





James Turner, Fire Chief

Nevada County Consolidated Fire District

# **CONTENTS**

Chief's Message	Page 1
Mission Statement, Vision Statement and Core Values	Page 2
Organizational History	Page 3
Joint Operations Area Agreement and Map	Page 4
Climate and Topography	Page 5
Budget	Page 6
Organization of the Nevada County Consolidated Fire District	Page 7
Fire Station Location Methodology	Page 8
Staffed Fire Station Location	Page 9
Annual Calls for Service	Page 10
Organizational Goals and Objectives	Page 11
Operations	Page 11
Department of Fire Prevention	Page 15
Administration	Page 18
Mobile Equipment and Facility Master Plan	Page 19
Apparatus	Page 19
Facilities	Page 22
Future Considerations	Page 24
Four Person Staffing	Page 24
Advanced Emergency Medical Services	Page 25
Shared Administrative Services and/or Consolidation	Page 25
Dividing the Joint Operations Area into Two Battalions	Page 26

# **CONTENTS**

Future Considerations (continued)	
Captain Staffing at All Stations	26
SummaryPage 2	!7
Charts, Figures, Maps, and Tables	
Chart 1: Nevada County Consolidated Fire District Organizational Chart	,
Map 1: Current Fire Station Locations	)
Table 1: Four Year Annual Call Volume History         Page 1	0
Figure 1: NFPA Response Timeline Recommendations for Career Firefighters Page 1	2

#### **CHIEF'S MESSAGE**



As the District's Fire Chief, I am proud to present the Nevada County Consolidated Fire District's Strategic Plan 2016 – 2021. This plan clearly defines the mission and goals of the Nevada County Consolidated Fire District while providing a guide for continuing the excellent services that we provide to the community for the next five years. The Strategic Plan is designed to be a dynamic document for Administrative planning and future development of programs.

James Turner Fire Chief

You have our commitment, that we will remain staffed, well-trained, and ready to serve you, our constituents at a moment's notice. You have my commitment that I will provide an organization that is professional, transparent and fiscally responsible to ensure your trust.

The Nevada County Consolidated Fire District has seen a 17% increase in emergency calls for service over the last five years and it is anticipated that the total calls for service for 2016 will exceed 6,500 calls in the Joint Operational Area. Having statistical data plays an instrumental process in planning for the future and defining the needs of the organization.

Once the Strategic Plan is implemented it will be modified periodically for priority changes, budgetary constraints, and planning refinements. This plan provides an overview of the anticipated Fire District activities as related to the goals contained within this plan. General economic conditions and the capability to fund projects will play a crucial role in determining the actual time that resources are secured and projects completed, however, I strongly feel that the goals, and the strategies to reach those goals, are well within reach.



#### MISSION STATEMENT, VISION STATEMENT AND CORE VALUES

#### **Nevada County Consolidated Fire District Mission Statement**

We will provide the highest level of emergency service to our communities by valuing our members, promoting positive leadership, and dedicating ourselves to excellence.

#### Nevada County Consolidated Fire District Vision Statement

It is the vision of the Nevada County Consolidated Fire District to be recognized by those we serve, our members and our peers as:

Providing the highest level of emergency services and fire prevention

A dynamic organization that adjusts to the needs of the communities we serve

An organization recognized as a leader in the provision of regional and cooperative services between communities

#### **Our Core Values**

**To our Residents:** We owe the residents of Nevada County the highest quality of service possible, characterized by responsiveness, integrity and professionalism. We will continually strive for quality improvement.

**To the Fire Agency:** We owe the Nevada County Consolidated Fire District our full commitment and dedication. We will always look beyond the traditional scope of our individual positions to promote teamwork and organizational effectiveness.

**To Each Other:** We owe each other a working environment characterized by trust and respect for the individual, fostering open and honest communication at all levels.

**To Ourselves:** We owe ourselves personal and professional growth. We will seek new knowledge and greater challenges, and strive to remain at the leading edge of our profession.



#### ORGANIZATIONAL HISTORY



In July of 1991, the Gold Flat and Bullion Fire Districts consolidated into one district, forming the Nevada County Consolidated Fire District (hereafter referred to as "NCCFD" or "the District"). It consisted of six

fire stations, covered approximately 56 square miles, had a population of approximately 17,000 and responded to approximately 850 calls per year. The new fire district included a combination of paid and paid-call staff. The new seven-member Board of Directors hired a career fire chief from outside of the area. His staff included a full-time fire marshal, six full-time firefighters, one administrative assistant, one financial officer, and 40 volunteer firefighters. The career firefighters provided initial response 12 hours per day, seven days per week from two fire stations.

In January of 1993 NCCFD completed consolidation with the Alta-Oaks-Sunset Fire District (AOS). AOS covered approximately nine square miles, had a population of approximately 3,000, and responded to 400 calls per year from its one fire station. It was a combination department with one full-time employee (the chief), a firefighter trainee, a volunteer assistant chief, and 12 volunteer firefighters.

In January of 1998 NCCFD consolidated with the Watt Park Fire Protection District (WPFPD). Established in 1958, WPFPD provided emergency service to approximately 2,500 people from two fire stations. There were four full-time employees and 15 volunteer firefighters who responded to over 318 calls in 1996.

In July of 2003 NCCFD consolidated with the 49er Fire Department that was formed in 1956 as a volunteer fire department. The volunteer fire department served the areas of Cement Hill, Wet Hill, Newtown Road, and the areas around Nevada City. The 49er FPD coved 53 square miles to the north and east of Nevada City and operated out of five stations.

#### JOINT OPERATIONAL AGREEMENT

The Joint Operating Agreement (JOA) provides for the Grass Valley Fire Department (GVFD), Nevada City Fire Department (NCFD) and Nevada County Consolidated Fire Department (NCCFD) to operate under a Boundary Drop/Closest resource response plan, under which the closest fire engine to an incident will be dispatched or multiple engines can be dispatched for larger incidents, regardless of jurisdiction. The three agencies are the only departments in the county operating under this agreement and over time have evolved into a very codependent system.

While the JOA satisfies the everyday operational needs of the three agencies, for significant incidents, the JOA still depends on automatic or mutual aid from other agencies in the area and reciprocates by assisting those agencies when requested.

The codependence of the three agencies has led to the integration of some services and sharing of facilities/equipment. Since 2001 GVFD and NCCFD have jointly staffed Station 1 in Grass Valley. In 2003 GVFD and NCCFD have integrated the duty officer coverage, this action provides for a single Battalion Chief or higher officers to be on duty to manage incidents as necessary.

Each Agency continues to work to standardize operational policies and procedures.



#### CLIMATE AND TOPOGRAPHY

Nevada County has a Mediterranean climate with warm to hot, dry summers, and wet, cool, rainy winters. Summer is very dry, but thunderstorms may occur. The winter rains contribute to a heavy fuel-loading of brush and grass, which dry out during the summer, posing a wildfire hazard. Snow occurs at times.

Western Nevada County has been recognized by the California Department of Forestry and Fire Protection (Cal Fire) as either a **High Fire Zone** or a **Very High Fire Zone**. This designation has caused extensive changes in building codes, landscape maintenance responsibilities for homeowners, and reassessment of risk by insurance agencies resulting in significant new burdens on the citizens of Nevada County.

Any fire that occurs in Western Nevada County has the potential to become a devastating wildfire placing citizens and their property at significant risk.



#### **BUDGET**

The Nevada County Consolidated Fire District (the district) continues to feel the impact of the recession from several years ago. During the recession, the district's general fund revenue declined from a high of \$4.77 million in FY 2008-09 to a low of \$4.35 million in FY 2010-11, a decline of \$420,000 (9%) in two years. Since then, the district has been able to recover revenues, but the return to prior level of economic stability is not complete.

Nevada County population increases from the prior decade have slowed, and actually decreased during the recession. But the latest population estimates are on the rise, showing the county will break 100,000 sometime after 2015, and expects an increase of 1.7% from 2016-2020. Over the last 15 years, the majority of population growth has been in unincorporated areas, a trend that could affect the district if those trends continue.

The latest published median household income in the county was \$57,353 (2013). The majority of the employment is in the service-providing and governmental job sectors, 72% and 21% respectively. Unemployment has decreased from 11% in 2010 to 6% in 2015 (January). On a related economic subject, the Nevada County CEO office projected sales tax receipt increase of 2% for the Board of Supervisors workshop, indicating increased consumer spending.

The assessed secured property values in Nevada County continue to increase (\$14.9 billion in 2014), although not yet reaching the high assessed values of 2010 (\$16.6 billion). It is expected the number of Prop 8 properties will continue to decrease, as they have over the last 4 years, increasing assessed property values. (Note; Prop 8 allows for the temporary reduction of property values resulting in reduced property taxes) The Nevada County Board of Supervisors workshop presentation projected 3 to 6% property tax growth for the fiscal year 2016-17, a positive sign of continued recovery.

There are indicators Nevada County continues with economic recovery. As population slowly grows, unemployment declines. Consumer spending continue to increase, as does property values. Recovery for Nevada County continues to be slow, which dictates a similar recovery for Nevada County Consolidated Fire District. It is anticipated with continued recovery rates, economic recovery for the district will occur over the next five to ten years.

#### Sources:

Nevada County Demographic & Statistical Profile for Fiscal Year 2015-16.

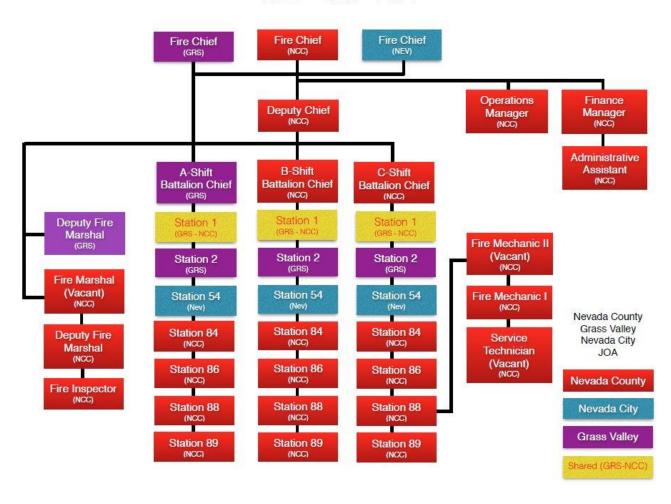
Nevada County Board of Supervisor's Workshop materials.

Nevada County Consolidated Fire District internal documents.

#### ORGANIZATION OF THE NEVADA COUNTY CONSOLIDATED FIRE DISTRICT

The Nevada County Consolidated Fire District oversees the unincorporated areas of Western Nevada County, sharing jurisdictional boundaries with the City of Grass Valley Fire Department and the City of Nevada City Fire Department. The structure of the Nevada County Consolidated Fire District and the Joint Operational Area (JOA) can be seen below.

# Joint Operational Agreement Organizational Chart NCC - GRS - NEV



#### FIRE STATION LOCATION METHODOLOGY

Until July of 1991 there were thirteen individual fire departments within Western Nevada County. The departments were predominately made up of volunteer firefighters and each agency was overseen by an elected fire chief. The departments worked independently of each other and their primary mission was to provide fire protection within their geographic boundaries. The location of each agencies stations were based on the current needs within those boundaries. The property allocated for building a fire station was usually achieved through the donation of land by a property owner and did not necessarily address future growth or consolidations.

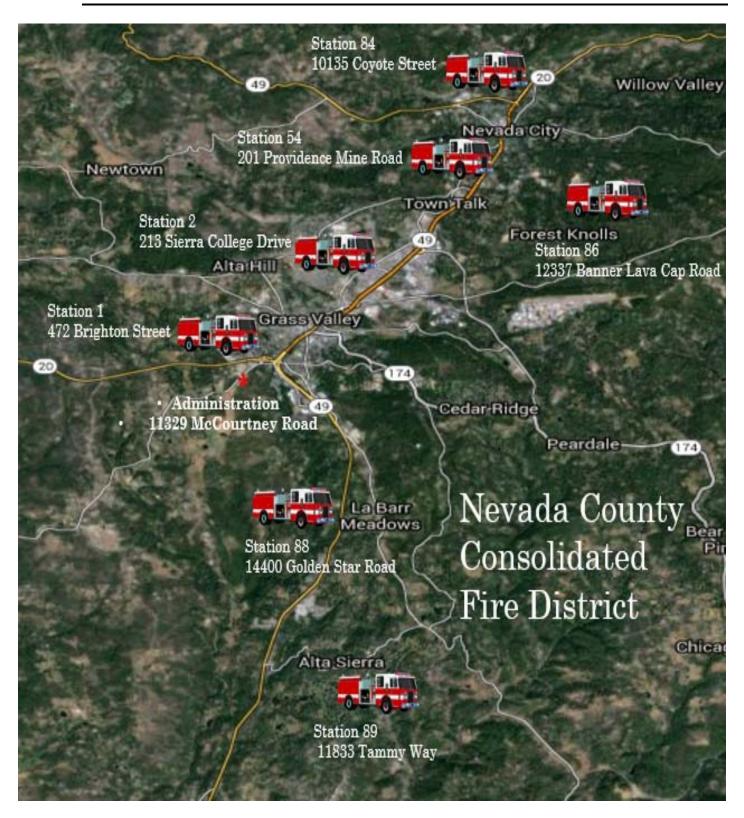
Today we still utilize those existing stations, but we have coordinated with other agencies to provide response to emergency incidents based on the closest resource. This has only been achieved by developing working relationships with our allied agencies. By contractual agreements and equitability of services, we have dropped jurisdictional boundaries to enhance emergency services to the constituents of Nevada County.

Future construction of all new stations within the Nevada County Consolidated Fire District jurisdiction will be based on density of population, call volume and response times. We will continue to work with other fire departments within Western Nevada County to assure future needs are addressed. All long-term financial commitments will be projected against the Fire District's five year financial projections. Fire District Management will assure funding for future stations is attainable and it does not create an unmanageable deficit within the fiscal budget.

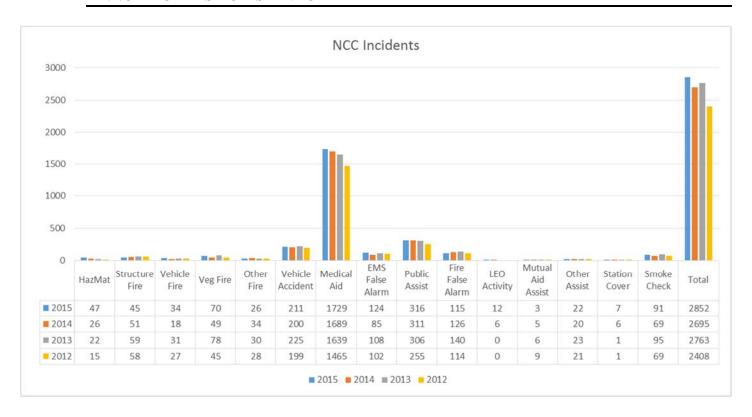
The guiding principles for fire station locations are found in the National Fire Protection Association (NFPA) Fire Protection Handbook, Volume II, 20<sup>th</sup> edition. They include:

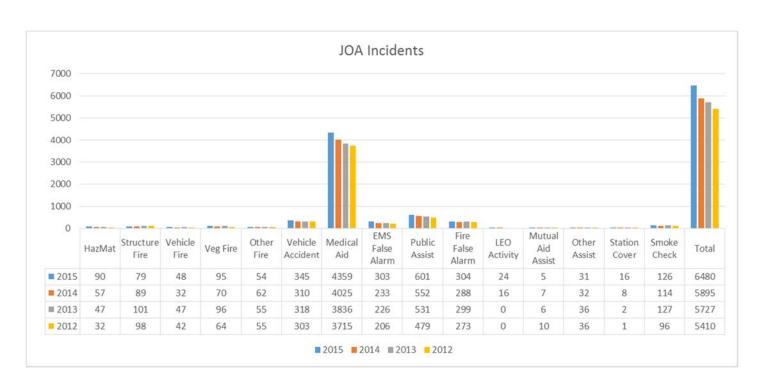
- Consideration of criteria established by the Insurance Services Offices, Inc. (ISO) regarding the distribution of fire companies within a community.
- Consideration of NFPA Standard 1710 which calls for an engine company to arrive on scene within four minutes of travel time to fire incidents and emergency medical calls 90% of the time. Additionally, this standard calls for a first alarm assignment within eight minutes of travel time 90% of the time.
- Consideration of the proximity of travel time to other fire station protection zones for timely inclusion in the full first alarm assignment.
- Consideration of rapid and safe access to multi-directional major response routes.
- Consideration of appropriate locations, given the land use issue in the surrounding environment.
- Consideration of utility availability, plot size, land availability, and surrounding traffic control issues.
- Consideration of historical and projected call volume (response workload) in an area under consideration using risk versus cost analysis.

#### STAFFED FIRE STATION LOCATION



#### ANNUAL CALLS FOR SERVICE





#### ORGANIZATIONAL GOALS AND OBJECTIVES

The strategic plan for the Nevada County Consolidated Fire District establishes goals and objectives for Operations, Department of Fire Prevention and District Administration. The Fire Chief directly oversees each division and these divisions have their own set of goals and objectives outlined below.

#### **OPERATIONS**

Operations is the largest division within the Nevada County Consolidated Fire District, consisting of 33 sworn staff, 4 non-sworn staff, and 7 reserves as of February 2016. The main mission of Operations is to respond to emergency calls for service from the community and provide quality emergency services while protecting life and property of the citizens of Nevada County. Although responding to emergencies is the primary mission of Operations, there are several support activities conducted by both sworn and non-sworn staff that are vital to the operation of the division including:

- Fire company annual business/commercial inspections
- Development and management of the District budget
- Coordinating and responding to non-emergency request for Fire District services from both District Administrative Office as well as the public
- Long range planning for the Fire District
- Applying for Assistance to Firefighters Grant and other grant opportunities

#### **Goal 1: Financial Management and Accountability**

During the recession years the Nevada County Consolidated Fire District has seen a reduction of \$450 thousand in General Fund revenue. As the economy recovers in Nevada County, and with the passing of the Special Tax of 2012, it is critical that the Nevada County Consolidated Fire District continues providing the best possible service to the community while maintaining a fiscally conservative mindset.

- Provide a five year projection for expenditures and revenues for the Fire District based on the current economic climate.
- Provide accountability to ensure Cost Recovery Incidents are being formally processed.
- Review and revise staffing assumptions to provide maximum coverage for all fire apparatus while minimizing non-essential overtime.
- Annually review the Fire District's false alarm fee to ensure all costs are being recovered for response to commercial fire alarm calls.
- Apply for Firefighter grants for staffing, equipment, and fire safety items.
- Update the aging fee structure currently in place.

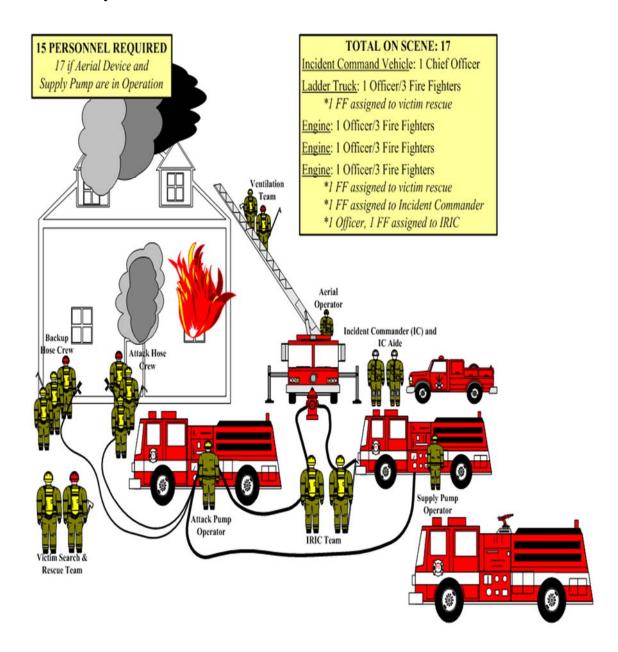
#### Goal 2: Arrive On Scene within 5 Minutes of Dispatch 90% of the Time

The Nevada County Consolidated Fire District strives to meet the National Fire Protection Association (NFPA) 1710 guideline for fire department responses which allows firefighters one minute to don their turnouts once an emergency call for service is received from dispatch and four minutes of drive time. A fire department is to meet this five minute response standard 90% of the time. By maintaining this standard response time, the Nevada County Consolidated Fire District can minimize deaths and injuries associated with fires; minimize the direct and indirect losses due to fires; and minimize deaths for people experiencing sudden illness, accidents, or injuries.

- Review response times on a monthly basis beginning in 2016 to ensure this goal is being met.
- Evaluate current and future fire station locations within the JOA to ensure proper locations are selected for new fire stations so the NFPA 1710 response time standard can be met.
- Review staffing assumptions to ensure the appropriate amount of equipment is adequately staffed to respond to emergency calls for service, including a potential shift for implementation of an Advanced Emergency Medical Technician squad.



NFPA 1710 established the standard response objectives for the initial full alarm using a task based analysis.



# Goal 3: Reduce the Risk of Fire to Residents through Prevention Campaigns and Mitigation Efforts

The best method for reducing fire fatalities and property loss is through fire prevention and public education initiatives. Public fire safety education initiatives play a major role in the prevention of fires. Public fire safety education through educational programs for schools, businesses, and civic associations have significantly reduced the number of fires in the community and have reduced the number of deaths and injuries associated with home fires.

#### **Strategies**

- Partnership with the Nevada County Fire Safe Council.
- Continue to support personnel in their participation in fire safety education for all age groups.
- Enhance Nevada County Consolidated Fire District website with more fire safety and disaster preparedness information.
- Maintain and enhance relationships with local radio and media to have public service announcements air for public broadcast and develop new program content to address specific fire safety and disaster preparedness needs in the community.

# Goal 4: Maintain a Strong JOA Partnership with Grass Valley and Nevada City Fire Departments

The Joint Operating Agreement (JOA) provides for the three agencies to operate under a Boundary Drop/Closest resource response plan, under which the closest fire engine to an incident will be dispatched or multiple engines can be dispatched for larger incidents, regardless of jurisdiction. The Grass Valley Fire Department, Nevada City Fire Department and Nevada County Consolidated Fire Department are the only departments in the county operation under this agreement and over time have evolved into a very codependent system.

- Actively participate in quarterly meetings with all agencies under contract within the JOA.
- Participate in planning committees for cost allocation planning for future fire protection services.
- Provide feedback on services, cost and other issues of concerns within JOA services to individual department heads.
- Review operations provided within the JOA to assure reciprocal value and transparency of services.

#### **DEPARTMENT OF FIRE PREVENTION**

The Fire Marshal (vacant), under the direction of the Fire Chief, manages the Department of Fire Prevention. The Department of Fire Prevention conducts fire and life safety inspections as well as plan reviews for new construction, existing buildings, and special events. Prevention also oversees abatement programs, multi-family residential inspections and investigation to determine origin and cause. The Department of Fire Prevention when fully staffed consist of a Fire Marshal, Deputy Fire Marshal and an Inspector. Positions within Prevention were reduced during the time of the economic down turn.

#### **Goal 1: Fiscal Sustainability**

A brief overview of the fees charged for plan review and inspection of new development, existing construction, and hazard abatement shows that the District does not recover 100% of the cost associated with providing staff and materials for these programs. The District will continue to review the cost associated with performing these services and increase fees where appropriate.

- Examine cost recovery options that would lead to a cost neutral business model.
- Review fire fees to ensure appropriate cost recovery for services provided.
- Establish an appropriate fee schedule for the services provided.

# **Goal 2: Ensure All Business and Commercial Occupancies Receive Annual Fire and Life Safety Inspections**

Both Fire Prevention and Operations perform annual fire and life safety inspections on business and commercial occupancies in the District, however not all of these occupancies have received their annual inspections.

- Ensure each occupancy that is required to have an annual fire and life safety inspection is assigned to the Fire Inspector or Engine Company each year.
- Examine the use of new technology applications, such as iPad based inspection software, in order to automate inspection process, scheduling, and data entry.
- Utilize the Fire Inspector for the inspection of larger square footage occupancies within the District.

#### Goal 3: Perform Hazard Abatement Inspections Bi-Annually

The Department of Fire Prevention has conducted hazard abatement inspections of vacant parcels in the past, which were previously identified within high target hazard areas of Alta Sierra, Banner Mountain and Cascade Shores. Due to budget constraints and available personnel, Prevention inspects vacant parcels on a complaint driven basis rather than performing a comprehensive, proactive District wide inspection program.

#### **Strategies**

- Re-Establish a hazard abatement program to address the accumulation of vegetation on vacant parcels within the District.
- Continue to explore program funding options through the formal grant process and/or State Cal Fire Fee schedule.
- Identify revenues within the District's fiscal budget to implement fuels reduction program.
- Continue cost recovery program through legal process via property lien for cost encumbered by the District to abate vacant parcels.

### **Goal 4: Improve Efficiency in the Plan Review Process**

The Department of Fire Prevention needs to examine a variety of measures to improve customer service including decreasing the turn-around time for initial plan review as well as evaluating the current fee schedule. Exploration into the utilization of electronic plan check submittal as an avenue for improving customer service.

- Examine methods for improving Fire Prevention efficiency reviewing building plans, such as electronic plan review and web based submittals.
- Develop an "Over the Counter" plan review pilot program for reviewing nontechnical plans in order to reduce plan check turnaround and decrease the cost to the customer.

#### **Goal 5: Evaluate Management Structure and Career Advancement within Fire Prevention**

In order to improve supervision of field staff, the Department of Fire Prevention has identified the need to re-establish the Fire Marshal position. Additionally, in order to promote staff from within the organization, the Fire Marshal will identify training opportunities for staff to improve their qualification for career advancement within Fire Prevention.

- Identify a revenue stream to re-establish funding for the Fire Marshal position.
- Develop a level of succession to meet the needs of the Department of Fire Prevention.
- Implementation of a "shift investigator" program to assist in determining origin and cause of fires.

#### **ADMINISTRATION**

#### **Goal 1: Ensure Administration Staffing is Sufficient for the Needs of the District**

To properly oversee Operations it is important to both increase and enhance staffing in Administration to ensure there is sufficient staff to support the Fire Chief, Deputy Fire Chief, Deputy Fire Marshal and two Battalion Chiefs as the District experiences growth. The increase and enhancement of administrative staffing is necessary in order to ensure appropriate span of control is maintained, workloads are manageable, succession planning and job titles/descriptions are in line with the type of work being performed.

- Establish an Acting Administrative Battalion Chief position to oversee personnel issues, schedule training, and provide leadership when the Deputy Chief is unavailable.
- Continue to evaluate the workload of administrative positions to assure goals are being met and project overload is avoided.
- Establish monthly meetings with administrative personnel and chief officers to further enhance communications and working conditions.

#### MOBILE EQUIPMENT AND FACILITY MASTER PLAN

# MOBILE EQUIPMENT REPLACEMENT PLAN

The objective of this plan is to identify and replace mobile equipment that have met or exceeded their serviceable life and replace them with emergency response apparatus, which meet the following criteria:

- Maintains or improves the current level of service
- Incorporates modern fire service technologies
- Meets current safety standards
- Standardization of the fleet
- Reduction in maintenance costs
- Cost effective to the citizens and District

This plan will integrate the rotation of select apparatus over the life of the plan to maximize serviceable life.

As of January 1, 2016, the District owned fleet is comprised of 28 vehicles including:

- 7 Type I Fire Engines
- 2 Type II Fire Engines
- 1 Type III Fire Engine
- 1 Type IV Fire Engine
- 2 Water Tenders
- 1 Light Rescue
- 9 Support/Staff Vehicles
- 1 Repair / Mechanic Vehicle
- 1 Utility Trailer
- 1 Public Education Trailer
- 1 Large Animal Rescue Trailer
- 1 Fire Investigation Trailer

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- Office of Emergency Services (OES) Water Tender 42
- Command I (County OES)
- Multi Casualty Incident (MCI) Trailer (County OES)
- Hazardous Materials Trailer (County OES)

The average age of the fleet is 11 years old. Ages range from 0 years old 26 years old. Of the four front line Type I engines, one is 0 years old and three are 9 years old. Respectively, these units have 0 to 100,000 miles and 0 to 6,000 chassis hours.

	Engine Type								
	Structure		Wildland						
Requirements	1	2	3	4	5	6	7		
Tank minimum capacity (gal)	300	300	500	750	400	150	50		
Pump minimum flow (gpm)	1000	500	150	50	50	50	10		
@ rated pressure (psi)	150	150	250	100	100	100	100		
Hose 2½"	1200	1000	5	175	1-1	-	(55)		
1½"	500	500	1000	300	300	300	1941		
1"		358	500	300	300	300	200		
Ladders per NFPA 1901	Yes	Yes	-	12	341	-	198		
Master stream 500 gpm min.	Yes	15		- 2	973	959	-		
Pump and roll	9	(=)	Yes	Yes	Yes	Yes	Yes		
Maximum GVWR (lbs)	8	187	20 (	33	26,000	19,500	14,000		
Personnel (min)	4	3	3	2	2	2	2		

#### MOBILE EQUIPMENT AND FACILITY MASTER PLAN

Equipment built prior to 1992 lacks many of the safety features found on modern vehicles such as anti-lock brakes, passenger restraint systems and roll-over protection. We currently have one vehicle in our fleet built prior to 1992.

The goal of the Equipment Replacement Plan is to establish criteria for the recommended replacement of our fleet as follows:

#### Engines:

Front line service life of 12 years. 10 years is the average industry standard for front line service. A 12 year plan provides for the purchase of an engine every 3 years, allowing for a complete rotation of our front line fleet every 12 years.

Service life of reserve units will be contingent upon the reliability of each unit.

#### Specialty Apparatus:

Certain specialty apparatus, such as water tenders, rescue vehicles, or technical vehicles will have a service life that is determined on the frequency of use, safety and reliability of each individual vehicle.

#### Staff Vehicles:

Staff vehicles will have an average service life of 10 years, or 125,000 miles.

Staff developed a standard specification for fire engines in 2006 utilizing district personnel. The District will utilize this specification for continuing engine purchases, taking into consideration updates in technology and needs specific to service areas.

Specialty apparatus specifications will be developed by district personnel, meeting the needs of the specific use of each vehicle.

Staff vehicle specifications will be based on purpose of use, utilizing those manufacturers offering government pricing.

#### **Engines**

The District currently operates 4 front line Type I engines out of Stations 84, 86, 88 & 89. To meet the goal of 12 years front line service, the District would need to purchase an engine every 3 years. Historical data along with information provided by manufacturers estimates a 3% annual increase in pricing.

#### MOBILE EQUIPMENT AND FACILITY MASTER PLAN

#### **Specialty Apparatus**

Specialty apparatus includes 2 water tenders, 1 Type III and 1 Type IV engine, 1 light rescue vehicle and 1 repair / mechanics vehicle.

Water tenders are both built on Kenworth three-axle chassis'. Both of these units have stainless steel water tanks and quality fire pumps giving the District the option to only replace the vehicle chassis at the end of the service life.

The Type III & IV engines both have low mileage and are in excellent condition.

The light rescue and mechanics vehicle are in fair to good condition. Similar to the water tenders, the district has the option to only replace the vehicle chassis at the end of the service life.

#### **Staff Vehicles**

The District currently operates 9 support / staff vehicles. 4 of those vehicles are operated on a daily basis.

Ages of the vehicles utilized on a daily basis range from 0-7 years old. It is estimated the District would need to purchase a staff vehicle approximately every 18 months.

#### **District Owned Facilities**

The District will be continually evaluating existing facilities to identify our current and future needs. Implementation of a routine maintenance program of our facilities will assist in reducing major repair cost throughout the life of the building. Annual review of allotted funds within the fiscal budget will take place to ensure long term funding of the maintenance program is available.

#### **Goal 1: Administrative Office**

The current building located at 11329 McCourtney Road is in poor condition and need of significant repairs. The original building was relocated to the property in the late 50's and was originally used as a mining building. The building is approximately 3,200 square feet and is located in an area that will continue to serve the District as its headquarters.

#### Strategies

- Explored options, lease / purchase commercial space, district owned property, remodel existing facility, modular facility. Developed pro's and con's for each.
- Obtained an evaluation from an engineering firm on most cost effective method if
  decision is made to rebuild / re-model on existing footprint of admin. Evaluation
  showed building / foundation structurally sound. Opinion of engineering firm is remodel is possible and most cost effective and that a complete tear down is not
  necessary.
- Current building is in good location. Better utilization of the nearly 3,200 sq. ft. will adequately serve our needs and provide room for future growth. Will be presenting recommendation in near future

#### **Goal 2: Retention of Existing Facilities**

The District maintains 12 fire stations (3 have been recently declared surplus by the District's Board of Directors and are in the process of being sold). Four are staffed by career personnel that are assigned to 24 hours shift work. We will continue to evaluate the need to retain the existing facilities that are not being used today or do not have a need in the future. The expenses to retain and maintain facilities and equipment that is no longer utilized, has shown a significant impact on the District's fiscal budget. Between the period of July 1, 2015 and February, 2016, the District has spent \$12,418 in utilities and routine maintenance expenses on our non-staffed District facilities. Consideration will be made to optimize facilities through mixed or shared usage with allied agencies.

#### **Goal 2: Retention of Existing Facilities continued**

#### **Strategies**

- Considered station locations, overlap, new stations, annexations, use today / future,
   ISO, allied agencies.
- Currently researching titles, zoning, valuation, ISO impact.
- Sales could offset future capital expenses.

#### **Goal 3: Modernization of Existing Facilities**

Nevada County Consolidated Fire Station 88 (14400 Golden Star Rd.), was built in 1987. The building is in good condition, but the interior is dated. The largest issue with Station 88 is the common dormitory, it is too small for current staffing conditions. Upgrades will be necessary to the dormitory, public reception area, and the kitchen. Fire Station 86 (12337 Banner Lava Cap Rd.) was built in the early 70's and the building is in fair condition. Station 86 was never intended to be utilized as a staffed fire station. It currently has a single restroom, poor layout, no office or public reception area. Assigned personnel have to walk outside to access the location where the engine is housed.

- Upgrades and modification have been identified within the facilities maintenance program, which will address all areas identified at Station 88 and Station 86.
- Funds will be allocated to the fiscal budget in order to fund maintenance projects.
- Future fire stations within the District due to growth will be constructed to meet the needs associated with full time staffing of personnel.

#### **FUTURE CONSIDERATIONS**

The goal of any strategic plan is to map out the future direction of the Fire District. Over the next five years there will be items that will need to be discussed with the Nevada County Consolidated Fire District Board of Directors in order to better serve the needs of the community and the needs of firefighting personnel. These items include:

- Three person staffing (career and seasonal firefighters)
- Continue and Expand the Internship Program
- Advanced Emergency Medical Services
- Shared Administrative Services and/or Consolidation
- Dividing the Joint Operations Area into two battalions
- Captains assigned at all stations on every engine

#### **Four Person Staffing**

A landmark study released by the National Institute of Standards and Technology (NIST) released in 2010 confirms that the size of firefighting crews has substantial effect on the fire service's ability to protect lives and property in residential fires. Conducted by a broad coalition in the scientific, firefighting and public safety communities, the study results found that four person firefighting crews were able to complete 22 of the essential firefighting and rescue task in a typical residential structure 30% faster than a two persons crew and 25% faster than three persons crew. This study was the first to quantify the effects of crew size and arrival times on the fire services lifesaving and firefighting operations.

Additionally, the Fire District is subject to the Federal Regulations 1910.134 issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) which requires two firefighters to enter a burning building or IDLH together and two firefighters to be outside of the building who are able to render immediate assistance should a rescue need to be made. This is commonly called the "two in/two out" rule. As the District staffs with two to three personnel on the engines, the engine company is oftentimes waiting for the arrival of another fire apparatus in order to safely enter a burning building. The impact of not having the essential personnel and equipment on scene in a timely manner could lead to an increase in the amount of property loss due to fires and potentially increase the loss of life should anyone be trapped inside. There is also inherent risk to the firefighters the longer it takes to initiate an interior fire attack due to flashover conditions typically developing within eight minutes of the start of the fire.

While the Fire District desires to have four person staffing on all fire apparatus to increase the effectiveness of firefighting operations it is unlikely that this will occur in the next five years due to the economic situation in the Fire District and the cost associated with increasing staffing from two/three personnel on a fire engine to four.

#### **Four Person Staffing Continued**

The Fire Chief does recommend that the District, and specifically its Board of Directors, be aware of the importance of staffing fire engines with four personnel versus two to three and determine a way to balance the need to increase staffing to four person fire engine companies with the need to open new fire stations in the future. One possibility for meeting the need to increase staffing for safer fire ground operations is the Advanced Emergency Medical Technician Squad Program section below.

#### **Advanced Emergency Medical Technician Squad Program (AEMT)**

The District's four engine companies are staffed with personnel that are trained to the level of "emergency medical technician" who provide medical care for medical emergencies and trauma. As calls for service continue to increase in the District, the Fire Chief will need to consider adding additional fire emergency response units to the existing fire stations in order to provide adequate personnel and equipment for emergency response. Currently 75%+ of the Fire District's emergency calls for service are for medical emergencies it is possible that the additional equipment would consist of an AEMT squad in lieu of an additional fire engine.

One advantage to an AEMT squad is that it will allow for a tiered level response for both medical and fire emergencies. The AEMT squad will also provide additional coverage at the busier fire stations for medical responses requiring advance life support and will provide more staffing for fire ground operations.

#### **Shared Administrative Staffing and/or Consolidation**

The District will continue to explore the option of cost sharing the position of Fire Chief with other agencies through an agreed upon cost sharing matrix. The Fire Chief's duties would include-Strategic planning, prepare a variety of technical and departmental activities reports and records, prepare and administer the department's annual budgets, maintain departmental awareness of state-of-the art developments, represent the agencies in relationships with the public, community groups, professional organizations, other departments and divisions, and outside agencies including City Council's and governing Boards. Additional cost savings may be realized by sharing of services such as payroll, staffing and possibly Human Resources.

Any future consolidations with the Nevada County Consolidated Fire District, will be carefully reviewed and evaluated in accordance with *Senate Bill 239*. Comparisons against the District's five and ten year financial projections will ensure financial stability of all agencies entering into the agreement.

#### Dividing the Joint Operations Area (JOA) into two battalions

In order to provide appropriate supervision to field staff, accomplish administrative tasks, and respond to emergency calls for service, the Fire Chief will need to consider splitting the JOA into two battalions. Additional battalion chief coverage will need to be considered if the JOA geographically expands its area of responsibility through future agreements and/or consolidations.

#### Captains assigned at all stations on every engine

The position of Captain is one of the most influential and important positions in the fire service. The Captain is the department member the public typically sees when they call 911. The chief, deputy chief, and battalion chief meet with the public on select calls based on complexity and need. The Captain goes to every incident in the first-due area, when assigned to that engine company. He or she needs to be constantly aware that he or she is continuously representing the fire department, the community, and the chief; must act in the best interest of the public (our bosses); and serves as the conduit between administration and personnel.

#### **SUMMARY**

This strategic plan lays the foundation for the development of the Nevada County Consolidated Fire District over the next five years by identifying goals within specific areas of the organization.

#### Operations:

- Financial Management and Accountability
- Arrive On Scene within 5 Minutes of Dispatch 90% of the Time within the JOA
- Reduce the Risk of Fire to Residents through Prevention Campaigns and Mitigation Efforts
- Maintain a Strong JOA Partnership with Grass Valley and Nevada City Fire Departments

#### Department of Fire Prevention:

- Fiscal Sustainability
- Ensure All Business and Commercial Occupancies Receive Annual Fire and Life Safety Inspections
- Perform Hazard Abatement Inspections Bi-Annually
- Improve Efficiency in the Plan Review Process
- Evaluate Management Structure and Career Advancement within Fire Prevention

#### Administration:

• Ensure Administration Staffing is Sufficient for the Needs of the District

#### Apparatus:

• Capital Replacement Program

#### District Owned Facilities:

- Administrative Office
- Retention of Existing Facilities
- Modernization of Existing Facilities

This plan also identifies five key areas that need to be considered as the District continues to grow. These items will need to be assessed over the next five years and potentially implemented in order to provide quality services to the constituents of the Nevada County Consolidated Fire District. These areas are:

- Four person staffing
- Advanced Emergency Medical Services
- Shared Administrative Services and/or Consolidation
- Dividing the Joint Operations Area into two battalions
- Captains assigned at all stations on every engine

#### **SUMMARY**

The Nevada County Consolidated Fire District is a dynamic organization that must be able to react to change, resolve problems, and work together with other departments and agencies on issues that may arise. The intent of this plan is to serve as a guide for the Fire District's development over the next five years. It also serves as the foundation document for informing the District Board of Directors as to the direction the Fire District is headed in order to ensure the community continues to receive outstanding fire protection services. The Fire District Management Staff will review this plan annually to ensure the goals outlined in this plan are being met.

