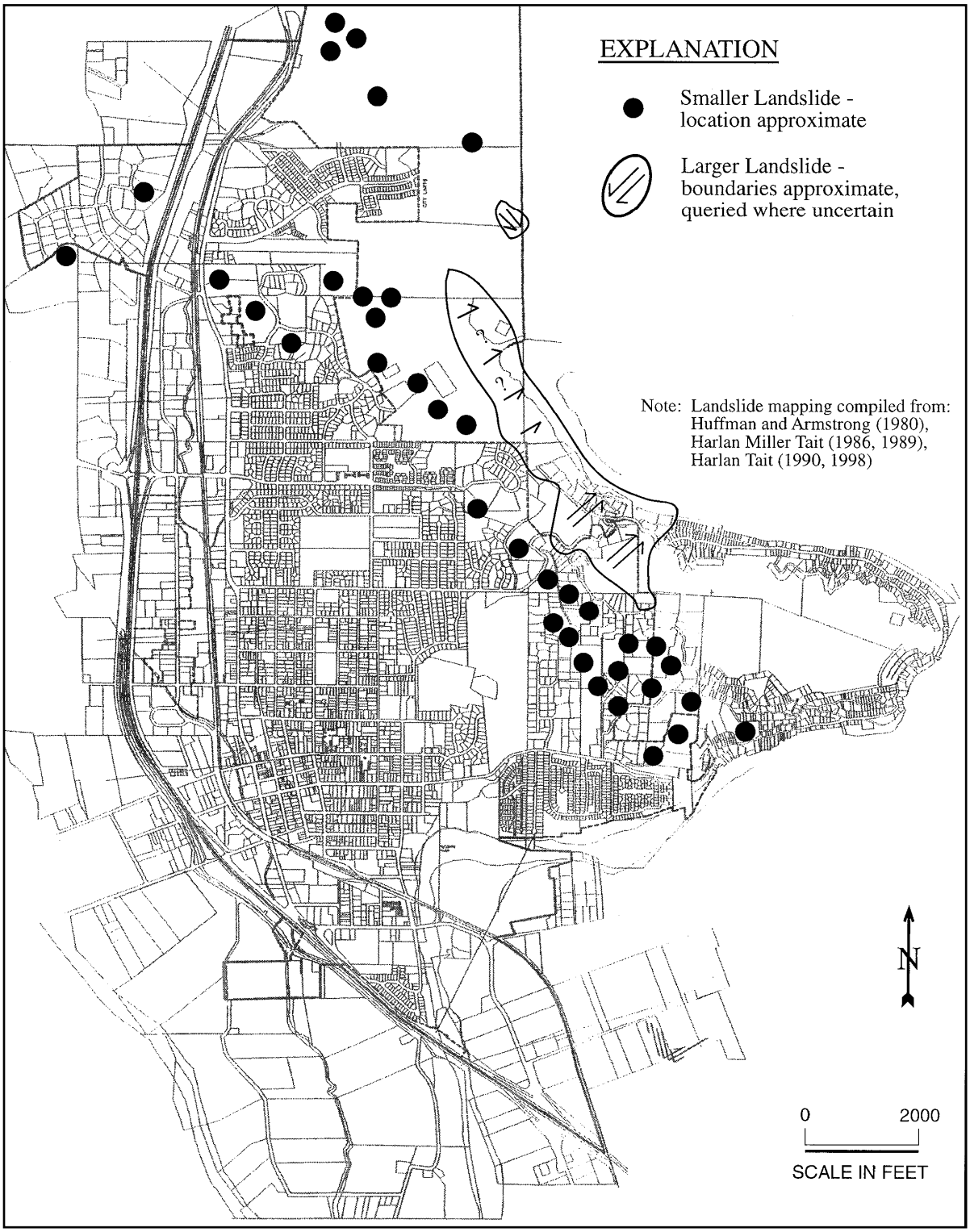

Figure 20 Landslide Locations

The risk of loss of property or life as a result of debris flows can be reduced in several ways. The most effective strategy is to avoid placing structures or facilities in debris flow paths. Where structures exist within areas at risk of debris flows, several measures can be taken to protect structures. These strategies generally involve stabilizing the debris flow source areas through regrading, subdrainage, or retaining walls, constructing basins to retain debris, or diverting debris away from structures. Detailed geologic mapping and subsurface exploration are required to evaluate debris flow risk and provide recommendations for mitigation measures.

Within developed areas, debris flows are sometimes triggered by concentrated runoff being discharged onto natural slopes, manmade slopes, or into swales filled with unstable deposits. This risk can be minimized through construction of appropriate storm drainage facilities in these areas.

16.3.3 Other Geologic Hazards

- Expansive Soils

Portions of the Healdsburg are underlain by expansive soils. Soils of this type undergo a significant volume change as a result of wetting or drying that can cause damage to improperly designed structures. Although the extent of expansive soils is not well known, such soils occur most frequently in areas underlain by rocks of the Great Valley Sequence or Sonoma Volcanics. Expansive soils can be mitigated through special foundation or pavement design.

- Expansive Bedrock

Moderately- to highly-expansive materials can occur within the bedrock formations present in Healdsburg. These materials are most commonly layers of mudstone or volcanic tuff. Mudstone within the Great Valley Sequence and Glen Ellen sediments may locally be moderately expansive. Tuff beds occur commonly in the Sonoma Volcanics and can be highly expansive. Areas of expansive rock can be evaluated during grading by geologic mapping and laboratory testing.

- Erosion

The potential for erosion can be a significant consideration for development along river banks. Generally, the banks of the Russian River in Healdsburg have erosion protection or buildings are set back a reasonable distance. The potential for large amounts of bank erosion is judged to be moderate. It is likely that bank erosion can be controlled in the future by maintaining adequate erosion protection measures such as those already in place.

To reduce erosion in developed areas, surface v-ditches and storm drains must be regularly maintained to continue functioning as designed. Failure to do so could result in degradation of the stability of cut and fill slopes. In addition, proper drainage and erosion control during grading is necessary to control erosion and avoid downstream sedimentation. Typically, erosion impacts are greatest in the first two years after construction, the time generally required to re-establish a good vegetation cover on man-made slopes.

17 Drainage and Flooding

17.1 Russian River

Part of the city's Sphere of Influence eastern boundary is defined by the Russian River, which extends 110 miles and drains approximately 1,500 square miles in Mendocino and Sonoma Counties into the Pacific Ocean.

The Federal Emergency Management Agency (FEMA) revised the flood hazard map for the Healdsburg area in 2006. All or portions of approximately 140 homes and a few non-residential properties within the city limits are included in the river's 100-year flood hazard zone (see Figure 21). In order to maintain participation in the National Flood Insurance Program, the City updated its floodplain regulations to bring the City's floodplain management ordinance into conformance with the current federal regulations and adopted the new flood hazard map.

17.2 Foss Creek

The other important surface water in the city is Foss Creek, which has its origins at the northeastern-most corner of the Sphere of Influence and empties into the Russian River. Most of the area within the city limits and over half of the Urban Service Area falls within the drainage area of Foss Creek. A portion of the Urban Service Area to the north of the city limits drains to Alexander Valley and the balance of the Urban Service Area drains to the Russian River.

Foss Creek runs north-south through town, roughly paralleling the Northwestern Pacific Railroad tracks, and flows first through a detention basin near the northern city limits (75 acre feet capacity) and to a second detention basin (off-stream) south of Dry Creek Road (49 acre feet capacity), then runs south in channels and conduits, leaving the city through double concrete boxes under US 101 near Exchange Avenue and Healdsburg Avenue.

The northern detention basin, located north of the Parkland Farms subdivision, was sized to accommodate anticipated development in the Foss Creek watershed portion of the city's northern planning area (i.e., Areas A, B, and C). The detention basin accepts increases in storm runoff from development and detains the peak storm flows, thereby reducing downstream flooding. The detention basin is designed with upper and lower sections so that the lower area nearest the creek has 3:1 banks, fills first, and functions as a riparian habitat and wetland. During a peak storm, an infrequent event, the upper portion of the detention basin fills as storm water backs in from the lower area. This area is designed with a gradual 6:1 slope and rectangular shape to be available for secondary use as a recreational area. The detention capacity for the basin was calculated for housing densities higher than have actually been approved resulting in a substantial factor of safety, therefore no other major flood control or offsite storm drain improvements are anticipated to be required for further development in the northern planning area.

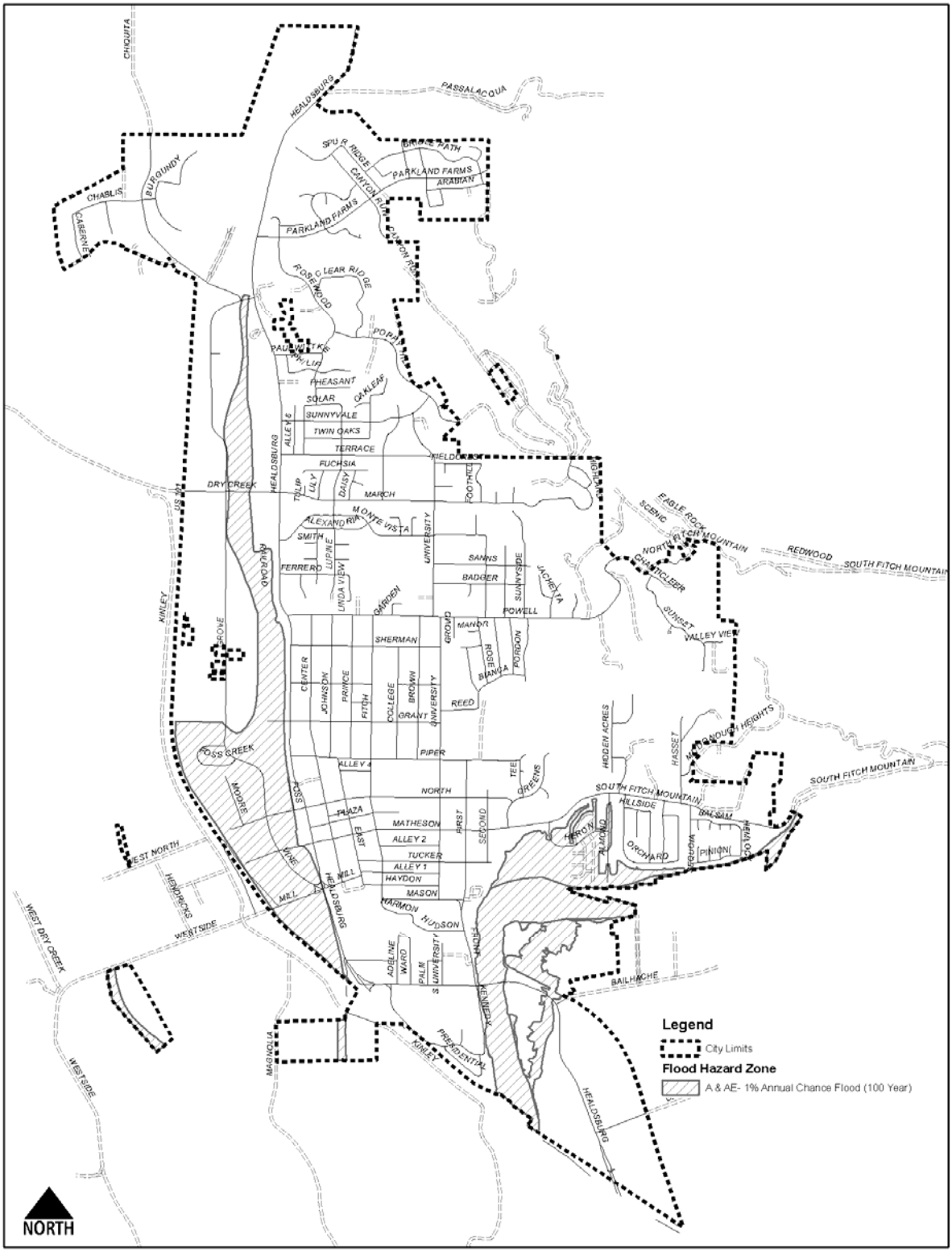

Figure 21 Flood Hazard Zones

The City has filed a flood map amendment application with FEMA to reflect a significant reduction in the flood hazard areas depicted for Foss Creek as a result of the detention basins' construction.

Drainage improvements planned for the foreseeable future include adding capacity in the low areas downtown that occasionally experience local flooding, and improving the channelized portion of Foss Creek north of North Street that fills quickly and may break out during a peak storm. Planned improvements for the area south of Healdsburg Avenue and Mill Street include a storm drain conduit along Ward Street to existing storm drains. A project to extend the bridge and culvert at West Grant Street will improve pedestrian access to the Grove Street development area without significantly reducing peak levels in Foss Creek, and will follow the other projects.

17.3 Dam Failure Inundation

Dam failure is the collapse or failure of an impoundment that causes significant downstream flooding. Flooding of the area below the dam may occur as the result of structural failure of the dam, overtopping, or a seiche (earthquake generated waves). The collapse and structural failure of a dam may be caused by a severe storm, earthquakes, or internal erosion of piping caused by embankment and foundation leakage.

Flood control for the lower Russian River is provided primarily by Warm Springs Dam. It is located on Dry Creek, a tributary of the Russian River, approximately 10 miles northwest of the city. Completed in 1983, the 30 million cubic yard dam is compacted earth-fill with an impervious core, measuring 319 feet high and 3,000 feet long. Lake Sonoma that was created by the dam has a storage capacity of 381,000 acre-feet and a total surface area of 3600 acres. Warm Springs Dam is located on a medium-sized fault but was designed to absorb the maximum expected displacement and groundshaking from any fault in the region. Failure of this dam could inundate most of the city, to an elevation of 230 feet (see Figure 22). The Army Corps of Engineers has developed an evacuation plan for affected areas, including Healdsburg, in the event of dam failure.

Coyote Dam is an earthen dam located on the East Fork of the Russian River above Ukiah (north and upstream of the city, in Mendocino County) and is part of a system that provides water to Mendocino, Sonoma, and Marin counties. The dam provides storage capacity of 122,500 acre feet at Lake Mendocino. Failure of this dam could inundate the southern portion of the city with water traveling down the Russian River. The City of Healdsburg Emergency Operations Plan, adopted in December 2007, specifies roles and responsibilities during an evacuation. A draft Emergency Operations Center operations manual has been prepared and is anticipated to be adopted in early 2009.[59]

[59] *City of Healdsburg Fire Department, personal communication, January 5, 2009.*

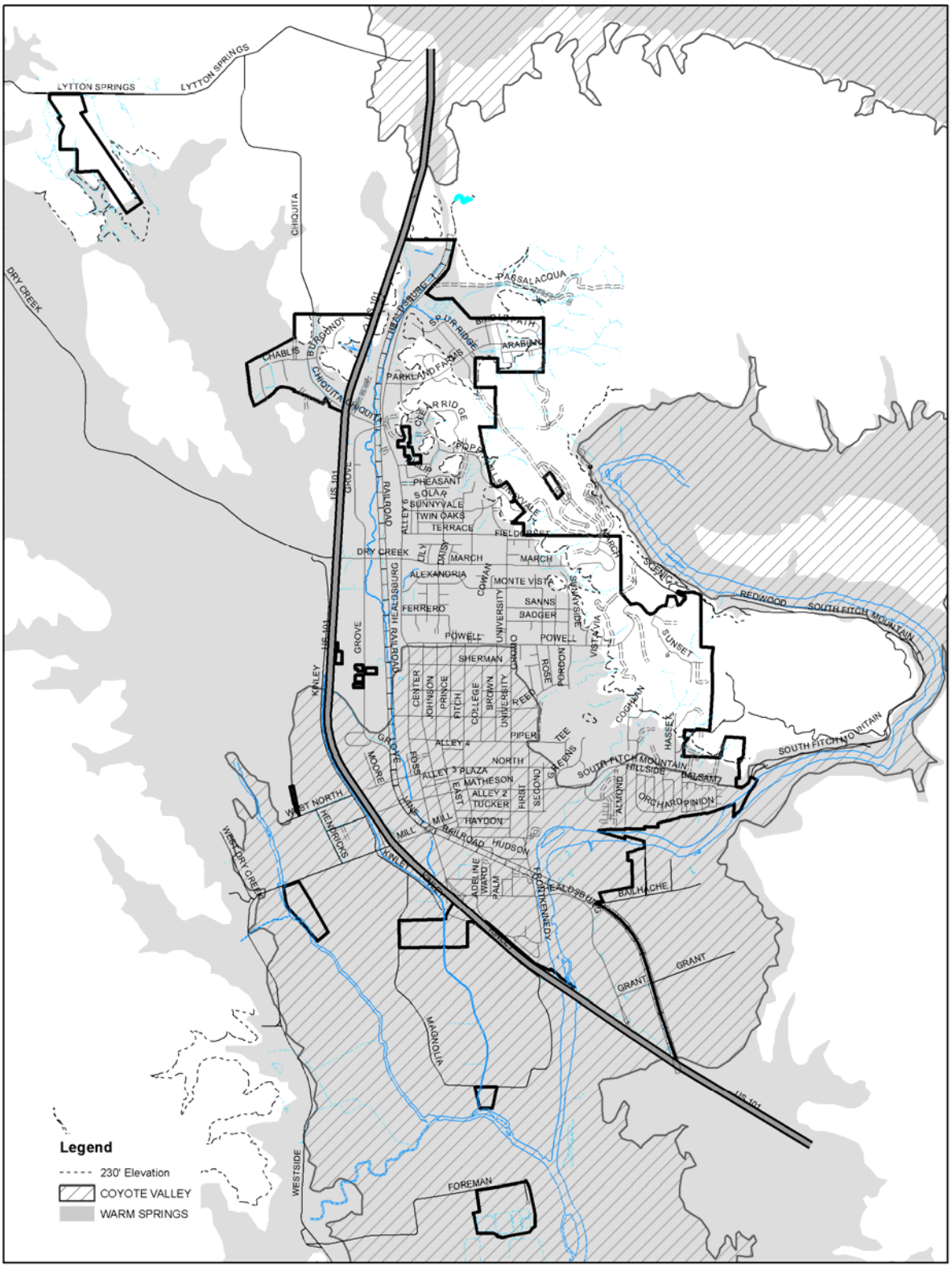

Figure 22 Dam Inundation Areas

18 Noise

18.1 Existing Acoustical Environment

Much of Healdsburg consists of residential areas with a generally peaceful acoustical environment. The primary existing noise-sensitive land uses, other than residential, include parks, schools, and hospital uses. The main existing sources of noise affecting these noise sensitive land uses include traffic, particularly along Highway 101 and arterials such as Healdsburg Avenue, the railroad (when it is operating), certain downtown uses which collectively or intermittently create a higher than average sound level, and various industrial uses. Noise associated with operations at Healdsburg Municipal Airport does not exceed the land use compatibility standards included in the General Plan.

Table 48 indicates existing sound levels measured at various locations in Healdsburg made between June and October of 2002. The locations were selected to examine diverse locales within the city with emphasis on sensitive land use areas. Some of these locations are noise-impacted areas as defined by the General Plan.

Table 48 Sound Level Measurements (2002)

Location	CNEL	Comments
Lupine Road	53	South side of Lupine Road/NE corner of Sunnyvale
Spruce Way	58	SW corner of Sunnyvale/Spruce
1300 Block of Prentice Drive	59	Healdsburg General Hospital
Ferraro and Lupine	56	Area of new homes
435 Allan Court	60	City offices
97 Kennedy Lane	57	Mobile homes
204 Tucker Street	56	Residential
1272 Orchard Street	54	Residential
1300 Pinon Drive	55	Residential
208 Almond Drive	62	Residential
800 Canary Court	57	Residential (near city pumps)
Badger Park	59	Park
118 North Street	61	Commercial
220 Matheson Street	61	Across from Healdsburg museum
Chiquita Road	72	South side of Chiquita, 200 feet east of US 101
Burgundy Road	71	South end of Burgundy Road
Chardonnay Drive	72	50 feet from US 101

Source: Lumina Technology, November 7, 2002

18.2 Noise Compatibility Standards

The General Plan includes land use compatibility standards for noise, measured in decibels. Decibel (dB) refers to a unit expressing the relative intensity of sound as it is heard by the human ear. The decibel scale is logarithmic. Zero dB is the lowest sound level that a normal ear can detect under very quiet ("laboratory") conditions and is referred to as the "threshold" of human hearing. On the logarithmic scale, 10 decibels are 10 times more intense, 20 decibels are 100 times more intense, and 30 decibels are 1,000 times more intense than 1 decibel.

The General Plan's noise standards are further based on Day-Night Average Sound Level (Ldn) and Community Noise Equivalent Level (CNEL) noise level ratings, which are frequently used in community noise ordinances since these are expressed as a function of time (because noise varies over time) and time of day (because people are more sensitive to nighttime rather than daytime noise).

Ldn is the A-weighted average sound level in decibels during a 24-hour period with a 10 dB weighting applied to nighttime sound levels (10 p.m. to 7 a.m.). This exposure method is similar to the CNEL (see below), but discounts the additional weight given in that measurement to noise during the evening time period (7 p.m. to 10 p.m.).

CNEL reflects noise exposure over an average day, with weighting to reflect nighttime sensitivity. Both of these standards are calculated from the cumulative noise exposures occurring over a 24-hour day in terms of A-weighted sound energy. The 24-hour day is divided into two intervals form 7:00 a.m. to 10:00 p.m., and the nighttime interval from 10:00 p.m. to 7:00 a.m.). A 10 dB weighting factor is additive to the sound levels occurring during the nighttime period interval to account for the greater sensitivity of people to noise during these hours.

As shown on General Plan Policy Document Figure 10, Land Use Compatibility for Community Noise Environments, the City of Healdsburg considers single-family residential land uses "normally acceptable" in noise environments of 60 dBA L_{dn} or less. Single-family residential land uses are considered "conditionally acceptable" in noise environments between 55 dBA L_{dn} and 70 dBA L_{dn}. In noise environments greater than 70 dBA L_{dn} but less than 75 dBA L_{dn}, residential land uses are considered "normally unacceptable." Residential land uses are considered "clearly unacceptable" in noise environments exceeding 75 dBA L_{dn}.

Interior residential noise standards for multifamily dwellings are set by the State of California at 45 CNEL. The standard is designed for sleep and speech protection and most jurisdictions apply the same criterion for all residential uses.

The City has also adopted Ordinance 1011 to regulate excessive noise and vibration by limiting intrusive noise generated from certain sources.

19 Scenic Resources

19.1 Overview of Scenic Resources

Views of wooded ridges and hillsides, the Russian River, and adjacent agricultural valleys which provide a classic California "wine country" landscape, are the primary scenic resources that enhance Healdsburg's setting. These scenic resources play a major role in Healdsburg in being an attractive place to live for local residents and as a destination for tourists.

Fitch Mountain is the most visible scenic landmark in the Planning Area, rising just to the east of the central part of Healdsburg. While this mountain includes some low-density residential development on its flanks, the higher portion remains open space that is permanently protected by a conservation easement.

Other scenic ridges adjoin the city to the northeast and north, including Healdsburg Ridge (a.k.a. Reservoir Hill) outside the city limits but within the Planning Area. Many of these ridgelines are maintained as private open space permanently protected by conservation easements. Scenic wooded ridges also exist in Area A, an area that was annexed into Healdsburg in 1994, and in Area C, just to the north of Area A and outside the city limits.

Views of the Russian River within the city limits are relatively limited. The river is visible from the Highway 101 and Healdsburg Avenue bridges, from Veterans Memorial Beach Park, and one block each of Front Street and Kennedy Lane. The river is also visible on certain sections of Fitch Mountain Road outside of the city limits where it winds around Fitch Mountain.

19.2 Scenic Ridgelines

Figure 23 depicts the major scenic ridgelines designated by the General Plan Policy Document. The General Plan requires a visual analysis for any development proposed within 200 feet on either side (based on a horizontal projection) of the centerline of major scenic ridgelines as shown on this figure. Such an analysis must demonstrate that the proposed development will be unobtrusive, and that any structural projections above the ridgeline will be screened by existing natural features. Either cross-section drawings at 500-foot intervals perpendicular to the ridgeline or computer-simulated photomontages showing before and after views of the ridgeline from pertinent vantage points are required for this visual analysis. This requirement has most recently been implemented for homes proposed within designated scenic ridgelines in Area A, and will be a primary design factor in selecting the location of any new homes proposed in nearby Area C, just north of the present city boundaries.

In addition to visibility analysis requirements, minor design review by the Planning Director is required under Section 2605(5) of the Zoning Ordinance for the construction of, or expansion of, greater than 500 square feet to a single-family dwelling located within a scenic ridgeline corridor designated by the General Plan as determined by the Planning Director.

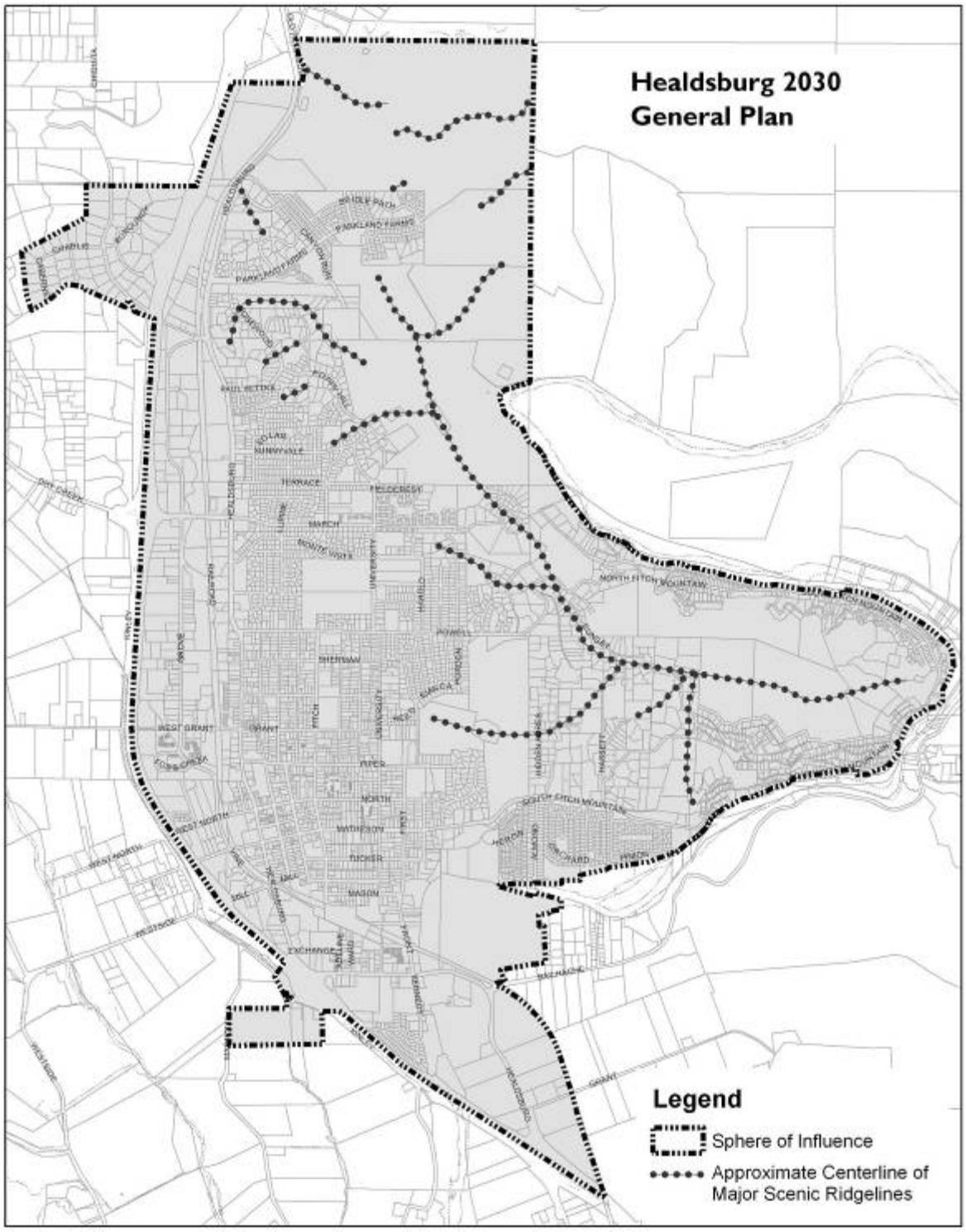

Figure 23 Major Scenic Ridgelines

19.3 Scenic Roads

The General Plan requires the protection and enhancement of the viewsheds along the following highways, roads, and streets (see Figure 24):

- Highway 101 - Entire length within the Planning Area
- Healdsburg Avenue - North of Grove Street
- North Fitch Mountain Road - East of Benjamin Way
- South Fitch Mountain Road - East of Heron Drive
- Healdsburg Avenue - South of Russian River bridge

Of these designated scenic roads, only "Healdsburg Avenue/North of Chiquita Road", and "Healdsburg Avenue/South of Memorial Bridge," are entirely within existing city limits. All or most of the other designated scenic roads are within the portion of the Planning Area that remains under County jurisdiction. Existing viewsheds along these designated scenic roads are described below.

Highway 101 offers views across both nearby vineyards and hillsides, and across much of Healdsburg, particularly north of Dry Creek Road where the freeway grade is higher than most of the city. As a scenic corridor, the Highway 101 freeway, which skirts most of Healdsburg lying to the east, is enhanced by mature redwood plantings which partially screen neighboring urban development, including various industrial and commercial uses, the Harvest Grove apartments, the back side of the Vineyard Plaza shopping center, and Presidential Estates.

For motorists approaching from the north, the first view of Healdsburg is of the relatively new Parkland Farms development at the far north end of town. The view from this section of the highway also includes the recently cleared and currently vacant site of a former lumber processing facility between the freeway and Healdsburg Avenue. A concrete divider in the middle of the freeway blocks the view of this area for south-bound motorists.

From motorists arriving in Healdsburg along Highway 101 from the south, an excellent view is afforded up the Russian River towards two old truss bridges with a background featuring Fitch Mountain and the Mayacama Mountains, forming a memorable first impression and entry to the city.

Fitch Mountain Road within the County offers a scenic route that follows a dramatic bend of the Russian River around the east side of Fitch Mountain. The scenery is enhanced by lush vegetation varying from redwoods on the north side of the mountain to more open oak woodland on the south side. Some sections of this road are also lined with older homes and residential enclaves that were originally developed as seasonal or vacation homes and are now mostly used year round.

Alexander Valley Road, Westside Road, and Dry Creek Road provide direct access into the scenic "wine country" valleys surrounding Healdsburg. All three of these roads are also designated scenic corridors under the Sonoma County General Plan.

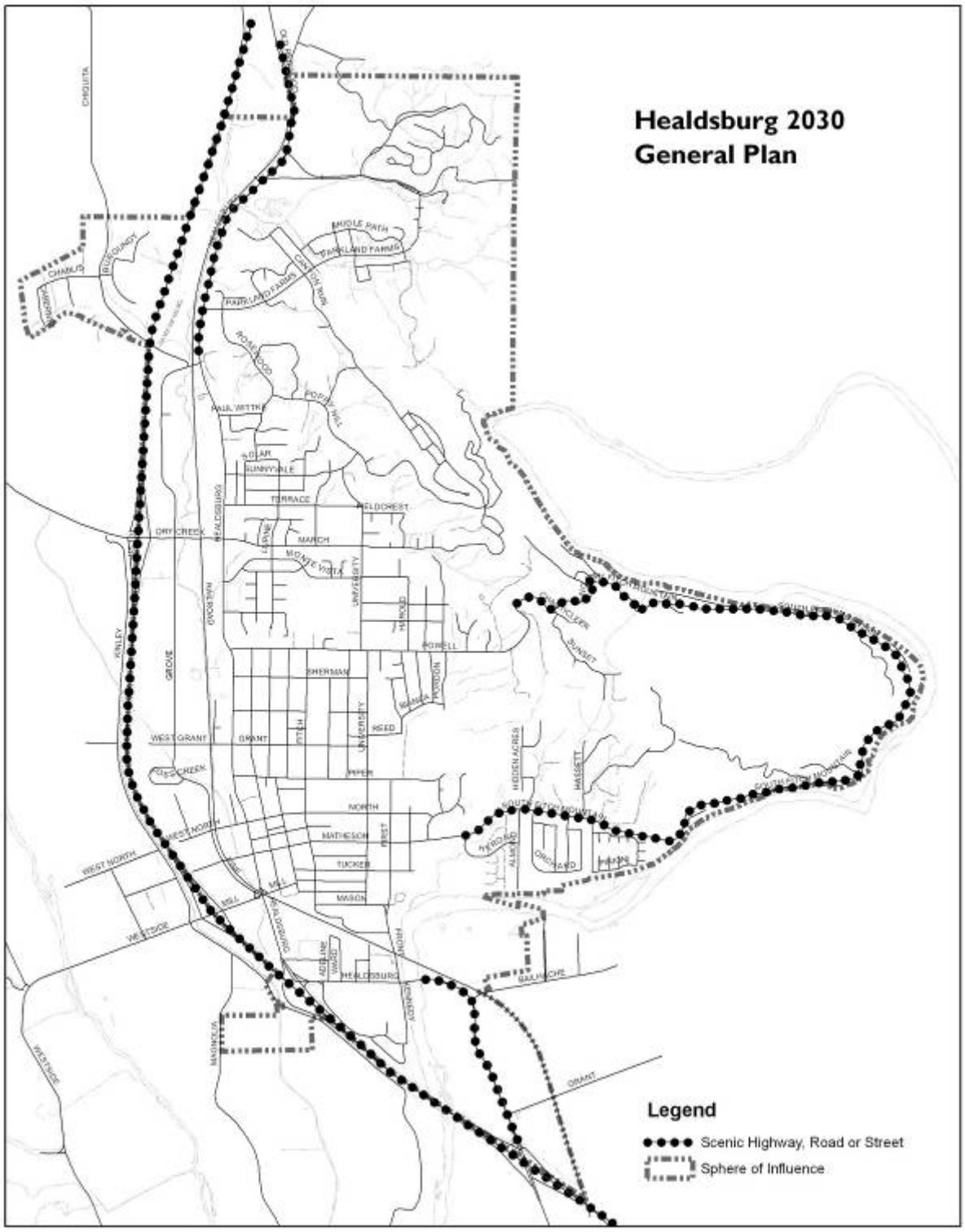

Figure 24 Scenic Highways, Roads and Streets

20 Urban Design

20.1 Existing Urban Design Features

The built environment of Healdsburg has many urban design features that are attractive and communicate a sense of place. Beyond the influences of topography, the features that have shaped the growth and pattern of the city include the central plaza and grid of streets comprising the oldest part of town, the railroad, Highway 101, and the Russian River.

In terms of urban design districts, Healdsburg can be very broadly divided into five categories: a) downtown, b) surrounding older, mostly-residential neighborhoods, c) major arterial corridors (mostly highway commercial) outside the downtown area (i.e., Healdsburg Avenue, Dry Creek Road), d) industrial areas (light and heavy, older and newer), and e) outlying neighborhoods. The approximate boundaries of the downtown area and older residential neighborhoods are shown in Figure 25. The city's industrial areas are located mostly between Highway 101 and the railroad. The newer neighborhoods include all those areas designated as Residential beyond the older residential area.

Each of these areas has its own set of distinctive visual attributes and qualities which are described briefly below.

- Downtown

The historic center of Healdsburg is situated around a central plaza that provides a vibrant, green and attractive visual focus for the downtown area. This plaza, with its towering old trees, benches, and gazebo, is surrounded by one- and two-story buildings, many of which were built in the 19th century. These elements together lend an historic feel to the area. Healdsburg Avenue is the historic main street of the city and runs along the west side of the plaza. A relatively dense array of mostly commercial uses comprising the downtown area extends further north and south along this main street, as well along nearby blocks of Center Street, Plaza Street, Matheson Street, and North Street.

While the downtown area was beginning to deteriorate in the 1960s and 70s, a series of planning efforts, including the 1979 Downtown Area Plan, the 1982 R/UDAT study, the 1988 Streetscape Plan, the Building Façade Rehabilitation Program (begun in 1985), and the West Plaza Project, helped to set the stage in transforming the downtown area into what it is mostly today: renovated, historic buildings, a pedestrian scale enhanced by subsequently implemented streetscape improvements, and a lively commercial center dominated by mostly small specialty shops, restaurants, and other commercial establishments geared to serving tourists as well as local residents.

The West Plaza Project involved clearing three blocks in 1980 due to vacancies and deterioration of buildings on the west side of Healdsburg Avenue. Construction of the Healdsburg Hotel in 2001 filled a visual gap in the enclosure of the plaza and has substantially influenced the plaza's present look.

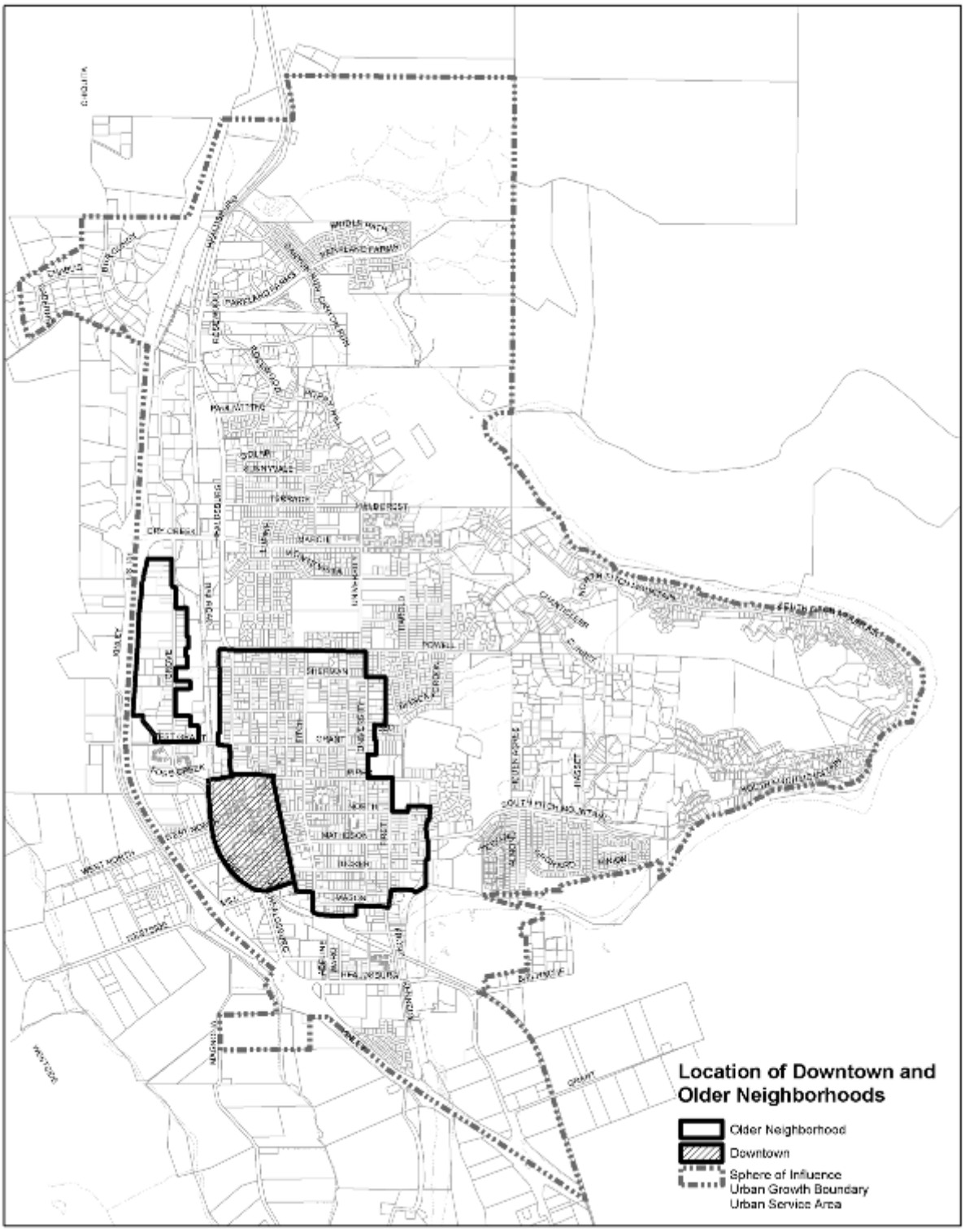

Figure 25 Downtown and Older Neighborhoods

The western edge of the downtown area includes the Vineyard Plaza Shopping Center, which provides important services to residents. At the north end of downtown is the Mitchell Center, which is also primarily resident-oriented and includes a movie theater. Both of these shopping centers are more auto-oriented that the rest of downtown, with parking located in front of buildings in contrast with buildings directly fronting the street as found in the city's older commercial core.

- Older Neighborhoods

On a grid of streets extending beyond the downtown area predominantly to the north, and east, (due to historic patterns of flooding along Foss Creek and Norton Slough to the west, and the railroad and adjacent, early industrial areas to the south) are the oldest residential neighborhoods in Healdsburg. Along Healdsburg Avenue itself north of the downtown area, between Powell and Grant Streets, many of the older homes have been converted to offices or apartments.

Along with the Grove Street area, which was an early suburb of Healdsburg that remained until recent times outside of the city limits, these older neighborhoods contain many historic buildings representing a broad range of architectural styles, including Queen Anne, Italianate, Homestead, Greek Revival, and Neo-classical. This older residential zone just outside of the downtown area includes the city's only two historic districts: several blocks of Matheson Street, and all of Johnson Street.

This area also includes most of the city's bed and breakfast inns, as well as a few of condominium developments and small apartment buildings, mostly built in the 1950s to 1980s, that replaced single-family homes or occurred as infill development. Attributes of this area include architectural variety developed over many years, and the presence of many heritage trees, small gardens and mature street trees.

- Newer Neighborhoods

In contrast, many newer neighborhoods in Healdsburg tend to have less variety of architecture and lot size because of mass production of housing within relatively shorter time periods. After World War II, new neighborhoods comprised primarily of single-family homes, along with a strip of apartments along March Avenue, were developed in subdivisions that relied on a street pattern typified by more curvilinear, loop and cul-de-sac streets, rather than extensions of the older grid pattern. As a result, many of these newer neighborhoods are linked to the older core of the city by collector or arterial streets only. Subdivisions constructed in the 1960s and 1970s are typified by medium-size lots (i.e., 6000 square feet), with mostly one-story homes and two-car garages. Some of these newer neighborhoods lack street trees, and the streetscape is more likely to include large expanses of driveways and building facades dominated by garage doors in comparison to older neighborhoods.

In the 1970s, many small- to medium-sized planned unit developments were built on the outskirts of Healdsburg, such as River View on the south side of South Fitch Mountain Road and Fitch Mountain Villas. These typically feature townhouses or small homes on relatively small lots, along with relatively narrow streets and shared open space areas maintained by a homeowner association.

An example of more recent large-scale residential development can be found in the Parkland Farms subdivision in Area A, an area that was annexed at the north end of the city in 1994.

This development is visually separated from the rest of Healdsburg by a low, wooded ridge. Many of the homes in this area were built on relatively small lots compared to previous single-family home development, and in accordance with design standards in the Specific Plan adopted by the City for this area. In contrast to earlier suburban development, most of the new homes are two-story rather than one-story due to escalating land costs and a trend toward smaller lots. As a result of the small lots in combination with relatively large homes, the density of this area appears in strong contrast to surrounding or remaining open space. With landscaping and street trees maturing in this area, this contrast is expected to soften over time.

This area also contains three affordable housing projects that consist of apartments or ownership townhomes that visually fit well with surrounding single-family homes. The nearby Oak Grove apartments on north Grove Street also provide a recent example of what has been built in the north end of Healdsburg, and are significant in being both the first three story residential development ever built in Healdsburg as well as being highly visible from U.S. Highway 101.

- Major Arterial Corridors

Healdsburg Avenue functions as the main street in Healdsburg and as such provides a corridor that sets the stage for viewing the city on a daily basis for both residents and visitors. The character of Healdsburg Avenue changes abruptly just north of Grant Street, where it includes many older homes that are now mostly used as professional offices, as well as soon infill apartments. This character changes once again north of Powell Avenue. Although vacant areas and residential uses predominate along much of the east side of the street, most of Healdsburg Avenue in this area is dominated by strip commercial uses such as car dealerships, car washing, gas stations, and various small commercial and/or office developments. In contrast to the downtown area, each of these uses typically has its own parking lot, usually fronting the street. This area does not have an environment conducive to pedestrian activity. Street trees are either immature or lacking in some areas, and there is no sense of intimacy, landmarks or scale that would invite pedestrian traffic or activity.

North of Dry Creek Road, Healdsburg Avenue's character changes again as it brushes against the low, mostly wooded, ridges that separate Healdsburg proper from the new north end that includes the Parkland Farms subdivision and Area C. After a few more highway commercial-type uses, the west side is dominated by large trees in the vicinity of the Simi Winery, while new residential development is visible on the east side in Area A, either fenced off and landscaped, or directly fronting the street. Other than some landscaped strips adjacent to new development in Area A, Healdsburg Avenue lacks street trees along much of this section.

South of downtown, Healdsburg Avenue between Mill Street and Highway 101 includes a mix of commercial and industrial uses that lack visual coherence. The City is examining how this section of Healdsburg Avenue could be visually improved. A roundabout is being considered for the intersection of Healdsburg Avenue, Mill Street and Vine Street in which visual improvement is one of the goals of the project.

Dry Creek Road, between Healdsburg Avenue and Highway 101, is another major arterial that provides a main entry into Healdsburg from the freeway. After exiting from the freeway, initial views includes an existing motel, restaurant, and gas station on the south, and a car and truck

parking lot for a local car dealership to the north. This shifts to highway commercial uses as well as an undeveloped property on the north just west of the railroad tracks.

- Industrial Areas

The city has several light and heavy industrial areas that are predominantly located west of the railroad and adjacent or relatively close to Highway 101. Depending upon the use and when built, some of these areas are attractively landscaped or screened, while other areas lack landscaping and screening, with some sites visible from designated scenic highways such as Highway 101 or Healdsburg Avenue south of Memorial Bridge.

The oldest industrial area exists in the immediate vicinity of the railroad and railroad station southeast of downtown. Since several parcels in this area include vacant buildings or are otherwise underutilized, and because this area is close to both downtown and older, residential neighborhoods, it has potential for redevelopment involving new businesses, housing, or mixed use.

Another light industrial area exists between the freeway and the downtown area. It includes the Foss Creek Circle area and light industrial complexes west of City Hall. Much of this area consists of more recent development and is relatively attractive.

The city's main heavy industrial area is located on the east side of the Russian River and is dominated by Syar Industries. The Old Redwood Highway Guidelines was adopted by the City in the 1980s for development in this area. To date, only one property, Capital Lumber Company, has been developed under these guidelines, which require a wide landscaped strip planted with redwoods along Healdsburg Avenue. Many of the other parcels in this area remain vacant or underutilized due to a lack of city water and sewer service.

20.2 Design Review Requirements

Zoning Ordinance Article 26 specifies applications that are subject to design review and requirements and procedures for applicants. Design review is required for all commercial, office, and industrial projects, and projects involving more than one residential unit. Additionally, design review is required for single-family dwellings in certain specific plan areas (i.e., Area A and the Grove Street Neighborhood Plan area). Design review is also required for the construction, certain alterations, and demolition of any designated historic building and for any structure within a designated historic district resulting in a permanent physical change to the building.

Minor design review approval by the Planning Director is required for the following residential developments:

- Minor changes to the exterior of existing buildings that require a use permit.
- A change of use in a building or site not involving substantial site changes.
- Changes to site design not involving major structural or site changes or use.

Major design review approval by the Planning Commission is required for the following residential developments:

- Residential projects with two or more units that involve the development of vacant land with site and building improvements or involving major changes or additions to a previously developed site.

- Residential projects involving a change of use which requires substantial changes to the site and proposals for exterior building modifications.
- Projects subject to development approval by the Planning Commission, such as subdivisions, use permits and projects requiring the approval of variance.

Typically, staff reviews all applications for design review and assesses each project relative to any applicable design standards from sources such as the General Plan, the Design Review Manual or specific plans such as for Area A. Areas where there is the potential for inconsistency are then brought to the attention of the Planning Commission prior to consideration of design review approval.

20.3 Design Review Policies and Guidelines

The Design Review Manual sets forth design review policies and guidelines. The manual includes general design standards that address preservation of natural site amenities, relationship to existing development, and site relationships. In addition, specific standards are provided in regard to architecture, parking, landscape design, tree preservation, fences and walls, outdoor storage and service areas, signs, and multi-family, downtown, hillside residential, commercial, and industrial development.

The Manual also establishes eight urban design districts and includes descriptions and key design guidelines for each of these districts. These descriptions and guidelines for these districts need to be updated to recognize existing development that has occurred since the Design Review Manual was first published. These include the completion of the hotel on the west side of the Plaza in District 1 West, new residential development that has already occurred in Area A in District 2, and consistency with guidelines that may be adopted as part of the Entry Road study in District 4 (Dry Creek Road) and District 6 (Healdsburg Avenue between Mill Street and the freeway).

New development in specific areas is also subject to design guidelines or standards that are included in city-adopted plans, including the Area A Specific Plan, the Grove Street Neighborhood Plan and the Old Redwood Highway Design Guidelines (Healdsburg Avenue south of Memorial Bridge).

Other areas could be considered for designation as a design district, such as Grove Street north of Dry Creek Road (mostly light industrial), an area with high visibility from Highway 101. Another potential design district is the area around the railroad depot, either as part of a specific plan or as a tool to promote attractive redevelopment and mixed uses in this area.

20.4 Street Trees

Besides man-made and architectural features, the wealth of street trees and gardens visible along public streets contribute to the city's character.

For new residential development, the City typically requires one street tree per lot, and two street trees per corner lot, with more trees often required where larger lots are proposed, as part of the subdivision or design review approval process. The selection of which tree species to be used is first proposed by the developer, and then reviewed and approved by the City Arborist and the Planning Commission. For new or replacement street trees in existing residential areas, the City Arborist maintains a list of suitable street trees based on the area available for accommodating the eventual size of the tree.

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