

# COMPREHENSIVE STUDY OF FIRE PROTECTION SERVICES

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## MUNICIPAL SERVICE REVIEW

Phase One

**Final Report  
December 2006**

Prepared for:  
**LAFCO of Napa County**



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# INTRODUCTION

## MUNICIPAL SERVICE REVIEW

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This chapter introduces the purpose and scope of the municipal service review (MSR) process and outlines the principal issues and objectives relating to the evaluation of fire protection services in Napa County.

### A. BACKGROUND

#### Legislative Authorization

In 1997, the California Legislature convened a special commission to study and make recommendations to address the governance and service challenges associated with the state's rapidly accelerating growth. The Commission on Local Governance for the 21st Century focused their energies on ways to empower Local Agency Formation Commissions (LAFCOs) to address these challenges. LAFCOs were established in 1963 to oversee the orderly formation and development of local governmental agencies, promote the efficient provision of municipal services, and to protect against the premature conversion of agricultural and open-space lands. The Commission's final report, *Growth within Bounds*, recommended various statute changes to improve LAFCOs ability to fulfill its legislative mandate. Several of the Commission's recommendations were eventually folded into the Cortese-Knox-Hertzberg Local Government Reorganization Act (CKH Act) of 2000.

#### What is a Municipal Service Review?

The CKH Act of 2000 authorizes LAFCO to conduct comprehensive studies of municipal services every five years in conjunction with the sphere of influence reviews of cities and special districts. Spheres of influence (SOI) are boundaries, determined by LAFCO, which define the probable service area for cities and special districts in a manner that meets the present and future needs of the community while protecting against the premature loss of agricultural or open-space lands. The term "municipal services" refers to the full range of services that a public agency provides or is authorized to provide. MSRs are studies that evaluate existing and future service conditions from a local and regional perspective. This includes making determinations on the adequacy, efficiency, and effectiveness of these services in relationship to local conditions and circumstances.

The statutory intent of the MSR process is for LAFCO to evaluate how agencies currently provide services and to consider the impacts on those services from future growth and other changes that may occur in the foreseeable future. This includes identifying opportunities to address deficiencies, inefficiencies, or inequities involving service levels and governmental structures that may exist currently or are anticipated in the future.

As part of the MSR process, LAFCO is required to prepare written determinations that address each of the following service factors:

- 1) Infrastructure needs or deficiencies;
- 2) Growth and population projections for the affected area;
- 3) Financing constraints and opportunities;
- 4) Cost avoidance opportunities;
- 5) Opportunities for rate restructuring;
- 6) Opportunities for shared facilities;
- 7) Governance options, including consolidation or reorganization of service providers;
- 8) Evaluation of management efficiencies; and
- 9) Local accountability and governance.

### **How this report will be used**

The CKH Act requires LAFCO to establish and review the SOI of each city and special district under its jurisdiction. In determining the SOI, which is required to be reviewed every five years and updated as necessary, LAFCO must make determinations with regard to the following four issues:

- 1) Present and planned land uses, including agricultural and open-space lands;
- 2) Present and probable need for public facilities and services in the area;
- 3) Present capacity and adequacy of public facilities that the agency provides; and
- 4) Existence of any social or economic communities of interest in the area if LAFCO determines that they are relevant to the agency.

The MSR process provides LAFCO with a tool for comprehensively studying existing and future municipal service conditions, evaluating organizational options, and examining whether critical services are provided in an efficient and cost-effective manner. In this way, the MSR helps to inform the SOI process with regard to identifying an appropriate and probable service area for each agency under its jurisdiction. LAFCO may also use the MSR in reviewing future proposals for extension of service beyond an agency's current boundary.

## B. Study Area and Agencies Covered

The study area for this MSR is Napa County. Illustrated on **Figure 1-1**, the MSR evaluates the operations of the five local agencies that provide fire protection services in Napa County. These agencies are:

- American Canyon Fire Protection District
  - City of Calistoga
  - City of St. Helena
  - City of Napa
  - County of Napa
- \* The County of Napa has elected to contract with the California Department of Forestry and Fire Protection (CDF) for fire protection services. As a State agency, CDF is not subject to the MSR process and is therefore not directly evaluated as part of this review.
- \* The Town of Yountville has elected to contract with the County of Napa for fire protection services. An expanded review of this relationship will be included as part of LAFCO's *Comprehensive Study of the Town of Yountville*, which is scheduled for 2007.

## C. Data Sources and Methodology

To reduce the amount of surveys and information required from the local fire service agencies, this MSR relied on already published documents as well as a limited agency survey and follow-up interview. Sources of information include, but are not limited to, the following:

- Comprehensive Annual Financial Reports, 2002-2003 and 2003-2004
- Napa County LAFCO Wastewater Municipal Service Review, 2005
- Napa County LAFCO MSR Survey of Fire Service Providers, 2005
- Association of Bay Area Governments, 2005 Projections
- Interviews with Agency Representatives, 2005
- National Fire Protection Association Standards, 2005
- California Statewide Fire Plan, 2005
- Fire Plan, Sonoma-Lake-Napa Unit, 2005
- General Plans for each local government in Napa County
- Government Finance Officers of America, 2005
- International City Management Association, 2005
- California State Fire Marshall Annual Report, 2004-2005

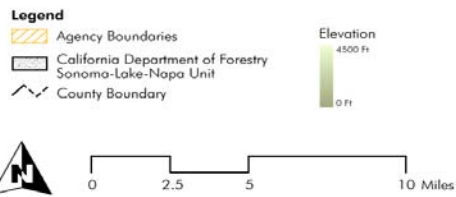
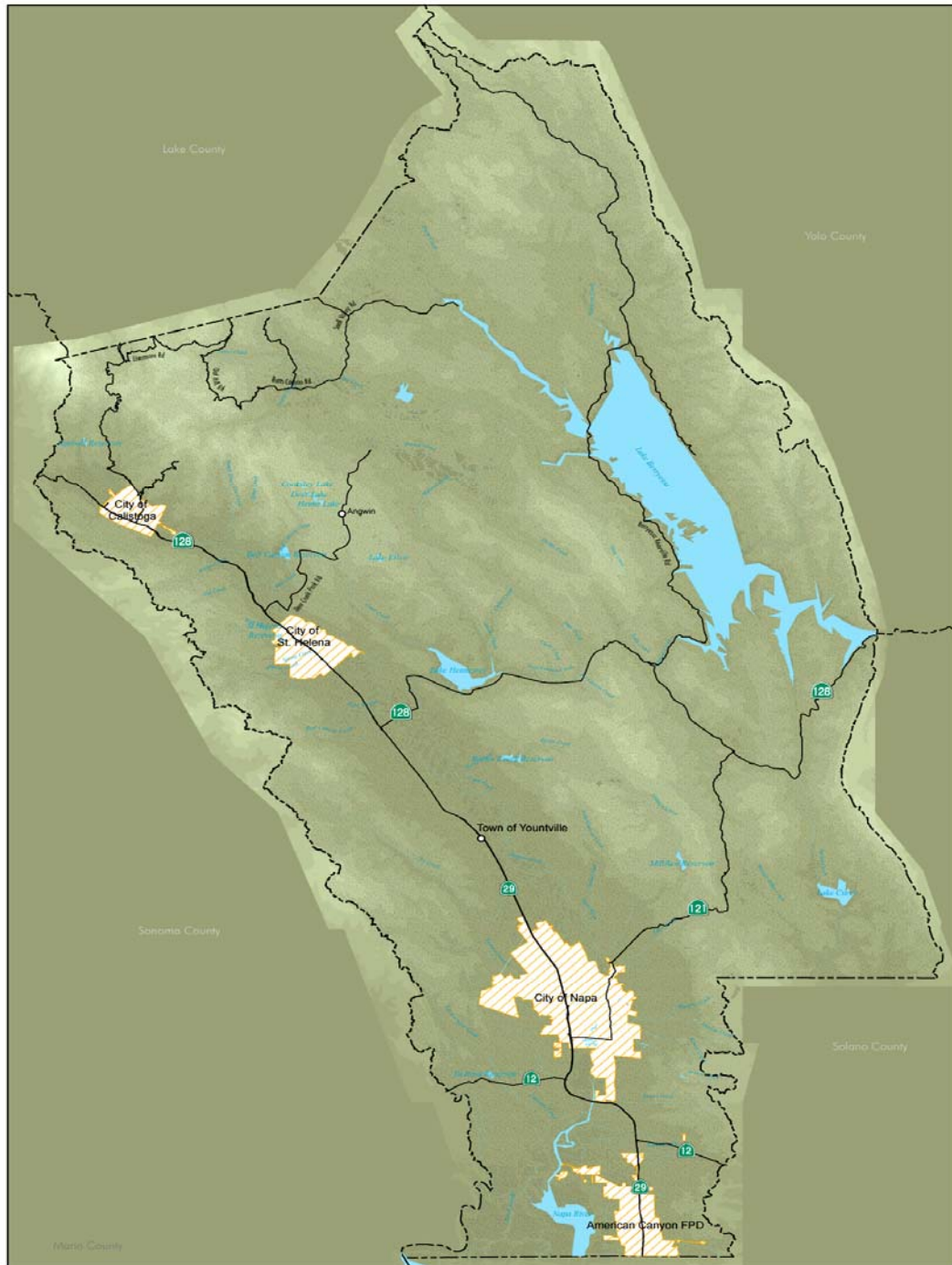


Figure 1.1  
Napa County  
Fire Service Agencies

## D. SCOPE OF SERVICES

The role of local fire protection agencies has transformed significantly over the last several decades to encompass an expanded range of public safety activities. This expansion includes a greater emphasis on emergency planning, emergency medical care, and code development and enforcement. The following identifies a few of the major factors that guide these services in Napa County.

### Fire Protection

The responsibility for providing fire protection services in California is shared by a number of governmental agencies. Determining the government agency that is responsible for serving a particular area in Napa County is based on a classification system managed by the California Board of Forestry and Fire Protection. This classification system designates all public and private lands as Federal, State, or Local Responsibility Areas. A summary of these designations in Napa County is as follows.

- ❑ **Federal Responsibility Areas:** Federal Responsibility Areas (FRAs) are incorporated or unincorporated lands that are owned or controlled by the federal government. There are a small number of FRAs located in northeast Napa County east of Pope Valley. These FRAs are served by CDF through a contract with the United States Forest Service.
- ❑ **State Responsibility Areas:** State Responsibility Areas (SRAs) are unincorporated and non-federal lands that generally underlie timber, brush, undergrowth, or grass. It is the policy of the Board to remove lands from SRAs once housing densities average more than three units per acre over an area of 250 acres.<sup>1</sup> SRAs comprise most of Napa County with the exception of the Napa Valley and are served by CDF.
- ❑ **Local Responsibility Areas:** Local Responsibility Areas (LRAs) are lands that are not designated as FRAs or SRAs by the Board. Nearly all of the lands located in the Napa Valley, including the five incorporated cities, are designated as LRAs and are served by one of the five local fire agencies.

An important factor directing fire protection responsibilities in California is distinguishing between wildland and structural fires. The State is responsible only for preventing and suppressing wildland fires. Structural fires are generally the responsibility of local agencies. As a result, the County of Napa responds to structural fires located within designated SRAs in Napa County, which includes the unincorporated communities of Angwin, Berryessa Estates, Berryessa Highlands, Circle Oaks, Deer Park, and Spanish Flat.

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<sup>1</sup> California Department of Forestry and Fire Protection website ([www.cdfdata.fire.ca.gov/incidents/incidents\\_terminology](http://www.cdfdata.fire.ca.gov/incidents/incidents_terminology)), November 8, 2006.



## Emergency Planning

The State of California Office of Emergency Service (OES) coordinates the State's response to major emergencies in support of local government. Underlying this system of support is the principal that local agencies are primarily responsible for emergency planning. Accordingly, local fire agencies must first rely on their own resources and, as they are exhausted, request assistance from the State. To help formalize this process, OES administers a statewide mutual aid program in which participating fire agencies can receive and provide assistance as needed. All five local fire agencies in Napa County participate in this program.

## Emergency Medical Care

California Health and Safety Code requires each county that develops an emergency medical services program to designate a local emergency medical services (EMS) agency. In 1998, the Counties of Mendocino, Napa, and Sonoma partnered to establish the Coastal Valley Regional Emergency Medical Service Agency to serve as the region's EMS agency. The primary function of the agency is to plan, develop, and maintain an effective emergency medical services system to meet the needs of the community.<sup>2</sup> Key duties include licensing pre-hospital personnel, coordinating, authorizing, and overseeing air and ground ambulance providers, and establishing pre-hospital care standards and objectives for the region. The County of Sonoma Health Services Departments operates the agency under the direction of an advisory committee that includes all three county EMS directors. The agency receives additional direction from advisory councils within each of the three counties.

All five local fire agencies in Napa County are licensed to provide some level of emergency medical care. The level of emergency medical care is generally distinguished between basic life support (BLS) and advanced life support (ALS). Health and Safety Code defines BLS as emergency first aid and cardiopulmonary resuscitation procedures, which is commonly referred to as "CPR." ALS is defined as definitive pre-hospital paramedic procedures, which includes intravenous medication. The majority of local agencies provide BLS. The City of Napa is the only local agency directly providing ALS.<sup>3</sup>

Pursuant to Health and Safety Code, the County of Napa is primarily responsible for arranging emergency medical ambulance transportation services in Napa County. The County currently has two agreements with Piner Ambulance Service to provide ALS ambulance services. These agreements, which establish a northern and southern service area, provide Piner's with exclusive ambulatory rights throughout most of Napa County. The lone exception involves the City of Napa, which maintains its own arrangement with

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<sup>2</sup> The Coastal Valley Regional EMS Plan includes eight objectives: system organization and management; staffing and training; communications; transportation; assessment of hospitals and critical care centers; data collection and evaluation; public information and education and disaster response.

<sup>3</sup> Funding for the City of Napa's ALS program is provided by an annual paramedic tax, which is assessed to each dwelling unit in the City. The amount of the paramedic tax is \$0.06 per \$100 of assessed value.

Piner.<sup>4</sup> The County also has a subsidy agreement with Angwin Volunteer Community Ambulance Company to provide BLS ambulance service for the greater Angwin and Pope Valley area.<sup>5</sup>

## Code Development and Enforcement

The Office of the State Fire Marshal (SFM) is responsible for administering a wide range of fire protection services in California. Key duties include code development and analysis, coordinating wildland-urban interface strategies, tracking local incident reports, and providing training and education programs in fire protection methods and responsibilities. Standards adopted by the SFM are codified into Titles 19 (public safety) and 24 (building standards) of the California Code of Regulations. Notably, Title 24 provides electrical, fire, and plumbing standards. Although these standards apply to all local jurisdictions, California Health and Safety Code allows local agencies to adopt more restrictive or different standards under certain climatic, geological, or topographic conditions.<sup>6</sup>

## Non-Governmental Organizations

A number of non-governmental organizations issue voluntary consensus standards that are relevant to fire protection agencies. Such organizations include the National Fire Protection Association (NFPA) and American National Standards Institute (ANSI). Training materials from other organizations such as the International Fire Service Training Association (IFSTA) and the National Association for Search and Rescue (NASAR) also establish standards to evaluate the training and performance of fire and rescue personnel. These standards are not binding on fire agencies, although frequently federal and state authorities incorporate these standards in regulations that may make them legally binding under some circumstances. Fire agencies must also consider the impact of federal and state laws and regulations, and "voluntary" standards. The courts will frequently apply "voluntary" standards issued by organizations in civil lawsuits.

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<sup>4</sup> Bonny Martignoni, EMS Manager, County of Napa, November 13, 2006.

<sup>5</sup> As part of this agreement the County of Napa pays the Angwin Volunteer Community Ambulance Company an annual service fee in the amount of \$30,000 to compensate for false or cancelled service calls.

<sup>6</sup> Jane Taylor, Associate Architect, California Building Standards Commission, November 9, 2006.

## SERVICE AGENCY PROFILES

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This chapter provides an overview of the five local agencies providing fire protection services in Napa County. Included is a description of each agency's organizational development, a table listing key service information, and a map of their jurisdictional boundary.

### A. AMERICAN CANYON FIRE PROTECTION DISTRICT

#### Overview

The American Canyon Fire Protection District (ACFPD) is a combination paid/volunteer special district. ACFPD is responsible for providing fire protection and emergency medical services for an approximate 6.0 square mile jurisdictional boundary that includes the City of American Canyon. ACFPD also has automatic aid agreements with the County of Napa and City of Vallejo to immediately respond to outside incidents that occur north to North Kelly Road, west to the Napa River, east to Solano County, and south to Highway 37 in Vallejo. In exchange, the County and Vallejo automatically respond to incidents that occur within ACFPD's northern and southern jurisdictional boundary, respectively. ACFPD is currently staffed by 17 full-time and 20 volunteer-reserve firefighters.

#### Background

ACFPD was established as an independent special district in 1957. ACFPD was formed under the California Fire Protection District Act (Health and Safety Code §13801 et. seq.) and was petitioned by local property owners to provide a higher level of fire protection for the community of American Canyon.<sup>1</sup> At the time of its formation, ACFPD was established as an all-volunteer agency funded by a voter-approved special property tax. Existing development in American Canyon included the Rio Del Mar Subdivision and a number of industrial sites located along Green Island Road, including the Leslie Salt Company. In 1961, ACFPD began providing service north to the Soscol Ridge as part of a service agreement with the County. The expansion of its service area along with the continued

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<sup>1</sup> Prior to ACFPD's formation, American Canyon received a basic level of fire protection from the County through its service agreement with the California Department of Forestry and Fire Protection (CDF). The closest CDF/County fire station was located approximately eight miles north of American Canyon at the intersection of Jefferson and Trancas Streets in the City of Napa.

development of American Canyon prompted ACFPD to hire its first paid fire chief in 1959. This hiring signified ACFPD's transition to a combination paid/volunteer district, and was accentuated with the hiring of paid firefighters throughout the 1960s.

In 1975, LAFCO established a sphere of influence for ACFPD. This initial sphere was unique because it consisted of a primary zone and a secondary zone. The primary zone included all lands that were already in ACFPD along with a number of surrounding parcels that were expected to require urban services within the next 10 years. The secondary zone reflected the area served by ACFPD under its service agreement with the County. However, following the termination of the aforementioned service agreement, LAFCO removed the secondary zone from ACFPD's sphere as part of a comprehensive update in 1982. In adopting the update, LAFCO emphasized the role of ACFPD as an urban service provider and correlated the location of the sphere with its service ability and the present and projected need for an urban level of fire protection in south Napa County.

In 1992, ACFPD was reorganized into a subsidiary district to the newly incorporated City of American Canyon. The reorganization resulted in a change to ACFPD's governance structure as the American Canyon City Council became its board of directors.

Current activities of ACFPD include the construction of a new fire station. The new fire station is part of a joint project with the American Canyon Police Department and will be located on the east side of Highway 29 near a planned town center complex. Construction on the joint-use facility is scheduled to be completed in 2007.

## Governance

ACFPD is a subsidiary district of the City of American Canyon. American Canyon is a general-law city governed by a five-member city council that includes a directly elected mayor. The mayor and four council members serve staggered four-year terms and are elected by general vote. Council meetings are conducted on the first and third Thursday of each month at American Canyon's Recreation Center. Meetings are open to the public and provide an opportunity for constituents to offer comments regarding fire protection services in and around American Canyon.

## American Canyon Fire Protection District

**Administrative Address:** 225 James Road, American Canyon, CA 94503  
**Primary Service Area:** City of American Canyon  
**Primary Service Population:** 14,306 (Department of Finance; January 2005)  
**FY2004/2005 Adopted Budget:** \$2,878,000  
**Emergency Medical Service:** Basic Life Support

<b>SERVICES PROVIDED:</b>			
<b>Specific Services</b>	<b>Self</b>	<b>Contract</b>	<b>Provides Outside Service</b>
1. Dispatch		x	
2. Fire Suppression	x		x
3. Basic Rescue	x		x
4. Advanced Rescue	x		x
5. Vegetation Mgmt	x	x	
6. Fire Code Permit/Enforce	x		
7. Haz Mat Response		x	
8. Construction Plan Check	x		
9. Fire Investigation	x		
10. Community Info/Education	x		

<b>STAFFING AND FACILITIES:</b>			
<b>Fire Stations:</b>	<b>List of Equipment</b>		<b>No.</b>
1. Station 11, 225 James Road	Type I Engine		3
	Type II Engine		1
	Type III Engine		1
<b>Personnel:</b>	<b>Number</b>	Type I Water Tender	1
Sworn Staff:	17	Type I Aerial Truck	1
Non-Sworn Staff:	1	Rescue Boat	1
Reserve-Volunteers:	20	Heavy Duty Rescue	1
		Support Vehicles	3

<b>SERVICE PROFILE:</b>			
<b>Service Calls (CY 2004)*</b>	<b>Count</b>	<b>Count Per 1,000 Population</b>	<b>Average Response</b>
Fire	32	2.2	
EMS/Rescue	829	57.9	
Hazardous Conditions	37	2.6	
Service Call	155	10.8	
Good Intent	64	4.5	
All Others	120	8.4	
<b>Totals</b>	<b>1,237</b>	<b>86.5</b>	<b>4:48</b>

\* All Calls

**ISO Class Rating:** Class 3 in areas w/in 1,000 feet of a hydrant  
 (1992 Survey) Class 9 in areas not w/in 1,000 feet of a hydrant

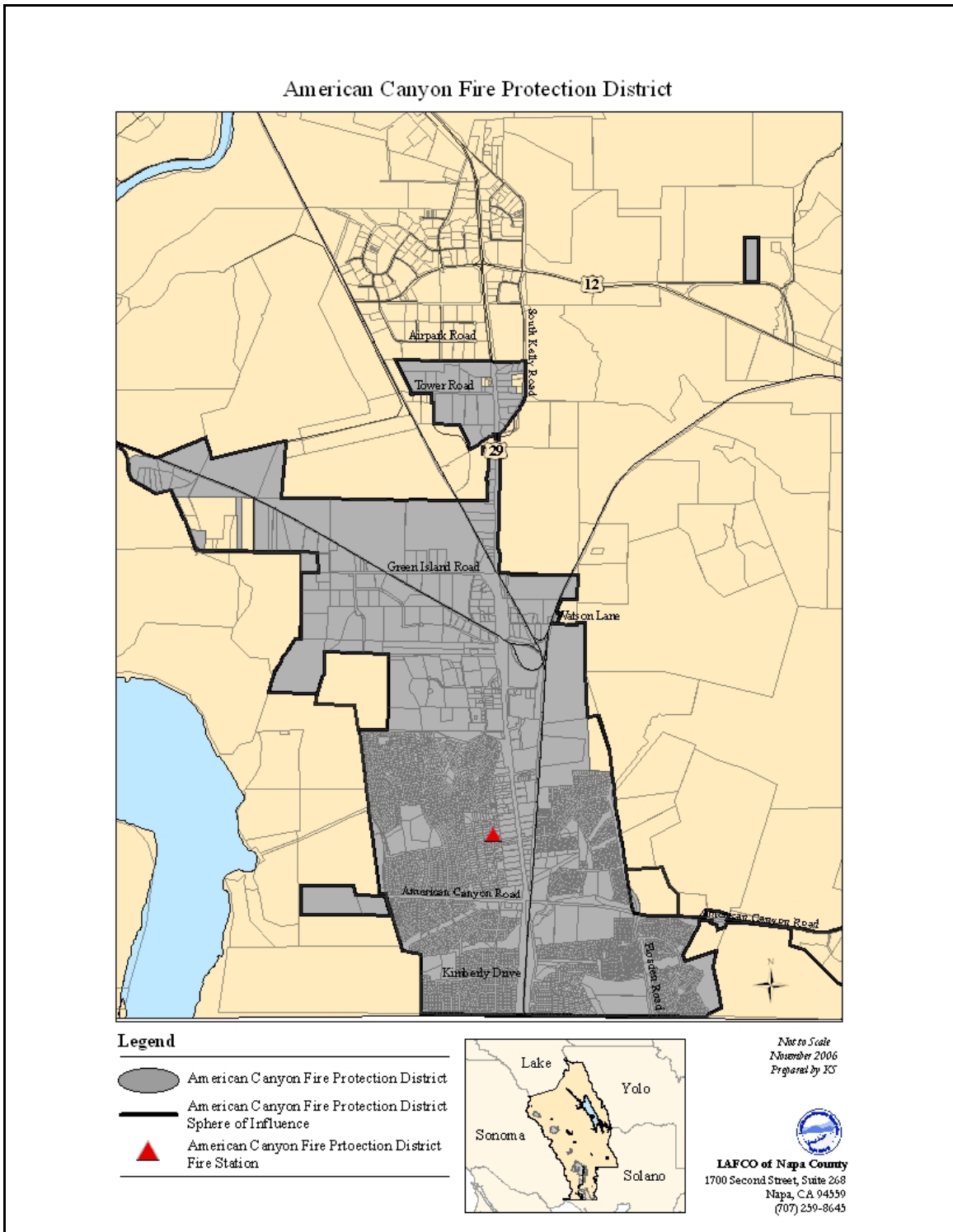


Figure 2.1  
ACFPD

## **B. CITY OF CALISTOGA**

### **Overview**

The City of Calistoga Fire Department (CFD) is a combination paid/volunteer department. CFD is responsible for providing fire protection and emergency medical services for an approximate 2.5 square mile incorporated area. CFD is also under contract with the County of Napa to serve as first responder to outside incidents that are within an additional 50 square mile area. This contracted service area extends north to Lake County and west to Sonoma County. Additionally, through an automatic aid agreement with County of Sonoma, CDF immediately responds to outside incidents in the Knights Valley region of Sonoma County. In exchange, CFD receives an annual service fee along with dispatch and fleet maintenance from the County of Napa and free access to the County of Sonoma's fire training facilities and instructors in Santa Rosa. CFD is currently staffed by three full-time and 18 volunteer-reserve firefighters.

### **Background**

Organized fire protection in Calistoga originated with the formation of an all-volunteer fire company in the 1880s. The volunteer fire company was formed to provide a basic level of fire protection for the growing community of Calistoga, which at the time was two years away from incorporating. A firefighters association was organized to help formalize service operations and facilitate fundraiser activities for the all-volunteer company. As part of this formalizing process, association members began electing a fire chief, which was customarily affirmed by the Calistoga City Council. Notable duties of the volunteer fire chief included preparing an annual budget for approval by the Calistoga City Council.

Modest growth in Calistoga following its incorporation helped to control service demands throughout most of the 20th century. However, by the 1970s, service demands began to increase significantly as Calistoga's population more than doubled between 1970 and 1980. It was during this period that Calistoga began exploring opportunities to supplement its volunteer staff with paid firefighters. Budget constraints proved decisive, and it was not until 1999 when Calistoga hired its first fire chief along with two full-time firefighters.

### **Governance**

CFD is one of five departments in the City of Calistoga. Calistoga is a general-law city governed by a five-member city council that includes a directly elected mayor. The mayor serves a two-year term while the four council members serve staggered four-year terms. Both the mayor and council members are elected by general vote. Council meetings are conducted on the first and third Tuesday of each month at Calistoga's Community Center. Meetings are open to the public and provide an opportunity for residents to offer comments regarding fire protection services in and around Calistoga.

## City of Calistoga: Fire Department

**Administrative Address:** 1232 Washington Street, Calistoga, CA 94515  
**Primary Service Area:** City of Calistoga  
**Primary Service Population:** 5,223 (Department of Finance; January 2005)  
**FY2004/2005 Adopted Budget:** \$514,950  
**Emergency Medical Service:** Basic Life Support

### SERVICES PROVIDED:

Specific Services	Self	Contract	Provides Outside Service
1. Dispatch		x	
2. Fire Suppression	x		x
3. Basic Rescue	x		x
4. Advanced Rescue	x		x
5. Vegetation Mgmt	x		
6. Fire Code Permit/Enforce	x		
7. Haz Mat Response		x	
8. Construction Plan Check	x		
9. Fire Investigation	x		
10. Community Info/Education	x		

### STAFFING AND FACILITIES:

Fire Stations:	List of Equipment	No.	
1. Station 19, 1113 Washington St.	Type I Engine	3	
	Type II Engine	2	
	Type III Engine	0	
	Type II Water Tender	1	
<b>Personnel:</b>	<b>Number</b>		
Sworn Staff:	3	Type I Aerial Truck	0
Sworn Volunteer-Reserves:	18	Type II Medium Duty Rescue	0
		Support Vehicles	2

### SERVICE PROFILE:

Service Calls (CY 2004)*	Count	Count Per 1,000 Population	Average Response
Fire	39	7.5	
EMS/Rescue	398	76.2	
Hazardous Conditions	24	4.6	
Service Call	117	22.4	
Good Intent	0	0.0	
False Call	30	5.7	
Other	0	0.0	
<b>Totals</b>	<b>608</b>	<b>116.4</b>	<b>4:52</b>

\* All Calls

**ISO Class Rating:** Class 5 in areas w/in 1,000 feet of a hydrant  
 (1992 Survey) Class 9 in areas not w/in 1,000 feet of a hydrant



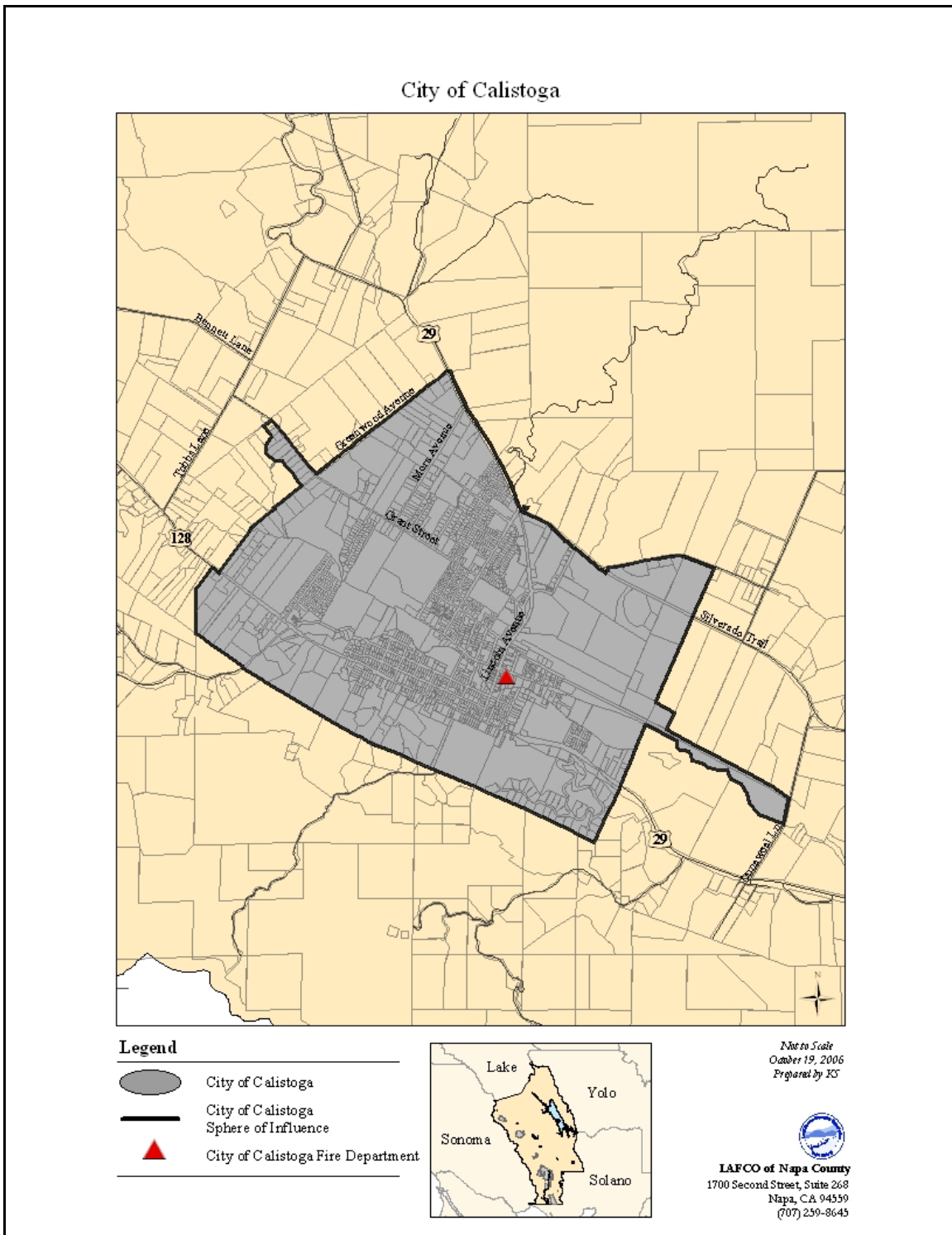


Figure 2.2  
City of Calistoga

## C. CITY OF ST. HELENA

### Overview

The St. Helena Fire Department (SHFD) is an all-volunteer department responsible for providing fire protection and emergency medical services for an approximate 4.4 square mile incorporated area. SHFD is also under contract with the County of Napa to serve as first responder to outside incidents within an additional 20 square mile area. This contracted service area extends north to Bale Lane, west to Langtry Road, east to Conn Valley Road, and south to Whitehall Lane. In exchange, SHFD receives an annual service fee along with dispatch and fleet maintenance services from the County. SHFD is currently staffed by 29 volunteer-reserve firefighters.

### Background

Organized fire protection services in St. Helena dates back to the 1880s with the development of three volunteer companies. These volunteer companies, although independent, coordinated their respective activities and provided organized fire protection for St. Helena and its residents over a 30-year period. In 1911, to streamline response efforts, all three volunteer companies merged together under the direction of one member-elected fire chief. The result of this merger is the present-day SHFD.

Although it remains all-volunteer, SHFD maintains a formal relationship with St. Helena to provide primary fire protection for the City. This relationship is reflected in St. Helena's Municipal Code, which specifies that the fire chief be appointed by the city council and serve as one of seven department heads under the direction of the city manager. St. Helena's Municipal Code also defines the scope of duties for the fire chief, specifies the maximum amount of volunteer staff, and establishes minimum training requirements.

In 1998, SHFD moved into a new 15,000-square-foot fire station in downtown St. Helena. The approximate 5.0 million dollar cost for the fire station was primarily funded through general fund allocations by St. Helena and a 2.0 million dollar voter-approved bond measure. It is expected that the new fire station, which includes administrative offices, meeting rooms, and sleeping quarters, will help facilitate the eventual transition of SHFD to a combination paid/volunteer department.

### Governance

SHFD operates as a quasi municipal department in the City of St. Helena. This relationship is facilitated through the fire chief, who is appointed by the city council and serves under the direction of the city manager. St. Helena is a general-law city governed by a five-member city council that includes a directly elected mayor. Elections are conducted by general vote; the mayor serves a two-year term while the four council members serve staggered four-year terms. Council meetings are conducted on the second and fourth Tuesday of each month at Vintage Hall. Meetings are open to the public and provide an opportunity for residents to offer comments regarding fire protection services in and around St. Helena.

## City of St. Helena: Fire Department

**Administrative Address:** 1480 Main Street, St. Helena, CA 94574  
**Primary Service Area:** City of St. Helena  
**Primary Service Population:** 6,006 (Department of Finance; January 2005)  
**FY2004/2005 Adopted Budget:** \$354,023  
**Emergency Medical Service:** Basic Life Support

### SERVICES PROVIDED:

Specific Services	Self	Contract	Provides Outside Service
1. Dispatch		x	
2. Fire Suppression	x		x
3. Basic Rescue	x		x
4. Advanced Rescue	x		x
5. Vegetation Mgmt	x		
6. Fire Code Permit/Enforce	x		
7. Haz Mat Response		x	
8. Construction Plan Check		x	
9. Fire Investigation	x		
10. Community Info/Education	x		

### STAFFING AND FACILITIES:

Fire Stations:	List of Equipment	No.	
1. St. Helena Fire Station, 1480 Main Street	Type I Engine	1	
	Type II Engine	1	
	Type III Engine	1	
	Type I Water Tender	1	
<b>Personnel:</b>	<b>Number</b>		
Volunteer-Reserves:	29	Type I Aerial Truck	1
Non-Sworn:	1	Type II Medium Rescue	1
		Support Vehicles	3

### SERVICE PROFILE:

Service Calls (CY 2004)*	Count	Count Per 1,000 Population	Average Response
Fire	29	4.8	
EMS/Rescue	372	61.9	
Hazardous Conditions	34	5.7	
Service Call	32	5.3	
Good Intent	28	4.7	
False Call	78	13.0	
Other	1	0.2	
<b>Totals</b>	<b>574</b>	<b>95.6</b>	<b>5:29</b>

\* All Calls

**ISO Class Rating:** Class 5 in areas w/in 1,000 feet of a hydrant  
(1991 Survey)

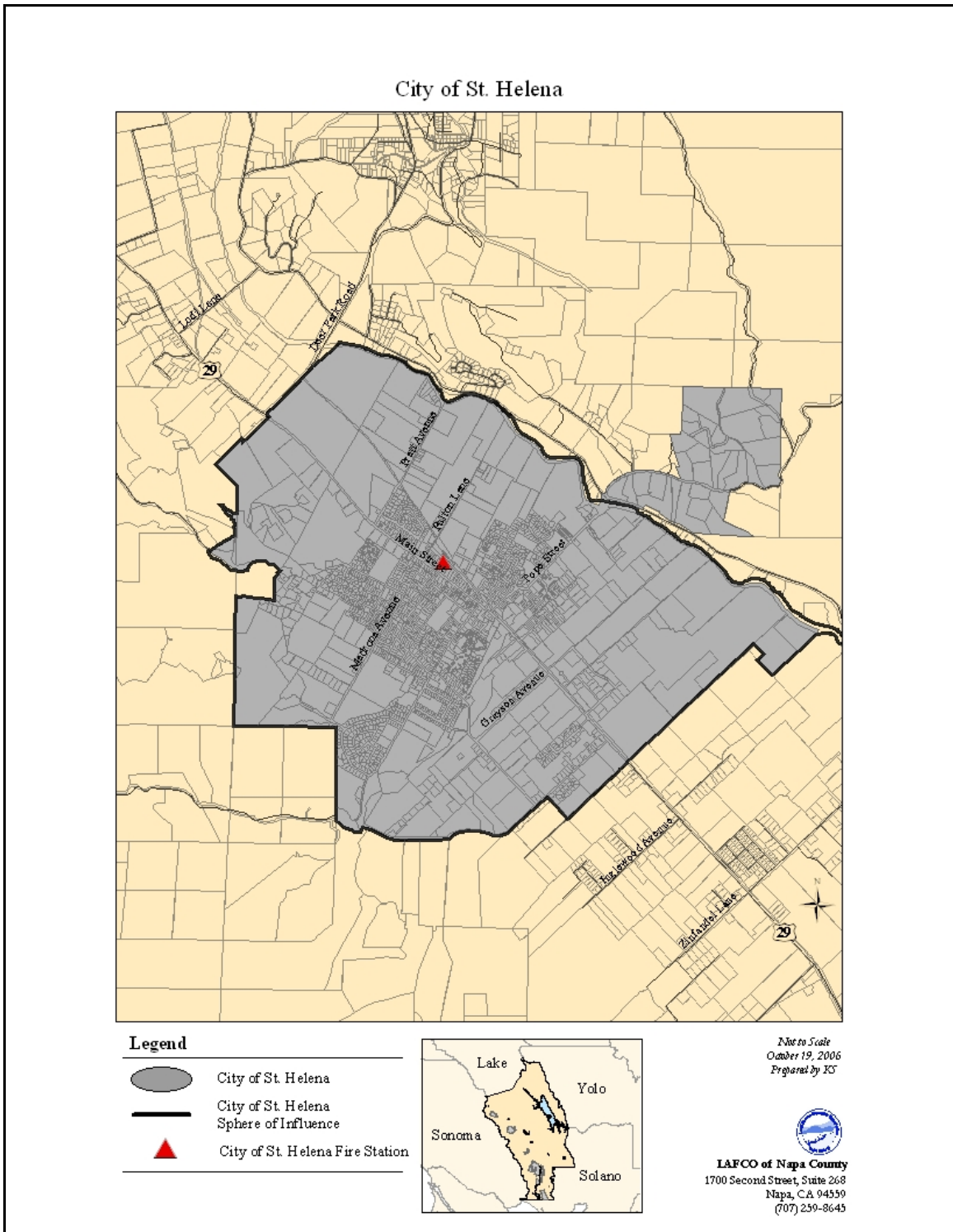


Figure 2.3  
City of St. Helena

## D. CITY OF NAPA

### Overview

The City of Napa Fire Department (NFD) is responsible for providing fire protection and emergency medical services for an approximate 18 square mile incorporated area. NFD also has an automatic aid agreement with the County of Napa to serve an unincorporated island commonly known as “Pueblo Park,” which is approximately 90 acres in size and is located within northwest Napa. In exchange, the County automatically responds to incidents in northeast Napa. NFD is currently staffed by 61 fulltime firefighters with three additional positions remaining vacant due to budget constraints.

### Background

Organized fire protection services in Napa dates back to the 1860s with the formation of the all-volunteer “Pioneer Engine Company No. 1.” This volunteer company was formed by local merchants to provide a basic level of fire protection for the downtown area. In 1872, following its incorporation, the City of Napa organized a second volunteer company with the formation of the “Napa City Hook and Ladder Company No. 1.”

In 1906, in response to growing service demands, Napa transitioned fire protection from volunteer to paid operations with the creation of NFD. This transition, which consolidated existing volunteer operations, included the hiring of a fire chief and paid staff along with the construction of NFD’s first fire station in the downtown area.

In 1950, Napa constructed a second fire station to serve new residential development in the northwest section of the City. The construction of this fire station, located on the former grounds of Napa Junior College, followed a 10-year period in which Napa experienced a 64 percent increase in population. Over the next thirty years, as Napa continued to develop to the northwest, service demands increased accordingly. This resulted in the construction of a third fire station on Trower Avenue near Solano Avenue in 1986. This was followed by the construction of a fourth fire station on Gasser Drive in 2003 to serve new and existing development in southeast Napa.

### Governance

NFD is one of eleven departments in the City of Napa. Napa is a charter-law city governed by a five-member city council that includes a directly elected mayor. The mayor and four city council members serve staggered four-year terms and are elected by general vote. Meetings are conducted on the first and third Tuesday of each month at City Hall. Meetings are open to the public and provide an opportunity for residents to offer comments regarding fire protection services in Napa.

## City of Napa: Fire Department

**Administrative Address:** 1539 First Street, Napa, CA 94559  
**Primary Service Area:** City of Napa  
**Primary Service Population:** 76,346 (Department of Finance; January 2005)  
**FY2004/2005 Adopted Budget:** \$10,229,443  
**Emergency Medical Service:** Advance Life Support (Paramedic)

### SERVICES PROVIDED:

Specific Services	Self	Contract	Provides Outside Service
1. Dispatch	x		
2. Fire Suppression	x	x	x
3. Basic Rescue	x	x	x
4. Advanced Rescue	x	x	x
5. Vegetation Mgmt	x		
6. Fire Code Permit/Enforce	x		
7. Haz Mat Response		x	
8. Construction Plan Check	x		
9. Fire Investigation	x		
10. Community Info/Education	x		

### STAFFING AND FACILITIES:

Fire Stations:	List of Equipment	No.
1. Station 1, 930 Seminary Street	Type I Engine	8
2. Station 2, 1501 Park Avenue	Type IV Patrols	3
3. Station 3, 2000 Trower Avenue	Type I Water Tender	0
4. Station 4, 251 Gasser Drive	Type I Aerial Truck	1
	Utility/Air unit	1
	Haz. Material Trailer	1
<b>Personnel:</b>	<b>Number</b>	
Sworn Staff:	61	Command vehicles
Non-Sworn:	6	Support Vehicles
Reserves-Volunteers:	14	Rescue Boat

### SERVICE PROFILE:

Annual Calls (CY 2004)*	Count	Count Per 1,000 Population	Average Response
Fire	256	3.4	
EMS/Rescue	4,217	55.2	
Hazardous Conditions	247	3.2	
Service Call	455	6.0	
Good Intent	571	7.5	
False Call	341	4.5	
Other	72	0.9	
<b>Totals</b>	<b>6,159</b>	<b>80.7</b>	<b>4:37</b>

\*All Calls

**ISO Class Rating:** Class 3 in areas w/in 1,000 feet of a hydrant  
 (2005 Survey) Class 9 in areas not w/in 1,000 feet of a hydrant



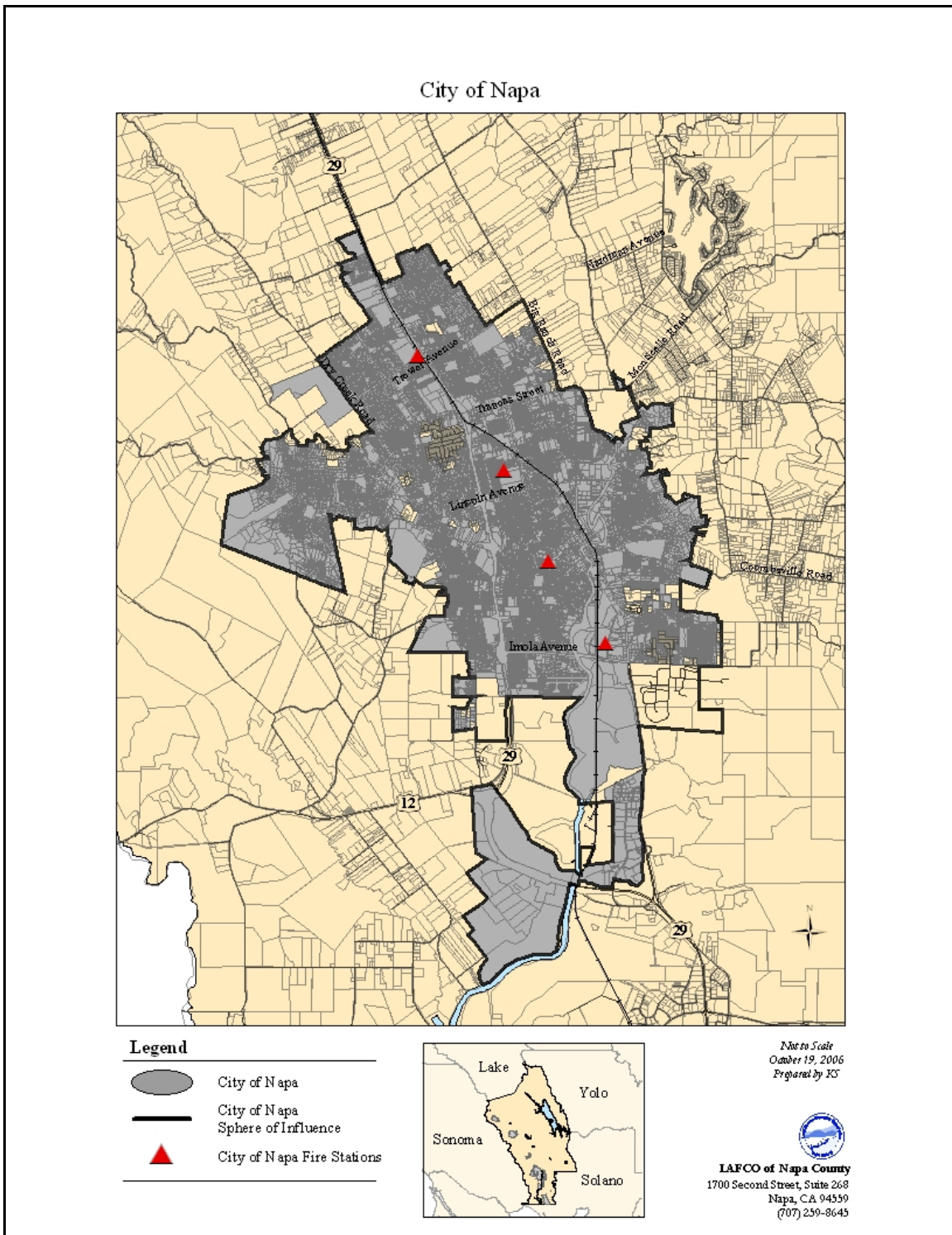


Figure 2.4  
City of Napa

## E. COUNTY OF NAPA

### Overview

The County of Napa Fire Department (NCFD) is generally responsible for providing fire protection and emergency medical services for all unincorporated areas in Napa County.<sup>2</sup> NCFD is also contracted to serve the Town of Yountville and the State Veterans Home. Although it possesses its own equipment and facilities, the County contracts for all fire administration and service operations with CDF. State personnel are assigned to NCFD from CDF's Sonoma-Lake-Napa Unit, which is based outside of St. Helena.

NCFD augments its service operations through a series of contracts and automatic aid agreements with local fire agencies. These arrangements provide additional coverage for select unincorporated areas that are adjacent to the five incorporated cities in Napa County. NCFD also funds and coordinates operations for nine independent volunteer organizations. Each volunteer organization elects its own fire chief that occupies a seat on an advisory board. The advisory board meets on a regular basis and provides input to NCFD on operation and policy matters. NCFD is currently staffed by 47 full-time and 250 volunteer-reserve firefighters.

### Background

The County of Napa was formed by the California Legislature in 1850. Over the next several decades, as settlements turned to communities, organized fire protection in Napa County began with the development of several independent volunteer organizations. These volunteer organizations were supported by the County and represented the first line of protection against structure and vegetation fires in Napa County. Significantly, several of these volunteer organizations preceded the incorporation of their respective communities, as in the case of Calistoga, Napa, and St. Helena.

In the 1930s, as part of a statewide effort, CDF began providing seasonal wildfire protection in Napa County. By the 1940s, the County had entered into an agreement with CDF to supplement its volunteer operations with basic structural fire protection for unincorporated areas. By the 1960s, in response to increased development, the County implemented a number of measures to improve the level of fire protection in Napa County. This included contracting with local agencies to provide "first call" service to surrounding unincorporated areas to help protect against wildland fires. Other measures implemented during this period included the appointment by the Board of Supervisors of CDF's assigned forest ranger to Napa County as the County's fire warden and the establishment of a countywide watershed parcel tax to help fund wildland fire protection services.

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<sup>2</sup> There are approximately 80 unincorporated parcels in south Napa County that are within the jurisdictional boundary of ACFPD. CDF is responsible for protecting against wildfire in Napa County.



In 1974, following a series of major fires, the County conducted a review of service alternatives to improve fire protection in Napa County. A principal aspect of the review was to consider whether it was appropriate for the County to create its own fire department and provide direct fire protection service. The review concluded that fire protection in Napa County could not be provided as effectively or economically through a county fire department as compared to the services offered by CDF and the volunteer organizations. However, the review did find that modifications were needed to formalize service plans and policies. As a result of the review, the County augmented its agreement with CDF and created the present-day structure of the NCFD. The County also consolidated the manner in which it funded the volunteer organizations by combining budget allocations into one general fund account. These actions were formalized as part of a fire protection program that was adopted by the Board of Supervisors on July 30, 1974.

## **Governance**

NCFD is one of several departments within the County of Napa. The County is governed by a five-member board of supervisors that are elected by district vote and serve staggered four-year terms. Board meetings are conducted every Tuesday at the County Administration Building in Napa. Meetings are open to the public and provide an opportunity for residents to offer comments regarding fire protection services in Napa County.

## County of Napa: Fire Department

**Administrative Address:** 1199 Big Tree Road, St. Helena, CA 94574  
**Primary Service Area:** Napa County (unincorporated)  
**Primary Service Population:** 28,156 (Department of Finance; January 2005)  
**FY2004/2005 Adopted Budget:** \$8,216,433  
**Emergency Medical Service:** Basic Life Support

### SERVICES PROVIDED:

Specific Services	Self	Contract	Provides Outside Service
1. Dispatch	x		x
2. Fire Suppression	x	x	x
3. Basic Rescue	x	x	x
4. Advanced Rescue	x	x	x
5. Vegetation Mgmt	x		
6. Fire Code Permit/Enforce	x		
7. Haz Mat Response		x	
8. Construction Plan Check	x		
9. Fire Investigation	x		
10. Community Info/Education	x		

### STAFFING AND FACILITIES:

Fire Stations:	List of Equipment	No.
1. Station 10 Ederly Island, 1600 Milton Road *	Type I Engine	16
2. Station 12 Yountville Station, 7201 Solano Avenue	Type II Engine	2
3. Station 13 Soda Canyon, 2368 Soda Canyon Road *	Type III Engine	8
4. Station 14 Capell Valley, 1193 Capell Valley Road *	Type I Water Tender	4
5. Station 15 Rutherford, Highway 29/128 *	Type II Water Tender	1
6. Station 16 Dry Creek/Lokoya, 5900 Dry Creek Road*	Type I Aerial Truck	2
7. Station 18 Angwin, 275 College Avenue *	Type II Rescue	5
8. Station 20 Pope Valley, P.O Box 25 *	Support Vehicles	1
9. Station 21 Deer Park, 1 Sanitarium Road *	<b>Personnel:</b>	<b>Number</b>
10. Station 22 Gordon Valley, 1345 Wooden Valley Rd *	Sworn Staff:	47
11. Station 25 Napa Station, 1820 Monticello Road	Non-Sworn	13
12. Station 26 St. Helena, 3535 St. Helena Highway	Volunteers:	250
13. Station 27 Greenwood Ranch, 1555 Airport Blvd		

\* Volunteer Stations

### SERVICE PROFILE:

Service Calls (CY 2004)*	Count	Per 1,000 Population	Average Response
Fire	204	7.2	
EMS/Rescue	1,295	50.0	
Hazardous Conditions	96	3.4	
Service Calls	97	3.4	
False Calls	395	14.0	

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Other	680	24.2	
<b>Totals</b>	<b>2,767</b>	<b>98.3</b>	-----
<b>* All Calls</b>			

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**ISO Class Rating:** Class 6: areas w/in 1,000 ft. of a hydrant and 5 miles from a station  
Class 8B: areas not w/in 1,000 ft. of a hydrant but w/in 5m from a station  
Class 10: areas not w/in 5m from a station

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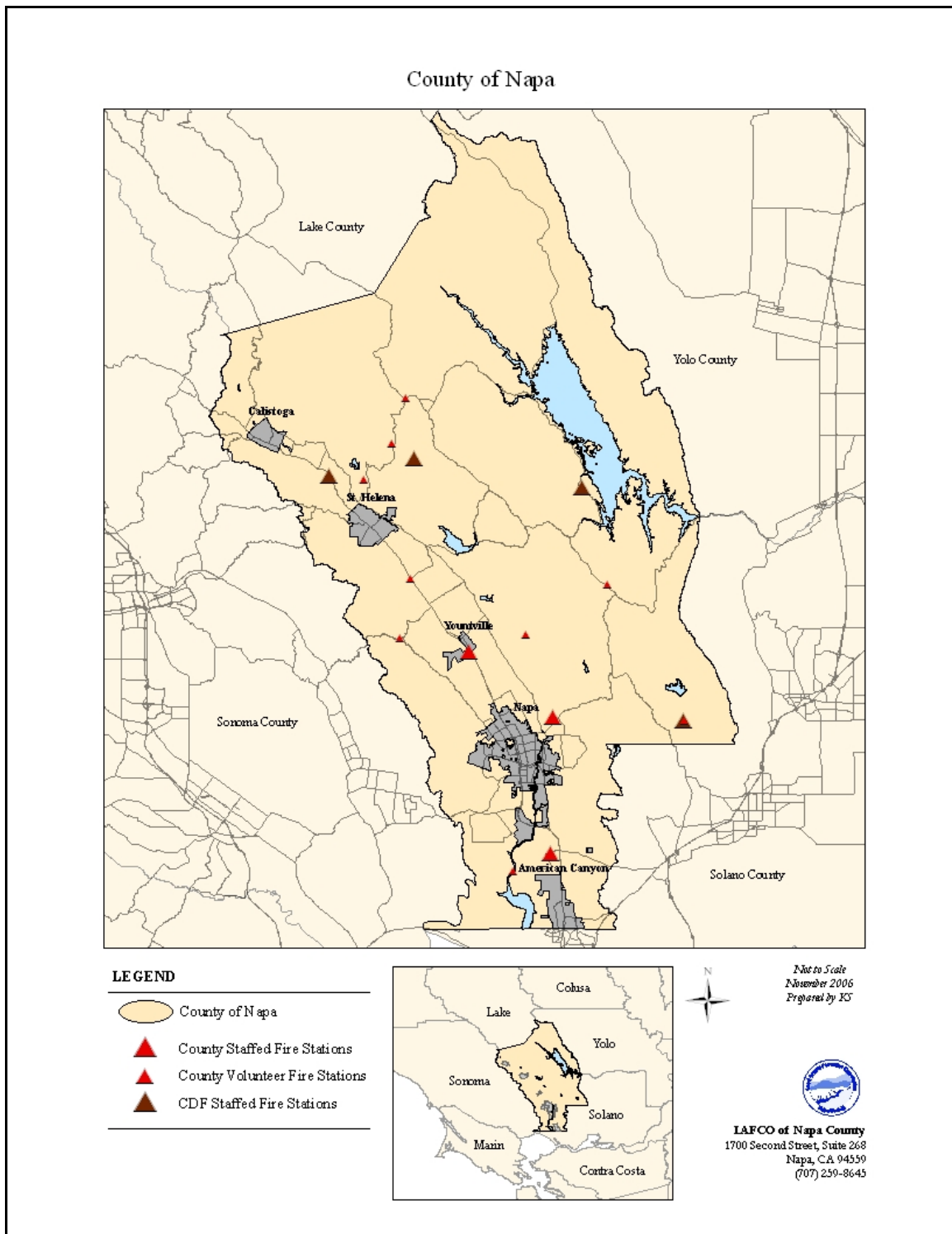


Figure 2.5  
County of Napa

## SERVICE CHARACTERISTICS

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This chapter provides an overview of the key regional and local service characteristics involving fire protection in Napa County.

### A. Future Growth

Future growth and land use policies have a significant role in directing the service obligations and capacities of fire protection agencies. In Napa County, development has historically occurred within the Napa Valley, with the remaining areas serving as predominantly rural residential, agricultural, or open-space uses. Significantly, the County General Plan aims to direct development toward existing incorporated and urban areas - making fire service obligations and capacities for these areas susceptible to continued growth.

#### Growth Control Measures

Two major initiatives shape growth management policies and regulations in Napa County: Measure A and Measure J. These measures have been influential in directing local growth towards the incorporated areas where public services and facilities are available. These measures are summarized below.

- **Measure A.** Adopted in 1980, Measure A requires the County to adopt a Growth Management System Element (GMS) as part of its General Plan. The GMS describes the derivation of the annual dwelling unit allocation, the division of the annual allocation into housing type categories, the timing and methods used for issuing building permits, and required provisions for affordable housing. Measure A limits growth in the unincorporated areas to a 1% increase each year.
- **Measure J.** Napa County's Agricultural Lands Preservation Initiative, known as Measure J, was approved by voters in 1990. Measure J prevents the redesignation of unincorporated parcels classified as "Agricultural Resource" or "Agriculture, Watershed, and Open-Space" through the year 2020, unless approved by the majority of voters.

## Growth Patterns and Trends

Over two-thirds of Napa County’s population resides within the Cities of American Canyon and Napa. Most of the remaining population resides in the unincorporated communities of Angwin, Deer Park, Lake Berryessa, and Silverado. A smaller portion of the population resides within the Cities of Calistoga, St. Helena, and Yountville.

It is expected that the majority of new growth in Napa County will continue to occur in American Canyon and Napa for the foreseeable future. This is evidenced by American Canyon, which has nearly doubled its population from 7,700 in 1990 to 14,200 in 2005. American Canyon’s strong growth rate is expected to continue as it has approved a number of sizable commercial and residential development projects that are currently under construction. This includes the Vintage Ranch and Napa Junction projects, which will collectively add close to 1,000 new residential units in American Canyon by the end of 2007. Growth in Napa is also expected to continue to increase as its sphere of influence was recently amended by LAFCO to add two sizable undeveloped areas (Big Ranch Road/Trower Avenue and Foster Road/Golden Gate Drive) that are designated for medium to high residential use. In all, Napa’s current land use policies indicate a capacity to develop an additional 7,840 residential units and 3.1 million square feet of commercial and industrial development.

In contrast to American Canyon and Napa, growth for the rest of Napa County is expected to increase modestly due to restrictive land use policies and infrastructure constraints. Calistoga and St. Helena have both adopted policies that restrict and sequence annual growth within their jurisdictions to 1.35% and 2.0%, respectively. A slight growth rate increase is expected for Yountville as it recently lifted a seven-year building moratorium that was associated with concerns regarding its available water supply. However, because its sphere of influence is generally coterminous with its existing jurisdiction, it is expected that most of the new growth planned in Yountville will be infill-related. Growth in the unincorporated areas is limited to a 1% annual increase by Measure A.

The Association of Bay Area of Governments (ABAG) periodically issues population, employment, housing, and household projections for the Bay Area region, which includes Napa County. Chart 3-1 shows ABAG’s projected population growth trends for the six land use authorities in Napa County through 2025. These projections indicate an annual growth rate for Napa County of 0.6 percent over the next 20 years – the majority of which will occur in the Cities of American Canyon and Napa.

**Chart 3-1  
ABAG Population Growth Projections,  
2005-2025**

Jurisdiction	2005	2015	2025
American Canyon	14,200	18,300	19,700
Calistoga	5,200	5,300	5,300
Napa	80,300	85,700	89,800
St. Helena	6,100	6,200	6,300
Yountville	3,400	3,500	3,600
Unincorporated	24,900	25,800	26,400
<b>Total</b>	<b>134,100</b>	<b>144,800</b>	<b>151,100</b>

Source: ABAG, 2005 Projections

## B. Service Arrangements

ACFPD and the Cities of Calistoga, Napa, and St. Helena all provide the majority of fire protection and emergency medical services within their respective jurisdictions. A distinguishing feature between these four agencies involves the use and need for volunteers. ACFPD and Napa both use volunteers as a supplemental resource to their fulltime firefighters. By comparison, Calistoga is largely dependent and St. Helena is completely dependent on volunteers to provide fire protection and emergency response services to their constituents.

The County of Napa relies both on fulltime and volunteer firefighters to provide fire protection and emergency medical services to the unincorporated areas. A distinguish feature of this arrangement is that the County contracts with CDF for all administrative and service operations.<sup>1</sup> As part of this arrangement the CDF Sonoma-Lake-Napa Unit Chief serves as the County Fire Chief. Specific service arrangements for each local fire agency are shown in Chart 3-2.

**Chart 3-2**  
**Napa County Fire Service Providers**

Service Type	Fire Service Providers in Napa County				
	ACFPD	Calistoga	Napa	County of Napa*	St. Helena
1. Dispatch	Contract	Contract	Self	Self	Contract
2. Fire Suppression	Self	Self	Self	Self	Self
3. Basic Rescue	Self	Self	Self	Self	Self
4. Advanced Rescue	Self	Self	Self	Self	Self
5. Vegetation Mgmt	Self	Self	Self	Self	Self
6. Fire Code Enforcement	Self	Self	Self	Self	Self
7. Fire Code Permitting	Self	Self	Self	Self	Self
8. Hazardous Materials Admin.	Self	Self	Self	Self	Self
9. Hazardous Materials Response	JPA	JPA	JPA	JPA	JPA
10. Construction Plan Check	Self	Contract	Self	Self	Contract
11. Fire Investigation	Self	Self	Self	Self	Self
12. Community Education	Self	Self	Self	Self	Self

\* The County of Napa is contracted by the Town of Yountville to provide fire protection services within its incorporated boundary.

<sup>1</sup> The County is also contracted to provide fire protection services to Yountville and the State Veterans Home.

## C. Shared Arrangements

Each of the five local agencies providing fire protection services in Napa County are generally first to respond to incidents within their respective jurisdictions. Given the critical need for rapid response and the potential for back-to-back service calls, these agencies also rely on an assortment of shared arrangements with other agencies to help ensure that an adequate level of fire protection and emergency response service is available at all times. These arrangements, which in some cases extend beyond Napa County, are formalized as part of service contracts, automatic and mutual aid agreements, and joint-power agreements. A summary of these arrangements follows.

### Service Contracts

- Calistoga is contracted by the County of Napa to serve as first responder to an approximate 50 square mile unincorporated area that extends to the Lake and Sonoma County borders. In exchange, Calistoga receives an annual service fee of approximately \$75,000 along with dispatch and fleet maintenance services from the County. This contract expires in June 2010 with one automatic extension of 12 months.
- St. Helena is contracted by the County of Napa to serve as first responder to an approximate 20 square mile unincorporated area that extends north to Bale Lane, west to Langtry Road, east to Conn Valley Road, and south to Whitehall Lane. In return, St. Helena receives an annual service fee of approximately \$60,000 along with dispatch and fleet maintenance services from the County. This contract expires in June 2007.
- The Schell Vista Fire Protection District (Sonoma County) is contracted by the County of Napa to serve as first responder to the Lovall Valley Loop Road area in southwest Napa County. In return, the Schell Vista Fire Protection District receives an annual service fee of approximately \$5,000 from the County.

### Automatic and Mutual Aid Agreements

- ACFPD participates in automatic aid agreements with the County of Napa and the City of Vallejo (Solano County). These agreements collectively obligate ACFPD to automatically respond to service calls that occur north to North Kelly Road, west to the Napa River, east to Solano County, and south to Highway 37. In exchange, the County and Vallejo automatically respond to service calls that occur within ACFPD's northern and southern jurisdictional boundary, respectively. These two agreements remain in effect unless terminated by mutual agreement by the agencies.



- Calistoga participates in a three-way automatic aid agreement with the County of Sonoma and the Knights Valley Volunteer Fire Company. This agreement obligates Calistoga to automatically respond to service calls in the unincorporated community of Knights Valley, which is part of County Service Area No. 40 (Sonoma County). In return, Calistoga receives free access to the County’s fire training facilities and instructors in Santa Rosa. This contract automatically renews each year unless cancelled by one of the three parties.
- Napa participates in one automatic aid agreement with the County of Napa. This agreement obligates Napa to automatically respond to service calls that occur within an approximate 90-acre unincorporated island that is completely surrounded by the City. This island is commonly referred to as “Pueblo Park” and is predominately comprised of single-family and multiple-family residences. In return, the County automatically responds to service calls in the Hagen Road/Silverado Trail area of northeast Napa. This agreement remains in effect until mutually terminated by the two agencies.
- All five local fire agencies are signatories to the California Master Mutual Aid Agreement. This system is administered by the State and establishes a formal process for local fire agencies to receive and provide assistance to other participating agencies during an emergency. Each agency retains control of its own resources and is compensated by the State for services provided. Most cities and all 58 counties in California are signatories.

### Joint Powers Agreements

- All five local fire agencies participate in three separate joint-power agreements. These agreements establish terms for the cooperative response to emergency incidents involving hazardous materials, the maintenance and sharing and a fire-safe demonstration trailer, and the use of the County’s fire training facilities near Yountville.

In addition to these shared arrangements, there are a number of informal agreements involving outside agencies that regularly provide additional fire protection resources to Napa County. Most of these informal agreements are facilitated by the County through its contractual relationship with CDF and involve the Rincon Valley Fire District (Sonoma County), South Lake County Fire Protection District (Lake County), Winters Fire Protection District (Yolo County), Suisun Valley Fire Protection District, and the Cordelia Fire Protection District (Solano County).

## D. Service Demands

Fire service agencies are required to keep track of fire service calls made on an annual basis based on the type of calls received. These include service calls for fire, emergency medical and rescue, hazardous conditions, and other related services, such as permitting and inspections. Other calls tracked include “good intent calls” (e.g., accidental calls without malicious intent), “false calls” (accidental calls with malicious intent), and “other calls” (miscellaneous calls).

Chart 3-3 shows the total service calls during the 2004 calendar year for each of the five local fire agencies. A common indicator to evaluate the relative demands on a fire agency is to divide the total number of service calls by a population factor of 1,000 persons. Using this method, Calistoga experienced the highest service demands with 117 calls for every 1,000 person in its jurisdiction. By comparison, although it received the most number of service calls, Napa experienced the lowest service demands with 81 calls for every 1,000 persons in its jurisdiction. The call breakout pattern for each of these fire agencies was also strikingly similar in nature based on location and population size.

**Chart 3-3**  
**Napa County Fire Agencies**  
**Fire Agency Call Volume, 2004**

Fire Service Calls	Fire Service Demands in Napa County				
	ACFPD	Calistoga	Napa	St. Helena	County of Napa*
Population	14,306	5,233	76,346	6,006	28,156
Total Calls	1,237	609	6,159	574	2,767
<b>Calls per 1,000 population (rounded)</b>					
Total Calls	87	117	81	96	98
Fire	2	8	4	5	7
EMS/Rescue	58	76	55	62	46
Hazard Conditions	3	5	3	6	3
Service Call	11	22	6	5	3
Good Intent	4	0	8	5	0
False Call	<1	6	5	13	14
Other	8	0	1	<1	24

Sources: California Department of Finance Population Estimates (1/2005). Call volumes provided by agencies.

\* County totals include service calls for the Town of Yountville and the State Veterans Home. In 2004, Yountville and the Veterans Home combined to generate 617 service calls, representing 189 calls per 1,000 persons. A significant portion of these calls were for emergency medical service (116 per 1,000 persons).

## E. ISO Ratings

The Insurance Service Office (ISO) evaluates municipal fire protection efforts in communities throughout the United States. Since a community's investment in fire mitigation is a proven and reliable predictor of future fire losses, insurance companies use ISO information to help establish premiums for fire insurance. Many communities also use ISO rating information as a benchmark for measuring the effectiveness of their fire-protection services with respect to fire insurance premiums. However, it should be noted that ISO benchmarking is not designed to specifically address property loss prevention or life safety purposes.

**ISO Rate Schedule**

ISO	Percentage Scores
1	90.00 or more
2	80.00 to 89.9
3	70.0 to 79.9
4	60.0 to 69.9
5	50.0 to 59.9
6	40.0 to 49.9
7	30.0 to 39.9
8	20.0 to 29.9
9	10.0 to 19.9

The ISO rating has three components. Ten percent is based on how the fire department receives and dispatches fire alarms, including their communications center, telephone service, dispatch circuits, and notification of firefighters about an emergency. Fifty percent is based on fire department operations, such as training, firefighter response to emergencies, maintenance and testing of fire equipment, and others. Forty percent is based on sufficiency of water supply for fire suppression beyond daily maximum consumption. ISO surveys all components of the water supply system, including pumps, storage, filtration, fire-flow tests at representative locations, and the distribution, condition and maintenance of fire hydrants.

An ISO officer uses Fire Suppression Rating Schedules (FSRS) to review a city's firefighting capability. The FSRS incorporates nationally-accepted standards and subsequent revisions developed by the National Fire Protection Association, American Water Works Association, and other professional organizations. ISO rates each community's fire protection service on a scale ranging from Class 1 to Class 10. Class 1 represents exemplary public protection from dangers of fire hazards and fires, while Class 10 indicates that the area's fire-suppression program does not meet ISO minimum criteria. The sidebar shows how each ISO rating corresponds to an average score. In short, an increment of one full ISO point corresponds to ten percentage points out of a total of 100 percentage points.

Chart 3-4 summarizes the ISO ratings for each of the five local fire agencies in Napa County. It is important to note that ISO ratings place the greatest emphasis on water supply available for fire suppression in the jurisdiction. This factor is often taken for granted in larger urbanized areas where sufficient water infrastructure is in place and topographical challenges are more limited. In highly urbanized areas, the provision of water infrastructure is less of a challenge than other areas of California. However, in Napa County, water supply and infrastructure will continue to be a significant challenge – in addition to the normal issues facing other jurisdictions such as fire department operations.

This critical importance of water supply in the overall ISO score is also reflected in the split rating received by each jurisdiction. For instance, each jurisdiction actually has two ratings. The highest ISO rating is for areas within 1,000 feet of a public water system (hydrants). The second rating – typically a ISO score of “9” – refers to areas of a community which are outside the public water system or more than 1,000 feet from a fire hydrant. Due to the lack of water infrastructure, most of unincorporated Napa County has an ISO rating of 10.

**Chart 3-4**  
**Napa County Fire Agencies**  
**ISO Scores and Classifications**

Fire Service Agency	ISO Weighted Components					ISO Ratings
	Dispatch	Fire Dept	Water	Divergence	Total	
ACFPD	7.6	34.7	37.7	-5.0	75	3/9
Calistoga	7.2	24.8	34.4	-7.3	59	5/9
Napa	6.9	33.4	33.1	-3.2	70	3/9
St. Helena	7.6	22.8	22.0	-1.9	50	5/9
County of Napa	5.3	21.0	20.7	-1.9	45	6/8B/10

Sources: ISO Ratings provided by individual jurisdictions

- **ACFPD.** ACFPD has a split ISO rating of 3-9. A score of 3 applies to areas located within 1,000 feet from a fire hydrant and within five road miles of the fire station, which includes most of American Canyon. A score of 9 reflects areas located within ACFPD’s jurisdictional boundary that are not within 1,000 feet of a hydrant, but are within five road miles of a responding fire station, which includes the west end of Green Island Road. Currently, water demands exceed capacity; however, increased water storage is under construction and American Canyon is negotiating a long-term water supply agreement with St. Helena to purchase an additional 1,000 acre feet of entitlement from the State Water Project.
- **Calistoga.** Calistoga has a split ISO rating of 5-9. A score of 5 applies to areas located within 1,000 feet from a fire hydrant and within five road miles of the fire station. A score of 9 reflects areas located along the perimeter of Calistoga that are not within 1,000 feet of a hydrant, but are within five road miles of the fire station. Calistoga’s ISO score is also diminished due to water store and pressure constraints; Calistoga’s water storage capacity has a deficit of 0.86 million gallons meaning that insufficient reserves are available for emergency fire protection. The water delivery system is also unable to accommodate adequate fire-flows during typical maximum day demands, thus causing pressures in the network to drop below 20 pounds per square inch.
- **Napa.** Napa has a split ISO rating of 3-9. A score of 3 applies to areas within 1,000 feet of a hydrant and within five road miles of a responding station. A score of 9 reflects areas located along the perimeter of Napa that are not within 1,000 feet of a hydrant, but are within five road miles of a responding fire station. These areas are

typically served by private wells and have insufficient water pressure and storage to effectively fight structural fires. Moreover, Napa’s present water system cannot deliver adequate pressure for firefighting to sites over 300 feet in elevation, thus creating issues with respect to fire fighting capability.

- ❑ **St. Helena.** St. Helena has an ISO rating of 5 and responds to all calls with at least 14 firefighters. While service levels are adequate within St. Helena limits, the heavily wooded hillside areas of St. Helena provide the greatest service challenge due to the high potential for wild fires. The combination of highly flammable vegetation, long and dry summers, rugged topography and the presence of people who live, work and recreate in the hillside areas results in a potentially dangerous situation. St. Helena’s water supply exceeds demand and is not significant factor in its ISO rating.
- ❑ **County of Napa.** The County has three distinct ISO ratings. Areas that are within five miles of fire station and within 1,000 feet of a fire hydrant have an ISO rating of 6. Areas that are within five miles of a fire station, but more than 1,000 feet from a fire hydrant have an ISO rating of 8B. Any areas that are more than five miles from a fire station regardless of proximity to a fire hydrant have an ISO rating of 10.<sup>2</sup>

Chart 3-5 notes the difference of ISO ratings if the local agencies could resolve the water supply and infrastructure issues (e.g., fire flow, testing and fire hydrant maintenance, etc.) associated with fire suppression, each of the jurisdictions would receive a significantly higher ISO fire service rating. The ISO fire service rating would increase by one point for ACFPD and Napa and by two points for Calistoga and St. Helena. In recognition of the critical importance of water supply and infrastructure, Chapter 4 addresses the water supply improvements being undertaken by each jurisdiction.

**Chart 3-5**  
**Napa County Fire Agencies**  
**Re-weighted ISO Scores and Classification**

Fire Service Agency	Current ISO		If Water Infrastructure was Deemed 100% Adequate	
	Total Score	ISO Rating	Revised Score	ISO Rating
ACFPD	75	3	87	2
Calistoga	59	5	75	3
Napa	70	3	87	2
St. Helena	50	5	79	3

Sources: ISO Ratings provided by individual jurisdictions. The County of Napa was not included in this table because public water systems are not generally available in the unincorporated areas.

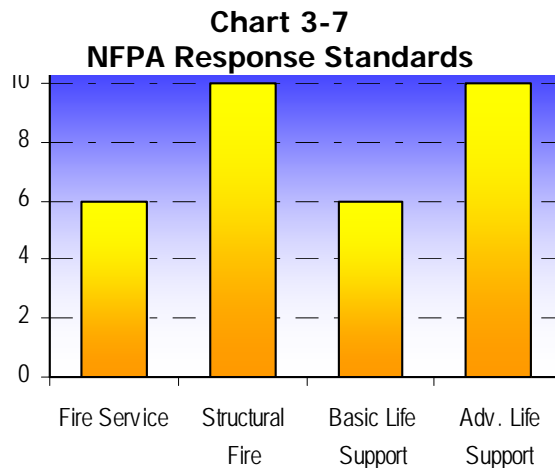
<sup>2</sup> The Town of Yountville is subject to the County’s ISO rating.

## F. Response Times

Response times for fire protection and emergency medical services (EMS) are important measuring tools in assessing performance and allocating resources. Local response time standards are generally designated to minimize fire damage and to maximize the chances of victim survival. Particularly in cases involving patients who have stopped breathing or are suffering cardiac arrest, the chances of survival are related to how quickly the patient receives medical care. Similarly, a quick fire suppression response can potentially prevent a structure fire from reaching the “flashover” point, defined as the moment where rapid spreading of the fire occurs.

Research has demonstrated that a fire reaches the flashover point within 8 to 10 minutes from inception, not from the moment of detection. The flashover point is the point where the structure fire is fully developed, portable extinguishers are ineffective, and search and rescue is very limited, likely resulting in death for any persons trapped in the structure. With respect to EMS, response time is critical in that the chance of survival of cardiac arrest diminishes approximately 10 percent for each minute that passes before the initiation of CPR and/or defibrillation. For EMS, basic life support is recommended within six minutes of onset, and advanced life support within 10 minutes of notification.

The National Fire Protection Association (NFPA) recommends that a first responder unit arrive at the scene of a fire in six minutes or less at least 90% of the time, measured from the 911 call time to the arrival time of the first-responder. NFPA recommends full response to a structural fire within 10 minutes of the 911 call at least 90% of the time. NFPA also recommends a 6-minute response for basic life support and 10-minute response for advanced life support at least 90% of the time.



The California Emergency Medical Service Agency provides statewide coordination of and leadership on the planning, development, and implementation of 32 local EMS systems. Each local EMS system provides appropriate planning, guidance, and monitoring for EMS services, including different response time standards. For the Coastal Valley Regional Emergency Medical Service, which includes Napa County agencies, it has adopted an ALS medical response time of seven minutes in urban areas, 14 minutes in semi-rural areas, and 29 minutes in rural areas. For BLS response, the response standard is 15 minutes in urban areas, 30 minutes in semi-rural areas, and 45 minutes in rural areas. BLS and ALS response standards should be achieved 90% of the time.

## Response Time Performance

The following discussion summarizes the performance of the five local fire agencies in Napa County with respect to their response times.

- ❑ **ACFPD** has an adopted response standard of five minutes, which it reports meeting approximately 90 percent of the time. The average response time for ACFPD in 2004 for all calls was 4:48. Longer response times are generally required when units are committed to other incidents or the incident is more than five minutes away from the fire station. Underserved areas within ACFPD that generally exceed a five minute response time include the west end of Green Island Road.
- ❑ **Calistoga** has an adopted response standard of five minutes, which it reports meeting approximately 90 percent of the time. The average response time for Calistoga in 2004 for all calls was 4:52. (The average response time for incidents that were in Calistoga's incorporated boundary was 2:56. The average response time for incidents located outside of Calistoga, which includes its contracted service area with the County, was 8:00.) Longer times are generally required when units are committed to other incidents or the incident is more than five minutes away from the fire station. There are no areas that are currently underserved in Calistoga.
- ❑ **Napa** has an adopted response standard of five minutes, which it reports meeting approximately 80 percent of the time. The average response time for Napa in 2004 for all calls was 4:37. Longer response times are generally required when units are committed to other incidents or the incident is located more than five minutes away from the closet fire station. Underserved areas in Napa that generally exceed a five minute response time include Browns Valley west of the Westwood Hills Park and the Hagen Road area east of its intersection with Silverado Trail.
- ❑ **St. Helena** has an adopted response standard of five minutes, which it reports meeting approximately 90 percent of the time for its incorporated area. The average response time for St. Helena in 2004 for all calls was 5:29. (The average response time for incidents that were in St. Helena's incorporated boundary was 4:40. The average response time for incidents located outside of St. Helena, which includes its contracted service area with the County, was 8:24.) Longer times are generally required when units are committed to other incidents or the incident is more than five minutes away from the fire station. There are no areas that are currently underserved in St. Helena.
- ❑ The **County of Napa** does not have an adopted response standard for service calls. The County is currently working with a consultant to calculate and analyze their response times and levels of coverage.

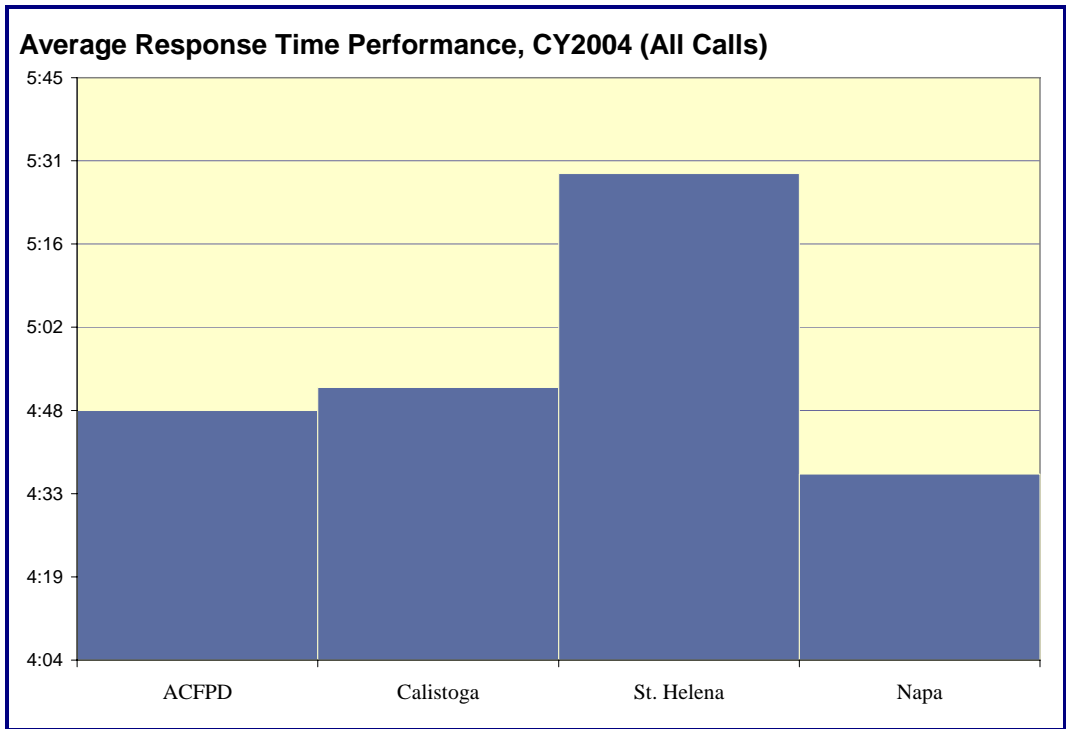


Chart 3.8



## FINANCIAL AND PLANNING RESOURCES

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This chapter provides an overview of the key financial and planning resources underlying fire protection services in Napa County.

### A. FINANCIAL CONTEXT

Local government finance in California has been affected by a number of propositions that set the stage for understanding the fiscal context of local fire service planning. Three of these measures, which are most often cited with respect to understanding the current financing constraints associated with local government, are summarized below:

- **Proposition 13 (1978).** This measure limits the ad valorem property tax rate, the growth of the assessed value of property, and thus the growth of tax revenue. This measure fixes the ad valorem tax at one percent of value, except for taxes to repay voter-approved bonded indebtedness.
- **Proposition 98 (1988).** This measure requires the State to maintain a minimum level of school funding. In 1992 and 1993, the Legislature began to shift billions of property taxes from local governments into the Educational Revenue Augmentation Fund (ERAF) for school districts.
- **Proposition 218 (1996).** Proposition 218 requires majority voter approval for new or increases in general taxes, reiterates Proposition 13 requirement for two-thirds voter approval of special taxes for which revenues are designated for specific purposes, and adds new steps that must be followed to impose a property-related fee or charge. The requirement does not apply to user fees and Mello-Roos Districts.<sup>1</sup>

Understanding this fiscal context underscores why many public agencies find it difficult to fund fire protection services through new taxes and instead rely heavily on general funds. It also underscores the importance of developing a separate revenue source to fund future service needs to accommodate new development.

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<sup>1</sup> The Mello Roos Facilities District Act: allows any county, city, special district, school district or joint powers of authority to establish a "Community Facilities District" for the financing of public services and facilities. These include streets, police protection, fire protection, ambulatory, elementary schools, parks, libraries, museums, and cultural facilities. Property owners that participate in the CFD pay a "special tax" to repay the bonds.

## B. SERVICE COSTS AND FUNDING SOURCES

In the 2004/2005 fiscal year, local fire agencies dedicated more than \$22 million in operating expenditures to fund fire protection services. The amount of fire expenditures per capita is an indicator of level of service and, in some cases, level of efficiency. However, it should be noted that local conditions and circumstances ultimately determine the amount and type of expenditures necessary to serve a particular jurisdiction. In some cases, higher levels of fire service are required or desired by a jurisdiction; therefore, the level of operating expenditures is correspondingly much higher.

Chart 4.1 shows per capita expenditures for each of the five local fire agencies in Napa County for the 2004/2005 fiscal year.<sup>2</sup> The highest per capita expenditure was the County at \$291. The lowest per capita expenditure was St. Helena at \$58.

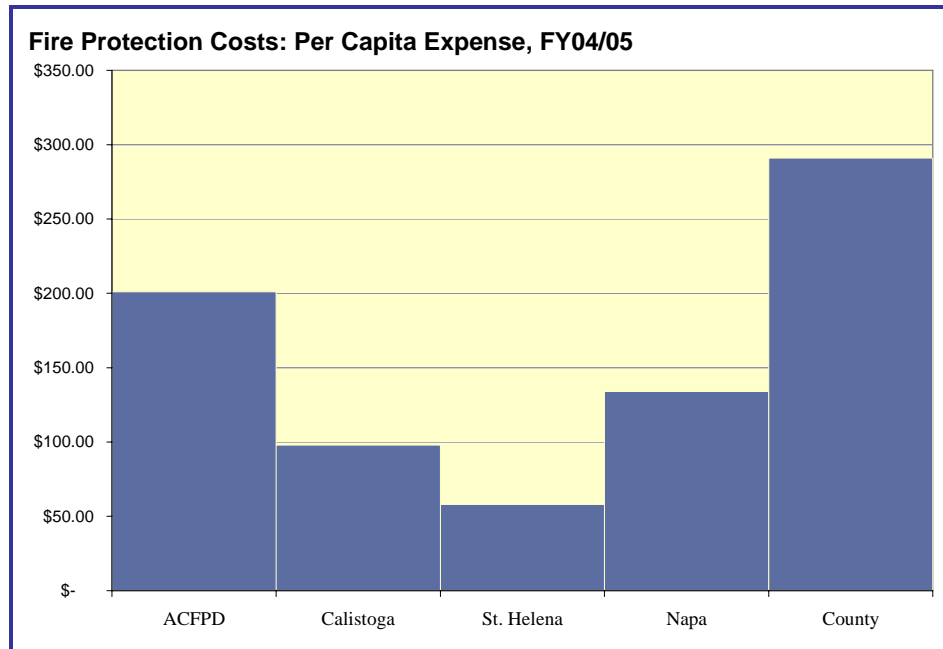


Chart 4.1

Fire protection services for Calistoga, Napa, St. Helena, and the County are primarily funded by general funds, which are drawn from property, sale, and transient-occupancy tax revenues.<sup>3</sup> The percentage of general fund expenditures that an agency dedicates to fire protection is an indicator of the relative cost of service for the affected agency. In the

<sup>2</sup> These amounts were calculated by dividing each agency's adopted operating expenditure for fire protection in FY04/05 by its service population as estimated by the California Department of Finance.

<sup>3</sup> These four agencies also receive key operational funding from service contracts for fire protection. Calistoga and St. Helena annually receive approximately \$75,000 and \$60,000, respectively, from the County to provide first-response services to surrounding unincorporated areas. The County receives approximately \$300,000 and \$400,000 annually from Yountville and the State's Veterans Home for fire protection services. The County also receives funding from a special parcel assessment as part of County Service Area No. 3 that funds elevated fire protection services for the Napa County Airport area. All five agencies have developed impact or development fees for new construction.

2004/2005 fiscal year, Napa, which serves the largest resident population in Napa County, dedicated 19.3% of its general fund expenditures on fire protection. Calistoga and St. Helena dedicated 9.7% and 4.8% of their general fund expenditures on fire protection. The County had the lowest percentage of general fund expenditures dedicated to fire protection at 3.8%. By comparison, ACFPD receives very little general fund dollars from the City of American Canyon. Nearly all of ACFPD's operating revenue is drawn from its property tax allocation, with a smaller amount coming from a special parcel assessment that was approved in 1979.

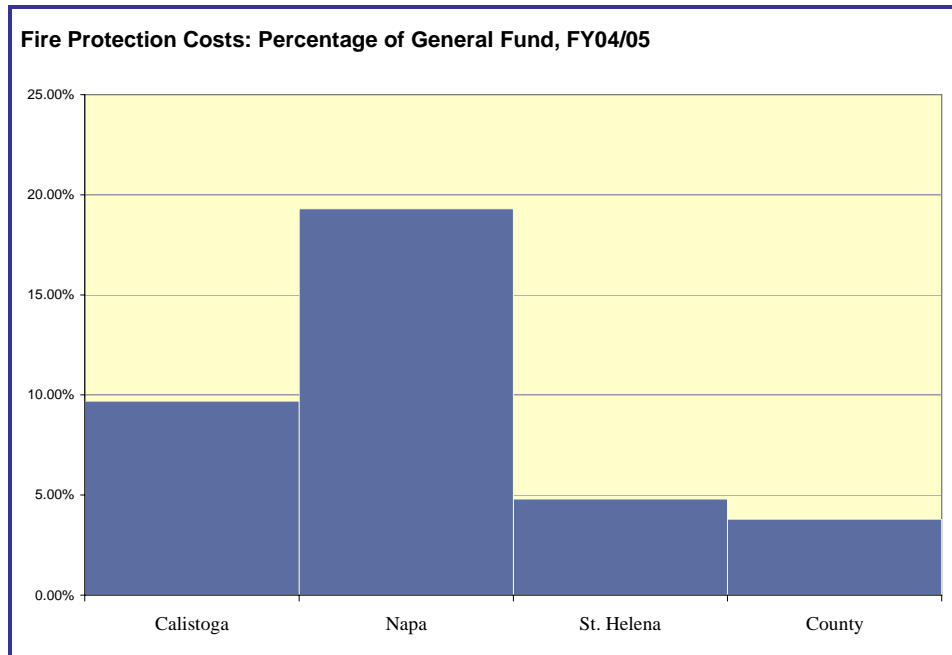


Chart 4.2

### C. AGENCY RESERVES

Managing agency reserves is an important issue for local governments. Unfunded mandates, the history of State cutbacks in funding, deferred maintenance on infrastructure, and emergency needs dictate that proper financial planning is critical for local governments. Maintaining reserves for designated (e.g., capital improvements) and undesignated purposes (e.g., emergencies) is thus of critical concern.

The Government Finance Officer's Association (GFOA) recommends that governments establish a formal policy on the level of unreserved fund balance that should be maintained in the general fund and the adoption of similar policies for other governmental funds. Although local circumstances will dictate the prudent amount of reserves, GFOA recommends unreserved funds of no less than 5 to 15 percent of regular general fund operating revenues or no less than one to two months of regular general fund operating expenses. No official guidelines or widely accepted standards have been issued for special districts.

The number of months of operating expenditures that could be supported by “unreserved funds” varies significantly among public agencies. ACFPD currently has the highest unreserved balance to operating expenditure ratio and can support up to 14 months of its service operations with unreserved funds. The County, St. Helena, and Napa can support nine, six, and three months of operating expenditures, respectively, with their unreserved funds. Calistoga has the lowest unreserved balance to operating expenditure ratio, covering almost two months. All five agencies exceed GFOA’s recommended unreserved fund balance.

## D. MATCHING INFRASTRUCTURE TO GROWTH

Anticipating future growth with planned improvements is an essential component in maintaining and expanding fire protection services and has a direct impact on ISO ratings, response times, and overall levels of service. Additionally, anticipating water demand and improving water supply and storage facilities is an important component for fire service improvements. Chart 4.3 details planned growth and how Napa County jurisdictions are building infrastructure to address expected population growth within their service areas.

**Chart 4.3**

Jurisdiction	Growth and Planned Improvements within Principal Planned Areas		
	Planned Growth (2005-2015)	Planned Fire Service Improvements	Planned Water Improvements
ACFPD/ American Canyon	Expanded growth of past 10 years is expected to continue. 29 percent growth expected.	Moving into a new firehouse with the American Canyon Police Dept. Just purchased a new ladder and a new engine truck.	Will increase water storage capacity by 7mg in 2006 with use of new storage tanks. Negotiating long-term water supply agreement with St. Helena.
Calistoga	Moderate growth of past 10 years is expected to continue. 3 percent growth expected	Developing a volunteer back-up crew and requesting earthquake retrofit for its fire stations and requesting a new fire engine.	An additional storage tank is planned to be built to increase storage capacity by 1 mg.
Napa	Moderate growth of past ten years is expected to continue. 10 percent growth expected	New station with increased staffing within the next 5 years, 2 new engines	In negotiations to build a 5.0 mgd tank near Napa Sate Hospital to increase system capacity.
County	Moderate growth of past 10 years expected to continue. 3percent growth expected	Conducting a study to evaluate response times and service standards.	None
St. Helena	Moderate growth is expected to continue. 2 percent growth expected.	None	Recycled water project planned and dredging Bell Canyon Reservoir will increase system capacity.

Source: County of Napa, Baseline Report for the General Plan (2005)

## E. POLICY AND PROCEDURES

Fire agencies should have a number of management and operational tools in place to effectively manage their staffing, finances, and resource allocation decisions. Some of the more important management tools include audited financial statements, mission statements, capital improvement plans, service delivery standards, staff training programs, and emergency operation plans. Although detailed analysis of this topic is beyond the scope of this review, it is possible to determine whether an agency has such a program. Future studies should examine the adequacy of these components for each jurisdiction.

Summarized in Chart 4.4, ACFPD and Napa have the greatest number of planning tools in place. Calistoga is missing three of the fire service planning tool elements. Only one jurisdiction (Napa) has had a recent written evaluation of services, which seems to be the element that is most overlooked. The other overlooked element is an Adopted Strategic Plan, which only ACFPD and the County has completed.

**Chart 4.4**  
**Napa County Jurisdictions**  
**Fire Service Planning Tools**

	ACFPD	Calistoga	Napa	St. Helena	County
Mission Statement	Y	Y	Y	Y	Y
Adopted Strategic Plan	Y				Y
Capital Improvement Plan	Y		Y	Y	Y
Staffing Standard	Y	Y	Y	Y	Y
Response Time Standard	Y	Y	Y	Y	
Fire Service Call Tracking System	Y	Y	Y	Y	Y
Recent Evaluation of Services			Y		
Written Mutual Aid Agreements	Y	Y	Y	Y	Y
Formal Staff Training Program	Y	Y	Y	Y	Y
Emergency Operations Plan	Y	Y	Y	Y	Y

Although all jurisdictions have a formal training program, the Governor’s Blue Ribbon Fire Commission (2003) concluded, among other items, that firefighter training was complex and diverse with many agencies participating in the development and delivery of training programs. While California has led the way in developing new training programs, the programs have yet to be brought together in a coordinated manner. There are no minimum statewide service levels or training standards mandated by law for California firefighters, nor statewide mandates for continuing training or maintenance of performance standards.