

July

2025



FIRE - RESCUE

Yakima County Fire District 12

WEST VALLEY FIRE-RESCUE

ORGANIZATIONAL EVALUATION

Standards of Cover & Deployment Analysis

Contents

Acknowledgments.....	iii
Introduction.....	iv
SECTION I: EVALUATION OF CURRENT CONDITIONS.....	1
Overview of the Organization.....	2
History of the Fire District	2
Governance & Lines of Authority	2
Operations & Deployment	6
Operational Deployment	6
WVFR Service Area.....	7
Critical Tasks Provided by WVFR	9
Other Local & Regional Public Safety Resources	14
Organizational Management & Planning.....	19
Management & Administration	19
Recordkeeping & Document Control	23
Fire District Planning	25
Financial Overview	27
Revenues & Expenditures	27
Staffing & Personnel Management.....	32
Administrative & Support Staffing	32
Operational Staffing.....	34
Volunteer Program.....	36
Personnel Management.....	38
Capital Facilities & Apparatus	42
WVFR Fire Stations.....	44
WVFR Fleet Inventory	50
Other Capital Equipment	54
Service Delivery & Performance.....	55
Service Demand.....	56
Response Performance Analysis.....	75
Population & Service Demand Projections	87
SECTION II: OTHER PROGRAMS & DIVISIONS.....	92
Community Services Division.....	93
Community Programs & Events	93
Intergovernmental Affairs	93

Training Division	94
Training Administration.....	94
Training Facilities & Resources.....	95
General Training Competencies & Personnel Trained	96
Fire Prevention Division	100
Public Education & Prevention Programs.....	100
Yakima County Fire Marshal's Office	101
Support Services Division.....	102
Equipment Program	102
Apparatus Specification Program.....	102
Communications Program	102
Fire Hydrant Program	103
Facilities Program	103
Quartermaster Program	103
SECTION III: FINDINGS, STRATEGIES, & RECOMMENDATIONS.....	104
Strategies & Recommendations	105
Staffing & Personnel	105
Operations & Deployment	108
Incident Reporting & Records Management	109
Health & Safety.....	111
Fire Stations & Facilities	113
Apparatus & Equipment.....	113
Financial Management	114
General Recommendations	116
SECTION IV: APPENDICES	119
Appendix A: Sample WVFR Data Outlier Management Policy	120
Appendix B: Example Data Summary Table	121
Appendix C: Table of Figures.....	122
Appendix D: References	125

Acknowledgments

The J. Angle Group, LLC, would like to extend its sincere appreciation to each of the individuals, members, and elected officials of Yakima County Fire District 12, whose contributions and assistance made this project possible.

Our sincere appreciation is extended to each of you...

West Valley Fire-Rescue/Yakima County Fire District 12

Nathan Craig
Fire Chief

Jim Johnston
Deputy Chief

Christy Boisselle
Administrative Officer

Nikki Monahan
Administrative Assistant

Ken Eakin, Chair
Board of Fire Commissioners

Paul Barham
Board of Fire Commissioners

Jim Borst
Board of Fire Commissioners

...and to each of the Firefighters, Officers, support staff, and elected officials that daily serve the citizens and visitors of Yakima County Fire District 12.

Introduction

In January 2025, Yakima County Fire District 12 retained the J. Angle Group (JAG) to conduct an Operational Assessment and Standards of Cover. The general intent was to develop strategies that would guide the fire district leadership with sustainable options for moving forward.

In addition, options and recommendations were to be developed and discussed for providing emergency services based on the acquired data, observations, data analyses, national standards, applicable regulations, and best practices. These were to include, but not be limited to:

- Changes, if indicated, to improve deployment and operational efficiency, including response performance standards.
- Staffing and personnel recommendations.
- Alternatives or methods for data collection for quality management.
- Any other potential recommendations or needs identified by JAG.
- Current and future training and continuing education needs.
- Any other potential recommendations or needs identified by JAG.

JAG believes that the following report has addressed these and more.

It is important to note that Yakima County Fire District 12 is the organization's official legal name; however, it is typically referred to as West Valley Fire-Rescue (and occasionally as the West Valley Fire Department). In this report, these monikers may be used interchangeably. Also, the term "Volunteer" Firefighter may be used interchangeably with "Paid-On-Call" Firefighter. In addition, "Paid Firefighter" or "Career Firefighter" may be used interchangeably.

West Valley Fire-Rescue

The J Angle Group found that West Valley Fire-Rescue is well-managed by the Board of Fire Commissioners, command staff, and at the officer level. The organization is respected by its fire service peers, community members, and other state and local public safety organizations.

Section I:

EVALUATION OF CURRENT CONDITIONS

Overview of the Organization

The following section provides a brief overview of Yakima County Fire District 12's history, demographic composition, and current infrastructure.

History of the Fire District

In 1960, following the successful petition of the residents of the West Valley area, the Yakima County Board of Commissioners approved the creation of Yakima County Fire District 12 (YCFPD12)—also known as the West Valley Volunteer Fire Department. Today, the organization is referred to as West Valley Fire-Rescue (WVFR). In 1961, the fire district appointed its first full-time Fire Chief.

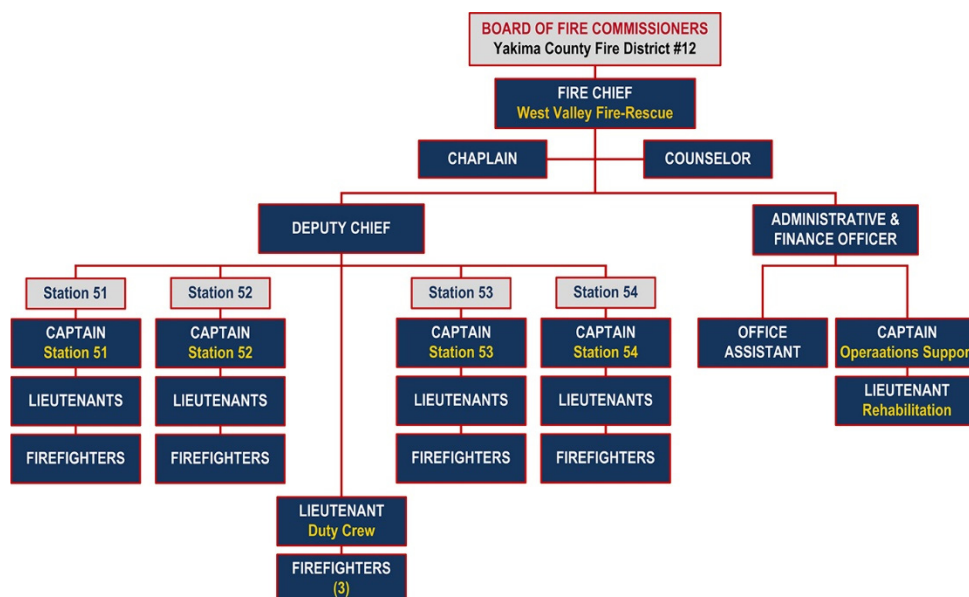
Governance & Lines of Authority

Yakima County Fire District #12 is governed by an elected three-member Board of Fire Commissioners. The Board maintains financial oversight and oversees and manages the district's general operations. Commissioners are elected for six-year staggered terms.

Organization & Staff Overview

WVFR is a combination fire district in which operations personnel are primarily Paid-On-Call (POC) Firefighter and Officer positions. The following figure represents the current WVFR organization chart.

Figure 1: West Valley Fire-Rescue Organization Chart (2025)



West Valley Fire-Rescue currently maintains 7.5 full-time equivalent (FTE) positions: Fire Chief, Deputy Chief (DC), Administrative & Finance Officer (AFO), an Administrative Assistant, a Duty Crew Lieutenant, and three Firefighters.

The Fire Chief supervises the Deputy Chief and the Administrative & Finance Officer. Both positions are assigned multiple duties and responsibilities (addressed in more detail later in this report). The Chaplain and Counselor are not full-time but are on the payroll in the same manner as the volunteers.

As shown in the preceding figure, the DC supervises the officers and Firefighters at WVFR's four fire stations and manages the Duty Crew Lieutenant and Firefighters. Each fire station has an assigned Station Captain, Lieutenants, and Firefighters.

The AFO supervises the Administrative Assistant, Support Services Captain, and Rehabilitation Lieutenant—each of whom has multiple responsibilities and is neither a full-time nor a part-time employee.

WVFR Service Area

Demographics

According to the United States Census Bureau, the original “West Valley” area in Yakima County is a former census-designated place (CDP). However, much of that area has since been annexed by the City of Yakima and no longer represents the current boundaries of Yakima County Fire District 12.

Population Discussion

Determining an accurate population for the fire district has been challenging. The numbers vary among the different resources:

Figure 2: Comparison of Population Numbers by Data Source

Data Source	2024 Population
Office of the Washington State Auditor ^A	20,000
Yakima County Department of EMS	15,100
ESRI Demographics Dataset	11,887
Washington State Office of Financial Management (OFM)	12,352
Average:	14,835

^A 2023 population estimate.

As shown in the preceding figure, there are substantial discrepancies among the four data sources. Although difficult to determine, the average of these may be the most accurate. If the Washington State Auditor's figure is excluded, the average is just over 13,000 persons.

Other Demographics

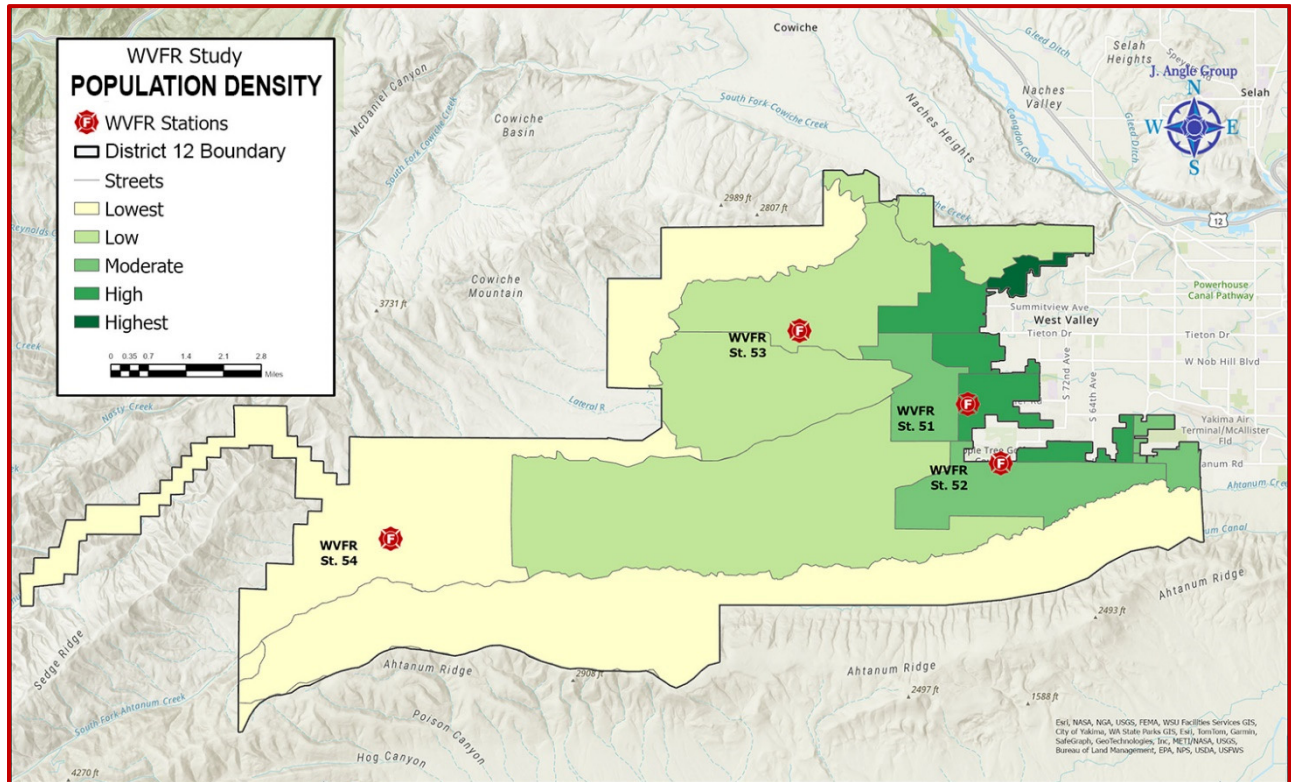
Approximately 18% of the fire district population is under the age of 14, while 21% are 65 years or older.¹ The population comprises 74% White persons, 11% Latino or Hispanic of any race, 2% Asian, and African American or Native American, respectively, at 1% of the fire district's population.²

As of 2024, the total estimated number of housing units in the WVFR service area was 4,635, of which 4,332 were occupied.³ As of 2022, the median home value in the fire district was \$350,784.⁴ The median household income for 2024 was estimated at \$91,776.⁵

In addition to seniors (65 years and older), other at-risk populations in 2022 were those individuals with disabilities, at 25%, and those below the poverty level, at 11%.⁶ Approximately 9% of the population under the age of 65 is uninsured.⁷

The following figure is a map generated using Geographic Information Systems (GIS) technology that shows the 2024 population density of Yakima County Fire District 12.

Figure 3: Population Density of Yakima County Fire District 12 (2024)



As shown in the preceding figure, the highest population density in the fire district is on the east end, while the lowest densities are on the far west side, along the southern border areas, and in the northwest portion of the fire district.

Operations & Deployment

West Valley Fire-Rescue is a multi-hazard public safety organization that provides traditional structural and wildland firefighting, as well as medical first-response (MFR) at the Basic Life Support (BLS) level. A private ambulance service provides Advanced Life Support (ALS) and patient transport under an exclusive contract with Yakima County for 911 services.

WVFR responds to both technical rescue and hazardous materials incidents. However, the fire district does not provide technical rescue operations (other than vehicle extrication) in more complex situations, nor does it mitigate significant hazardous materials incidents. WVFR maintains personnel trained at the Awareness level.

As of March 2025, West Valley Fire-Rescue maintained about 80 Paid-On-Call (or "Volunteers") operations personnel. WVFR employs a minimum of four career Firefighters (one of whom is a Lieutenant) scheduled Monday through Friday from 0600–1800 hours at Station 51. The Lieutenant supervises the three Firefighters.

Each two-person crew works four 12-hour shifts during the weekdays. Two career firefighters work Monday through Thursday, and the other two work Tuesday through Friday. When all four are on shift, two Firefighters are assigned to Station 51, and two are assigned to Station 52. At 1500 hours, they return to Station 51. Personnel and staffing will be discussed in more detail later in this report.

Operational Deployment

WVFR deploys its operations personnel and apparatus from four fire stations located throughout the fire district. Station 51 serves as headquarters and maintains a substantial amount of property adjacent to the facility for training purposes and other uses.

Command Officers

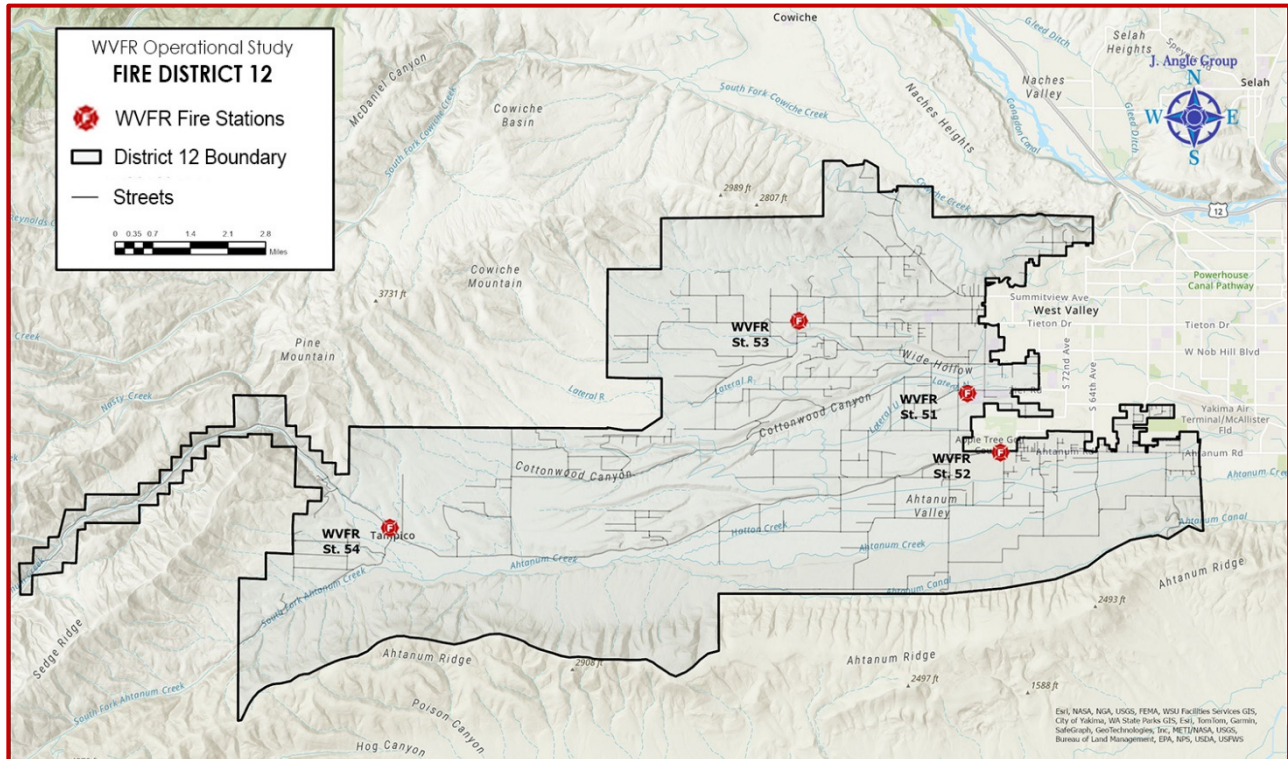
The position of Duty Chief is maintained 24 hours a day. The Fire Chief, Deputy Chief, Station Captains, and qualified Lieutenants (who have passed the Captain's exam) may fulfill the role of Duty Chief.

A Duty Officer is scheduled weekly from Friday at 1800 hours through Sunday at 1800 hours. The Duty Officer may be a Captain, Lieutenant, or a qualified Senior Firefighter (who has passed the Lieutenant's exam). The Duty Officer is assigned a command vehicle during that period.

WVFR Service Area

Much of the original "West Valley" has since been annexed by the City of Yakima. Today, the Yakima County Fire District 12 boundaries greatly exceed the original area (just over 7 square miles) known as West Valley. The fire district response area encompasses about 92 square miles west of Yakima.⁸

Figure 4: Yakima County Fire District 12 Boundaries (2025)

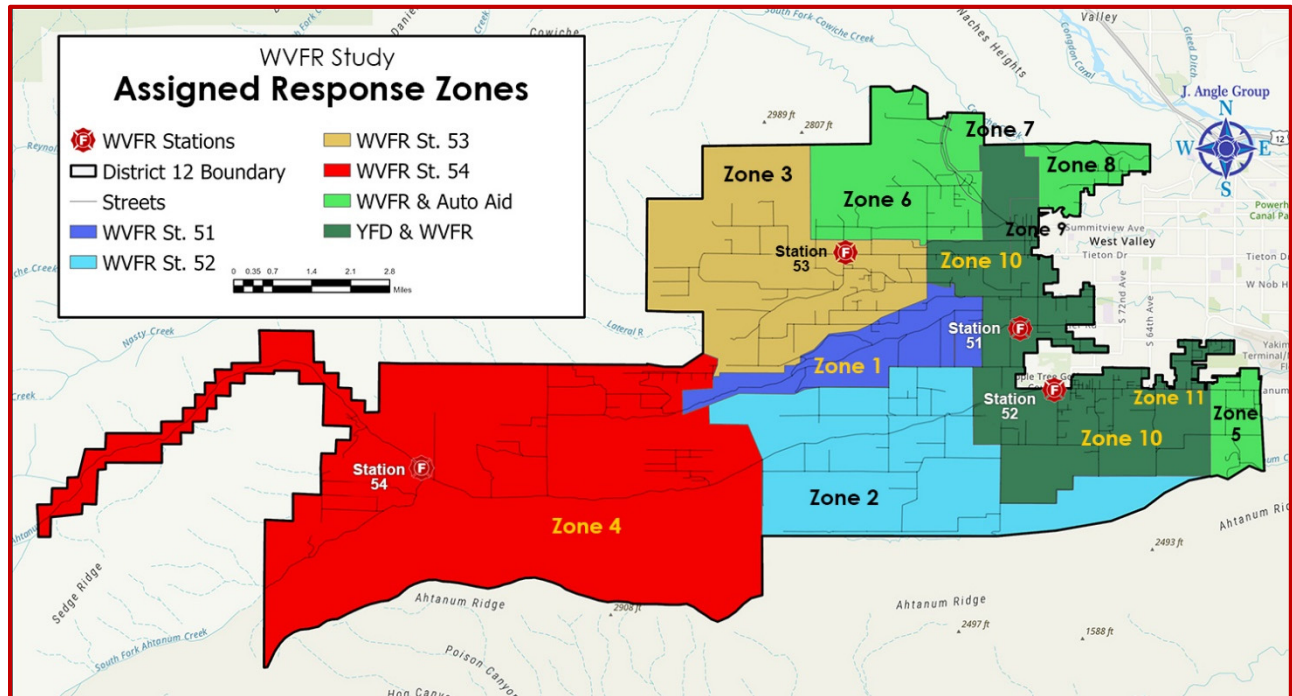


Fire District Response Zones

To accommodate the Spillman Flex[®] computer-aided software utilized by Valley Fire Communications (VFC), Yakima County Fire District 12 developed 11 distinct response zones (RZ). As shown in the next figure, each response zone was assigned to a first-due WVFR fire station. However, in some response zones, the first-due station may be a combination of WVFR or a first-due station from another department in the form of automatic aid.

The following figure illustrates the boundaries of each WVFR response zone and the assigned first-due fire station.

Figure 5: Yakima County Fire District 12 Response Zones



The following is a list of each of the response zones and first-due fire stations:

- **Zone 1:** WVFR Station 51
- **Zone 2:** WVFR Station 52
- **Zone 3:** WVFR Station 53
- **Zone 4:** WVFR Station 54
- **Zone 5:** WVFR Station 52 (YFD Station 96)
- **Zone 6:** WVFR Station 53 (YCFD1)
- **Zone 7:** WVFR Station 53 (YCFD1)
- **Zone 8:** WVFR Station 51 (YFD Station 96 and YCFD6 Station 2)
- **Zone 9:** YFD Station 92 (WVFR Station 51)
- **Zone 10:** YFD Station 92 (WVFR Station 51 and WVFR Station 52)
- **Zone 11:** YFD Station 94 (WVFR Station 52)

WVFR Protection Class Grade

The Washington Surveying and Rating Bureau (WSRB) is an independent, nonprofit public service organization that produces data to assist insurance companies in accurately evaluating risk. There are four areas evaluated and scored independently:

- Fire Department: 40%
- Water Supply: 35%
- Fire Safety Control: 16%
- Emergency Communications: 9%

As a result of the evaluation, a community is assigned a Protection Class grade of 1–10, where a PC of 1 is considered to have exemplary fire protection capabilities and a PC of 10 indicates that capabilities (if any) are insufficient for insurance rating credit. In January 2024, the WSRB assigned Yakima County Fire District 12 a Protection Class (PC) of 4.⁹ Most fire districts and fire departments in Washington State have a Protection Class of 5 or more.¹⁰

It must be noted that the PC assigned to a fire district is the overall class of the community and not necessarily the classification of all properties located within the fire district. Distance to fire stations, fire hydrant criteria, and other rules must be applied to the community PC to determine the Protection Class of individual properties.¹¹

Critical Tasks Provided by WVFR

West Valley Fire-Rescue provides fire protection, EMS, and other emergency services to an area exceeding 90 square miles. Therefore, specific critical tasks must be accomplished for each type of incident and corresponding risk, and certain numbers and types of apparatus must be adequately staffed and dispatched.

Tasks that must be performed at a fire can be broken down into two key components: life safety and fire flow. Life-safety tasks are based on the number of building occupants, their locations, status, and ability to take self-preservation actions. Related tasks involve the search, rescue, and evacuation of victims.

The fire-flow component involves delivering sufficient water to extinguish the fire and create an environment within the building that allows Firefighters to enter. The number and types of tasks needing simultaneous action will dictate the minimum number of Firefighters required to combat different types of fires.

In the absence of adequate personnel to perform concurrent actions, the Incident Commander must prioritize the tasks and complete some in chronological order rather than concurrently. These tasks include the following:

- Command
- Water supply
- Backup/Rapid Intervention
- Scene safety
- Pump operation
- Search and rescue
- Fire attack
- Ventilation

Critical task analyses also apply to other fire-related and non-fire types of emergencies, including medical emergencies, technical rescue operations, hazardous materials incidents, and wildland incidents. Numerous simultaneous tasks must be completed to control an emergency incident quickly and effectively. Within this document, risk levels for each type of response have been identified.

Generally, response types are broken into low, moderate, high, and maximum risks. These apply to each of the areas of fire response, EMS, and other incidents. Each hazard type was identified, and the number of personnel was determined based on critical tasking and the fire district's operational procedures.

Types of Risk

The types of risk are defined as follows:

- **Low Risk:** Minor incidents involving small fires (fire flow less than 250 gallons per minute), single-patient non-life-threatening medical incidents, minor rescues, small fuel spills, and small wildland fires without unusual weather or fire behavior.
- **Moderate Risk:** Moderate-risk incidents involving fires in single-family dwellings and equivalently sized commercial office properties (fire flow between 250 gallons per minute and 1,000 gallons per minute); life-threatening medical emergencies, hazardous materials emergencies requiring specialized skills and equipment; rescues involving specialized skills and equipment; and larger wildland fires.
- **High Risk:** High-risk incidents involving fires in more significant commercial properties with a sustained attack (fire flows more than 1,000 gallons per minute), multiple patient medical incidents, significant releases of hazardous materials, high-risk rescues, and wildland fires with extreme weather or fire behavior.

The next figure summarizes the personnel required by incident type and risk category.

Figure 6: WVFR Staffing Needs Based on Risk

Incident Type	Low Risk	Moderate Risk	High Risk	Maximum Risk
Structure Fires	2	16	36	52
EMS Calls	2	9	18	41
Wildland Incidents	3	14	80	—

Establishing resource levels needed for various emergencies is a uniquely local decision. Factors that influence decisions regarding incident staffing include the type of equipment being operated, the training levels of responders, operating procedures, geography, traffic, and the nature of buildings and other protected areas.

Critical Task Analysis

Critical tasks are those activities that must be conducted promptly by Firefighters and officers during emergency incidents to control the situation, prevent further loss, and perform any necessary tasks required for a medical emergency. Additionally, WVFR is responsible for ensuring that responding personnel and apparatus can promptly, efficiently, and safely perform all described tasks.

The following figure shows WVFR's minimum number of personnel needed to assemble an Effective Response Force (ERF) for fire incidents and the severity of the risk by function.

Figure 7: Critical Tasking—Fire Incidents

Function	Low Risk	Moderate Risk	High Risk	Maximum Risk
Duty Chief or Officer (Command)		1	3	5
Safety		1	1	1
Size up (360°)	1 ^A	1 ^A	1 ^A	1 ^A
Driver/Engineer	1	1	2	3
Aerial/Ladder Truck			3	3
Water Tender (or supply)		1	1	2
Standpipe/Sprinkler Control			1	1
Fire Attack	1	4	6	9
Search & Rescue		—	4	4
Ventilation/Utilities		2	4	4
Backup Line		2	2	2
Rapid Intervention Team		2	3	6
Rehab			2	6
Air Supply			2	4
Ambulance ^B		2	2	2
Total ERF:	2	16	36	46

^A Temporary assignment. ^B AMR unit.

The following figure illustrates WVFR's minimum number of personnel required to assemble an ERF for EMS-related incidents, categorized by risk severity and function.

Figure 8: Critical Tasking—EMS Incidents

Function	Low Risk	Moderate Risk	High Risk	Maximum Risk
Duty Chief or Officer (Command)		1	1	1
Safety			1	1
Size up (360°)		1 ^A	1 ^A	1 ^A
Documentation	1		1	
Family/Bystander Liaison				
Operations				
Triage Supervisor				1
BLS Treatment—WVFR	1	6	6	16
BLS Ambulance—AMR			4 ^B	
ALS Ambulance—AMR		2 ^B	4 ^B	8
ALS Treatment Only—AMR				10 ^B
Transport Supervisor			1	1
Staging				1
Bus				1
Emergency Management				1
Total ERF:	2	9	18	41

^A Temporary assignment. ^B AMR unit(s).

The following figure illustrates WVFR's minimum number of personnel required to assemble an ERF for wildland incidents, along with the risk severity by function.

Figure 9: Critical Tasking—Wildland Incidents

Function	Low Risk	Moderate Risk	High Risk
Duty Chief or Officer (Command)		1	4 ^B
Safety			1
Recon Group		1	1
Lookout			2
Size up (360°)	1 ^A	1 ^A	1 ^A
Driver/Engineer	1	3	12 ^B
Flank Divisions		4	24
Water Tender (or supply)		1	8 ^B
Structure Protection		4	12
Holding			6
Fire Attack	2		
Rehab			4
Staging			1
Emergency Management			1
Bulldozer			4
Total ERF:	3	14	80

^A Temporary assignment. ^B Requires mutual aid personnel.

Other Local & Regional Public Safety Resources

Emergency Communications & Dispatch Services

WVFR is dispatched by Valley Fire Communications (VFC) in Sunnyside and is owned and operated by Yakima County Fire District 5. SunComm 911 Communications in Yakima serves as the primary 911 Public Safety Answering Point (PSAP) for Yakima County.

If a 911 call originates in the WVFR area, it is received at SunComm and subsequently forwarded to VFC for dispatching. VFC provides emergency communications and dispatch to nearly all fire departments and districts in Yakima County. VFC aims to achieve a 60-second or less call processing time at the 90th percentile.

VFC does not utilize a medical priority dispatch system (MPDS) but instead relies on SunComm, which uses ProQA® from Priority Dispatch™ to provide priority dispatching and pre-arrival instructions to callers in a medical emergency.

In April 2025, SunComm began utilizing the Nurse Navigation Program, operated by American Medical Response (AMR). The program aims to direct callers (patients) to the appropriate level of care, which may or may not include ambulance transport to a hospital. Calls to 911 that indicate low-acuity conditions may be transferred to a Nurse Navigator, who can assess symptoms and make a referral to the most appropriate medical care.

SunComm also intends to launch the PulsePoint™ system in the Summer of 2025. In cases of cardiac arrest, the system will notify nearby citizens who have the application installed on their cell phones of the incident's location. This will allow citizens trained in CPR to respond quickly and provide assistance.

Ground Emergency Medical Transport

American Medical Response has an exclusive contract for 911 responses with Yakima County. AMR is a nationwide company that provides ambulance service to thousands of communities, operating a fleet of 8,000 ground ambulances. In Yakima County, AMR provides BLS and ALS patient transport. AMR has contractual obligations to meet various response time, staffing, training, and other performance standards.

Interlocal Agreement with AMR

West Valley Fire-Rescue provides ambulance quarters for two AMR ambulance crews at Station 51. AMR maintains one ALS-staffed and equipped ambulance with a Paramedic and an EMT on duty 24 hours a day. A second BLS-staffed and equipped ambulance is housed at the station 22 hours daily.

The fire district has a unique agreement with American Medical Response. In exchange for \$300 per call, during certain hours of the day, AMR will respond to all non-critical “medical” incidents that do not warrant a WVFR response (e.g., lift assists). This program is intended to reduce “burnout” among West Valley Fire-Rescue’s volunteer personnel.

Air Medical Transport

Helicopter scene transport is available through the Life Flight Network® with the closest bases in Richland, Moses Lake, and Dallesport, Oregon. Airlift Northwest® maintains a helicopter base approximately 30 minutes away in Wenatchee.

Yakima County Search & Rescue

The Yakima County Sheriff's Office manages the Search & Rescue Program (YCSOSAR). This organization can assist in a variety of incidents that include:

- Searching for lost or injured individuals (e.g., hunters, hikers, snowmobilers, etc.).
- Assisting and rescuing people who have become injured or are unable to get out.
- Assisting in the mobilization of firefighting apparatus during large wildfires.
- Performing safety patrols during certain public events.
- Providing amateur radio support during searches, rescues, and disasters.
- Responding to requests from the Office of Emergency Management for assistance with various activities during natural disasters.
- Other efforts may include air searches, mountain rescues, water rescues, and other specialized searches.

Yakima County Department of Emergency Medical Services

The Yakima County Department of EMS (YCDEMS) provides multiple services to fire districts, fire departments, and other agencies throughout Yakima County. These services include:

- Development of EMS training curricula.
- Coordinating and providing initial and ongoing education and training.
- EMS Evaluator Training.
- Quality assurance and improvement.
- Medical Program Director support.
- Working with the Washington State Department of Health on several committees.

Office of Emergency Management

The Yakima County Office of Emergency Management (OEM) is managed through the Yakima County Department of EMS. Its primary role and responsibilities include:¹²

- Assisting citizens in becoming better prepared through presentations and demonstrations.
- Responding to active incidents, including conducting situational observation, and providing traffic control, damage assessments, and basic disaster medical support.

- Utilizing structures, platforms, and roles described in the National Response and Disaster Recovery Framework.
- Specifying responsibilities through Emergency Support Functions (ESF).
- Managing the Emergency Operations Center (EOC).

Mutual & Automatic Aid Sources

West Valley Fire-Rescue has access to several fire departments and fire districts that may be available to provide mutual and/or automatic aid. These include:

Figure 10: Mutual & Automatic Aid Resources Available to WVFR

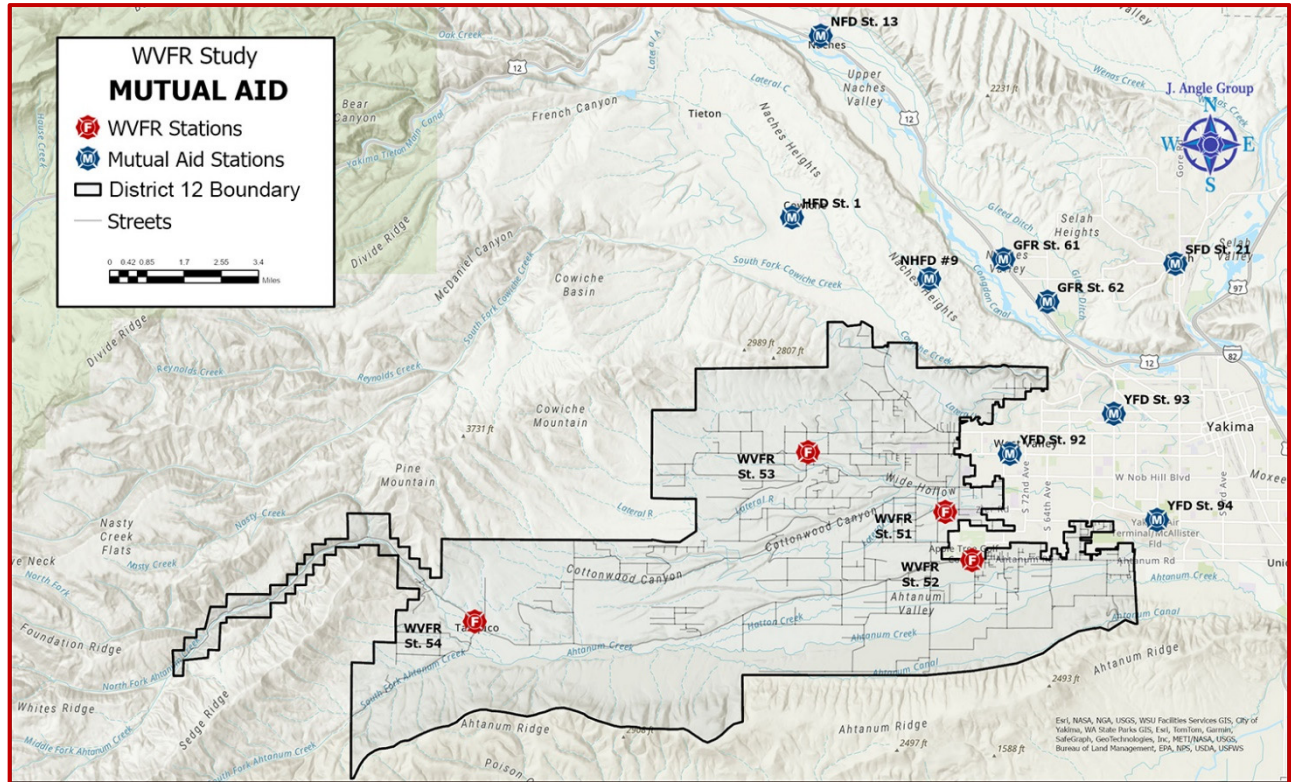
Agency Name	Station No.	No. of Engines	No. of Aerials	Other Resources	No. of Staff
Yakima Fire Department	#92	1	0	Brush	3
	#93	1	1	Brush, Aerial	3
	#94	1	0	2 ARFF units, Tender	3
	#96	2	0	WUI Engine	3
YCFD 1–Highland	#1	2	0	Tender, Brush	V
YCFD 2–Selah	#21	5	1	4 Brush, 2 Tenders	V/C
YCFD 3–Naches	#13	2	0	Brush, Tender	V
YCFD 4–East Valley	#40	2	0	2 Brush, Air Unit	V/C
YCFD 6–Gleed	#62	2	0	Tender, 2 Brush	V/C
YCFD 9–Naches Heights	#9	2	0	Tender, Brush, Drone	V
YCFD 14–Nile-Cliffdell	#11	2	0	Tender, Brush	V

YCFD = Yakima County Fire District. V = Volunteer (paid-on-call) staff. V/C = Volunteer & Career staff.

Not listed in the preceding figure is Yakima County Fire District 5 due to its multiple fire stations and relatively distant locations from WVFR. However, when requested, YCFD 5 would provide mutual aid to WVFR.

The following figure shows the locations of the various mutual aid fire stations adjacent to the boundaries of Yakima County Fire District 12.

Figure 11: Mutual Aid Stations



WVFR will request mutual aid from the Yakima Fire Department Special Operations Division for Technical Rescue services (water rescue, extrication, confined space rescue, etc.) and hazardous materials when necessary. A Washington State regional hazmat team from the Department of Ecology will respond to major hazardous materials incidents if needed.

Organizational Management & Planning

Management & Administration

Managing a fire district effectively is a complex task, often influenced by financial constraints, political pressures, and demanding community expectations. Today, such organizations must address these complexities by ensuring an efficient and flexible organizational structure, providing adequate responses, maintaining competencies, having a qualified workforce, and achieving financial sustainability.

A well-organized and efficiently administered fire district has appropriate documentation, policies, and procedures. It clearly understands, acknowledges, and addresses internal and external organizational issues. Processes must also be established to manage the flow of information and communication between West Valley Fire-Rescue and the citizens it serves. The J. Angle Group has analyzed WVFR's efforts in the following section.

Administration Division

West Valley Fire-Rescue is dedicated to delivering exceptional customer service. The organization considers its residents and taxpayers as its customers. With this philosophy, WVFR conducts itself in the best interests of the community. The Administration Division (AD) is responsible for a variety of tasks and programs that include some of the following activities:

- Preparing and managing payroll and financial transactions.
- Researching and producing policies and procedures.
- Developing and managing the fire district's budget.
 - Accounts payable and receivable.
- Maintaining employee and WVFR records.
- Providing support for employee disputes (grievance resolutions, personnel, and safety matters).
- Maintaining daily clerical, administrative, and other projects.
 - Preparing operational memos, policies, procedures, SOGs, and more.
 - Assisting the Fire Prevention Division with public education programs.
 - Maintaining training records and other data entry.
 - Publication and distribution of the quarterly WVFR newsletter.

District Goals & Vision

West Valley Fire-Rescue has adopted the following Vision and Mission Statements:

West Valley Fire-Rescue Vision Statement

We strive to be a dynamic, innovative, and proactive response organization committed to the highest standards to meet the community's needs.

West Valley Fire-Rescue Mission Statement

The West Valley Fire Department is dedicated to the preservation and protection of life, then property. To accomplish our Mission, we focus on:

- *Community Education: Providing public safety, first aid, accident prevention, and preparedness training, along with fire and injury prevention information and supplies.*
 - *Emergency Services: Serving the public by responding to and mitigating emergencies.*
 - *Preparedness: Ensuring members are trained, educated, and certified for all-risk hazard response, with equipment and resources maintained in a ready state.*
-

Internal Assessment of Critical Issues

The following is a list of critical issues as determined from the Fire Chief's perspective:

Critical Issue 1: Staff Retention

Recruiting and training on-call operations personnel throughout the fire district is a challenging task. This is especially true at Stations 53 and 54.

Critical Issue 2: Financial Sustainability

Voters approved a lid-lift in 2024 to assist with capital purchases. Costs are substantial.

Critical Issue 3: Firefighter Safety

Ensuring Firefighter safety, mental and physical health, and reducing carcinogens.

Critical Issue 4: Leadership

Maintaining effective leadership at all staff levels.

Management Documents & Processes

Documenting fire district activities is necessary to meet WVFR's mission and is a legal requirement in many aspects of fire service operations. Detailed and consistent documentation also provides a mechanism for measuring performance.

In organizations that provide Emergency Medical Services, this can entail both clinical and operational performance. Policy and procedure development and maintenance are critical to ensuring a stable, effective, and cohesive organization.

The following figure outlines the elements related to management documents and processes.

Figure 12: WVFR Regulatory Documents

Description	WVFR
Standard Operating Guidelines (SOG) are in place	Yes
SOGs are regularly updated	As needed
SOGs are used in training evolutions	Yes
Organizational policies are in place	Yes
Policies are internally reviewed for legal mandate	Use an attorney as needed
Are internally reviewed for consistency	Posted weekly
Training on policies is provided regularly	Posted weekly
Process to ensure compliance with regulations	Yes, assorted methods

Internal & External Communications

In today's communication environment, the public expects strategic, frequent, responsive, and thoughtful communication from its public safety agencies. Likewise, employees expect the same when disseminating internal messages. Without effective communication, public and employee confidence in their local fire district can be severely damaged, and informal communication channels may be created to spread false and misleading information throughout the community and organizations.

External Communications

West Valley Fire-Rescue maintains a comprehensive and well-designed public website, a Facebook® page with over 5,800 followers, and an Instagram® account with 224 followers. The main pages of the WVFR website include:

- About Us (6 sub-pages).
- Divisions (7-plus sub-pages).
- Stations (6 sub-pages).
- Community Resources (12 sub-pages).
- Contact Us (3 sub-pages).
- Members Pages (12 sub-pages).

The West Valley Fire-Rescue Facebook® site is up-to-date and includes a variety of public service announcements and photos of fire district activities.

WVFR publishes a quarterly newsletter mailed to residents and businesses throughout the fire district (and to some residents outside and adjacent to the district). The newsletter can be downloaded from the WVFR website.

Internal Communications

West Valley Fire-Rescue utilizes various methods for internal communications with its members and employees. These are shown in the following figure.

Figure 13: WVFR Internal Communications Methods

Communication Method	WVFR
Regularly scheduled meetings	Weekly for staff; monthly for officers
Written memorandums	Yes
Member newsletter	Monthly
Open-door policy	Yes
All-hands meetings	Approximately four annually
Members provided with an e-mail	Yes
District intranet	No. Members access via the WVFR website

Although the fire district does not have an internal intranet, its website provides a password-protected portal for its members. The portal includes links to 12 pages of resources and information for WVFR members. The fire district utilizes the iSpyFire® mobile application for messaging, along with television monitors that display pertinent information at each station.

Recordkeeping & Document Control

Diligent and thorough documentation and analysis of fire district activities are critical in making sound management decisions and maintaining public transparency when presenting issues to the electorate or approving expenditures. Taxpayers and elected officials expect current and accurate data and information to make informed decisions.

Operational & Annual Reports

The Fire Chief prepares a comprehensive monthly report for the Board of Fire Commissioners and officers, which is available on the website each month. Additionally, an annual report is published and made available to all WVFR members and the public on the fire district's website.

Incident Reporting

Prior to January 2024, West Valley Fire-Rescue utilized the Emergency Reporting (now owned by ESO®) RMS. At the beginning of that year, WVFR changed its records management system to ImageTrend® Emergency Management Software.

The ImageTrend® system is compliant with the National Incident Reporting System (NFIRS) and the Health Insurance Portability and Accountability Act (HIPAA). The system is being utilized to document:

- Fire-related incidents.
- EMS incidents and electronic patient-care reports (ePCR).
- Personnel exposure records.
- Training records.
- Public education and other events.

The fire district is currently acquiring a new electronic software application from Emergent Fire & EMS Software. WVFR will use this application for:

- Fleet maintenance records.
- SCBA testing (contracted service).
- Hose testing (began contracting for this service in 2025).
- Ladder testing (inspected only).
- Pump testing (contracted service).
- Breathing air testing (sent to compressor manufacturer).

Data Outlier Management

In fire department incident data analysis, an outlier is a data point that significantly deviates from other observations in the dataset. These outliers can arise for various reasons, such as data entry errors, unusual events, or genuine variability in the data. Examples of outliers in fire department data include:

- **Unusual Incident Counts:** For example, if a particular fire station reports an exceptionally high or low number of incidents compared to historical data or other stations, this could be an outlier.
- **Response Times:** Extremely short or long response times compared to the average can be considered outliers.
- **Damage Estimates:** Very high or low fire damage estimates might be outliers, especially if they differ significantly from typical values.
- **Casualty Numbers:** Anomalously high or low numbers of injuries or fatalities in incidents can also be outliers.

When JAG reviewed and analyzed the fire district's historical incident data, it found many outliers. Addressing these is crucial for maintaining data integrity and ensuring statistical accuracy. Outliers can distort the overall picture of incident data and the operational performance of fire districts. By identifying and managing outliers, WVFR can enhance decision-making and resource allocation, especially in emergency operations, where unusual patterns require immediate attention.

Outliers can also indicate errors in data collection or entry, so addressing them enhances the quality of the data. Additionally, understanding outliers can provide insights into unusual events or conditions. For example, when analyzing emergency response times, outliers resulting from data entry errors or rare events can skew the average response time, making it appear worse than it is. Managing such outliers provides a more accurate picture of fire agency performance.

Document Control

WVFR has established a process for providing access to public records, which can be obtained by completing a form available on its website or by submitting a request to the designated contact. Hard-copy files are maintained in a secure file room. Computers are password-protected, and electronic files are regularly backed up.

Fire District Planning

Yakima County Fire District 12 conducts internal and external planning through various meetings and retreats. The following figure lists the various planning processes.

Figure 14: Yakima County Fire District 12 Planning Processes (2025)

Plans	Completed	Comments
Strategic Plan	Yes	Plan is for 2025–2029; updated annually
Capital Improvement Plan	Yes	Created 2019; updated annually
Master Plan	Yes	Created in 2002; updated 2006
Succession Plan	Yes	In the Strategic Plan, reviewed periodically
Operational Planning		
Response Plans	Yes	Run cards & response zones by station
Operational Plans	Yes	Operational & Incident Command
Mutual Aid Plan	Yes	Plans & agreements in place
Disaster Planning ^A	Yes	Damage assessment & other SOGs

^A WVFR's portion of the Yakima County Hazard Mitigation, Wildfire Protection, and Comprehensive Emergency Management plans.

The fire district's planning processes generally involve staff and the Board of Fire Commissioners. Citizens and businesses usually do not participate. Although WVFR updated its Master Plan in 2006, it is nearly 20 years old. WVFR developed a Strategic Plan as a replacement for the Master Plan. The Strategic Plan is updated annually and reported every month.

Pre-Incident Planning

West Valley Fire-Rescue's duty crew conducts pre-fire or pre-incident planning by visiting various businesses throughout the fire district. The intent is to familiarize and document hazards and other information that can be useful in the event of an incident. The information collected is entered into a records management system and may include:

- Location of electrical service.
- Gas service location.
- Alarm panels.
- Sprinkler risers.
- Fire department connections.
- Lockboxes.
- Special hazard areas.

This information is then made available on the WVFR first-due apparatus via an Apple iPad through iSpyFire. This program enables responding Firefighters to receive important information on a business or facility. This has improved Firefighter safety and made the mitigation of fires and other incidents more efficient.

Financial Overview

WVFR is a special taxing district sustained primarily through property tax revenues to fund the district's operations. WVFR prepares annual budgets for the fiscal year of January 1 through December 31 using the cash-basis method of accounting. Under the cash-basis accounting method, revenues and expenses are recorded when cash is received or paid rather than when they are earned or incurred.

The budget development process involves a collaborative effort between the WVFR's Budget Officer, the Fire Chief, and administrative staff. The budget is then presented to the public through a budget hearing and formally adopted by the WVFR's three-member Board of Fire Commissioners.

Revenues & Expenditures

The district uses funds to account for its financial operations, maintaining a total of five funds. The fiscal and accounting of these funds includes cash, financial resources, liabilities, and balances related to specific activities or objectives. A brief description of the funds is described as follows:

- **General Fund:** also known as the Fire Budget, is the district's primary operating fund. It accounts for all financial resources for general government activities. The General Fund revenues are derived from property taxes, currently \$1.14 per \$1,000 of assessed value (AV), grants, and other cost-recovery revenues.
- **EMS Fund:** is used to manage revenues and expenditures specifically related to Emergency Medical Services. EMS Levy fund revenues are provided through Yakima County government from a countywide property tax at a current rate of \$0.25 per \$1,000 of assessed value.

In addition to the Department of Emergency Medical Services, EMS Levy revenue is shared among each of the fire departments and districts in Yakima County. These funds are distributed based on a specific funding distribution formula. As a result of this formula, the fire district receives slightly less than what is paid by its property owners.

- **Reserve Fund:** accumulates money for future needs such as unexpected emergencies, capital improvements, or other planned expenses beyond the regular annual operating budget.

- **Debt Service Fund:** a restricted fund used to accumulate and pay for the principal and interest on debt obligations incurred, including bonds, loans, or other types of financing used for capital projects such as fire stations, vehicles, and other expenses.
- **Capital Fund:** an account that holds funds for facility improvements, apparatus, and major equipment purchases.

The following figure summarizes WVFR's FY2020–FY2025 budget.

Figure 15: WVFR Historical General Fund Budget

Revenue/Expenses	2020 Actual	2021 Actual	2022 Actual	2023 Actual	2024 Actual	2025 Budget
Recurring Revenue	1,886,870	1,931,318	1,969,693	1,990,284	2,278,187	2,890,463
Non-Recurring	76,535	91,317	259,803	191,821	296,182	79,700
Other	2,324,000	---	---	---	---	---
Total Revenue:	4,287,405	2,022,635	2,229,496	2,182,105	2,574,369	2,970,163
Salaries & Wages	766,614	751,700	819,456	920,682	1,004,772	1,024,538
Benefits	222,715	184,997	195,840	222,769	229,611	229,300
Pensions	36,677	36,498	39,040	39,179	46,251	42,000
Total Salaries & Benefits:	1,026,006	973,195	1,054,336	1,182,630	1,280,634	1,295,838
Materials & Services	496,108	628,961	\$422,000	553,741	294,343	394,650
Equipment & Maintenance	161,200	124,294	298,517	218,978	227,845	235,500
Facilities & Buildings	140,433	139,045	150,222	154,226	137,182	143,445
Total Recurring Expenses:	797,741	892,300	870,739	926,945	659,370	773,595
Capital Outlay	968,945	1,437,638	178,948	769,926	327,391	545,000
Debt Service	15,089	184,390	183,593	182,675	181,578	185,253
Total Non-Recurring:	984,034	1,622,028	362,541	952,601	508,969	730,253
Total Expenses:	2,807,781	3,487,523	2,287,616	3,062,176	2,448,973	2,799,686
Net Budget:	1,479,624	-1,464,888	-58,120	-880,071	125,396	170,477

Revenue

For analysis purposes, revenues—sometimes referred to as resources—are classified as recurring or non-recurring. Recurring resources can be reasonably anticipated annually. On the other hand, non-recurring revenues, such as one-time grant awards, proceeds from asset disposals, or cost recovery efforts—including reimbursements for wildland equipment—may not occur annually or are not easily quantifiable. While these amounts may be estimated with a reasonable degree of accuracy, the frequency of their receipt categorizes them as non-recurring.

The maximum allowable regular property tax levy rate for fire districts in Washington is \$1.50 per \$1000 of a district's assessed valuation. For FY2020–FY2024, the regular property tax levy rate declined from \$1.19 per \$1000 of the district's assessed valuation in FY2021 to \$0.8895 per \$1000 of the district's assessed valuation in FY2024.

This decline is due to Washington's statutory levy growth limit of 1% annually without voter approval. In early 2024, the district put a \$0.2505 levy lid lift before the voters, raising the regular property tax rate to \$1.14 per \$1000 of the district's assessed valuation starting in FY2025. Additionally, the district receives revenue through the countywide EMS Levy at a rate of \$0.25 per \$1000 of the district's assessed valuation.

The district's General Fund recurring resources for FY2020–FY2024 averaged \$2,711,029, derived from property tax and the EMS Levy revenue provided through Yakima County. The district's non-recurring resources comprise grants, interest income, and miscellaneous revenues such as wildland equipment reimbursements and proceeds on the sale of capital assets.

Over FY2020–FY2024, the WVFR resources had minimal variability, with only a few notable increases in non-recurring revenue. In FY2020, the district received a General Obligation Bond of \$2.32 million for building a new fire station. In Fiscal Year 2022, the district experienced a significant revenue increase due to the sale of capital assets. In FY2024, the fire district received a significant revenue increase through the ARPA Grant award, which enabled the purchase of a backup generator.

Expenditures

Like revenue, expenditures are classified as either recurring or non-recurring. Recurring expenditures can be reasonably anticipated annually and are generally quantifiable. Non-recurring expenditures may not occur annually or are not easily quantifiable.

Non-recurring expenditures include capital outlays and equipment purchases, as well as non-capitalized equipment purchases and other minor costs that are not considered ongoing.

Recurring Expenditures

Recurring expenditures reflect the district's operating budget and are vital for day-to-day operations. The following section considers WVFR's recurring or operating expenditures. These expenditures are divided into four main categories: Personnel, Materials and Services, Equipment and Maintenance, and Facilities and Buildings. A concise overview of these recurring expense categories is provided below.

- **Personnel** comprise salaries, wages, and employee-related benefits, such as health insurance, payroll taxes, and retirement.
- **Materials & Services** include costs related to day-to-day operating expenditures such as miscellaneous supplies, public education, office supplies, insurance, travel, legal services, dispatch, and administrative support.
- **Equipment & Maintenance** includes preventative maintenance, repair, and fuel expenses of current assets and apparatus.
- **Facilities & Buildings** include expenditures related to all station maintenance, repair, supplies, and utilities.

WVFR's *recurring* expenditures have increased approximately 13.47%, or \$245,687, from \$1,823,746 in FY 2020 to an anticipated \$2,069,433 budgeted in FY2025. Of the fire district's total expenditures, 46% are allocated to wages and benefits. Over FY2020–FY2025, the WVFR expense budget has shown minimal variability, with one notable increase in FY2022, primarily due to purchases of new communications equipment.

Fire District Personnel & Staff

WVFR's personnel-related expenditures account for the largest portion of the district's recurring and total expenses. These expenses include salary and wages, benefits and retirement costs, overtime, Workers' Compensation, and more.

Historically, personnel-related expenses account for approximately 63% of recurring expenditures for FY2020–FY2024. Personnel costs are expected to total \$1,295,838 for the FY2025 budget year, an increase of \$269,832 from FY2020. Proportionally, salaries and wages account for approximately 79% of total personnel expenses, with benefits and pensions accounting for the remaining 21% on a year-to-year basis.

Fire District Debt

WVFR has one debt service obligation: a Limited Tax General Obligation Bond (LTGO) issued in fiscal year 2020 for \$2.3 million, which supports capital projects. The debt is scheduled to mature in December FY2035. The LTGO bond is repaid through the district's existing property tax revenues and managed through the Debt Services Fund.

Capital Planning

The district has a published capital improvement and replacement plan, which can be found on the WVFR website. Among the projects identified as necessary by the district are station improvements, equipment purchases, and apparatus, including an engine, tender, brush rig, rescue vehicle, and command vehicle.

Staffing & Personnel Management

Administrative and operations staff are the greatest asset of any public safety organization. Consistent and compassionate management of a fire district's human capital is crucial in ensuring that staff are prepared to perform their jobs effectively, efficiently, and safely, while also experiencing a high level of job satisfaction.

Achieving this requires consistent management practices, a safe working environment, recognition of positive workforce practices, inclusion, and equitable treatment, as well as encouragement of input.

The size and structure of a fire district's staffing depend on the organization's specific needs. Organizational priorities should align with the community they serve. Several national organizations provide staffing guidance and recommendations, including the Washington State Department of Labor and Industries (L&I), the National Fire Protection Association (NFPA), and the Center for Public Safety Excellence (CPSE). This section provides an overview of West Valley Fire-Rescue's staffing configuration and personnel management practices.

Two distinct staff groups are common in most fire service organizations: administrative and support staff, and operations staff. The duties of administrative and support staff primarily focus on ensuring the efficient and cost-effective delivery of emergency services, as well as providing ancillary services such as fire code enforcement and public education activities.

Operations staff are the most visible and recognized, as they provide direct emergency response and service to the community. Both groups must be adequately supported to ensure effective and efficient success in accomplishing the fire district's mission.

Administrative & Support Staffing

Providing operational staff with the resources needed to safely and effectively mitigate emergencies is one of the primary responsibilities of administrative and support staff. Additional responsibilities include planning, organizing, directing, coordinating, and evaluating the various programs utilized within WVFR.

In many cases, administrative and support staff concurrently handle a variety of responsibilities, some of which do not fall under the previously mentioned categories.

The next figure illustrates the administrative and support-staffing structure for WVFR.

Figure 16: WVFR Administrative & Support Staffing

Position Title	Number of Positions	Hours Worked per Week
Fire Chief	1	40
Deputy Fire Chief	1	40
Administration & Finance Officer	1	40
Administrative Assistant	1 (0.7 FTE)	28

As with many smaller fire service organizations, administrative and support staff typically serve multiple roles with varying job responsibilities—which is also the case for WVFR. The Fire Chief and Deputy Chief serve as on-call “Duty Chiefs” on a rotational basis, along with other qualified volunteer Captains, to provide incident command support during significant incidents.

While the Administration & Finance Officer position is paid at the Deputy Chief's rate, the position is solely administrative and has no direct operational responsibilities. Administrative responsibilities are distributed among the command staff as follows:

- **Fire Chief:** Public Information, Budget Development, Executive Management, Planning (Strategic and Business Operations), Policy Development, Board Support, Operations Response.
- **Deputy Chief:** Training, Safety Program, Employee Evaluation, Fire Investigation, Recruitment and Retention, Haz Mat and EMS program, Operations Response.
- **Administration & Finance Officer:** Human Resources, Accounts Payable, Public Education, Hiring Processes, Payroll, Board Secretary, Office Management, Support Services.

Administrative Staff Discussion

Administrative and support staff represent approximately 4% of the total WVFR staff. In JAG's opinion, this is low because WVFR is responsible for all the required administrative and logistical support functions, such as information technology (IT), fleet maintenance, janitorial services, human resources management, and legal services, among others.

Operational Staffing

As previously discussed, the operational staff is typically the face of any fire service organization due to their more frequent interaction with the citizens and patients they serve. This group is involved with nearly every facet of a fire district's operations. For WVFR, this includes fire suppression, medical first-response, vehicle and farm equipment extrication, some level of fire investigation, public education, and several other activities.

The following figure illustrates WVFR's operational staff structure.

Figure 17: WVFR Operational Staffing (2025)

Position Title	No. Positions	Hours Worked/Week	Weekly Schedule
Captain	5	Volunteer	N/A
Lieutenant (FTE)	1	48	4-12 Hour Shifts
Lieutenant	11	Volunteer	N/A
Firefighter/EMT (FTE)	3	48	4-12 Hour Shifts
Firefighter/EMT	19	Volunteer	N/A
Firefighter/EMR	32	Volunteer	N/A
On-Scene Support/Rehab	10	Volunteer	N/A
Total:	81 (4 FTE)		

The preceding figure shows that approximately 95% of emergency response and scene support personnel are volunteers (paid on-call). The three Firefighter/EMTs and Lieutenant/EMT work four 12-hour shifts (0600-1800 hours) per week. Two employees work Monday through Thursday, and the other two work Tuesday through Friday. This schedule results in two personnel being on duty on Mondays and Fridays. As a result, WVFR attempts to schedule two Volunteer Firefighters to increase staffing during those times.

Each full-time employee assigned to operations has additional programmatic responsibilities beyond their typical operational responsibilities, which include:

- **Duty Crew Lieutenant:** Crew management, apparatus maintenance, small equipment maintenance, and facility maintenance.
- **Duty Crew Firefighter:** Pre-fire planning, Knox-Box program maintenance, and recordkeeping.

- **Duty Crew Firefighter:** Hydrant maintenance and recordkeeping, smoke detector installation program, and addressing program.
- **Duty Crew Firefighter:** EMS equipment and supplies.

Minimum staffing consists of two career Firefighters per day, supplemented by Volunteer Firefighters—depending on the day of the week and leave coverage requirements. On Tuesdays through Thursdays, there may be up to four FTE personnel working. During those times, the crews are split into a couple of two-person crews, staffing Engine 251 at Station 51 and Brush 251 at Station 52.

During weekends and when on-duty crews are already committed to an emergency response, a callback system is used to alert volunteers to respond.

Operations Staff Schedule Discussion

JAG noted that the four Firefighters assigned to the day shift are split into two-person crews and are staffing Stations 51 and 52. This should be of concern to WVFR. As noted earlier in this study, delivering enough personnel to the scene to accomplish the various tasks required to mitigate an emergency is essential, and many of these tasks must be completed quickly. However, it is worth noting that not all tasks listed need to be completed simultaneously.

Typically, structure fires are the most labor-intensive incidents. National standards recommend that at least 15 personnel arrive at a fire scene in a single-family residence to ensure safe and effective operations. Additional personnel and resources may be required, depending on the size of the building, the complexity of the incident, the need for emergency medical treatment, and/or the presence of any special hazards.

Because of the limited daily operations staff and split crew scheduling approach, it appears WVFR is unable to muster an effective response force with career personnel on their own for anything other than a low-risk incident and, therefore, must rely on volunteer response as well as automatic and mutual aid with neighboring fire agencies for structure fire incidents. This observation is not meant to denigrate the abilities of the career and volunteer responders. Rather, it highlights the limited initial response capabilities and capacity to respond to significant and/or concurrent incidents.

Washington Administrative Code (WAC) 296-305-05002 states that interior firefighting in an environment that is immediately dangerous to life and health (IDLH) is prohibited. Entering this environment cannot commence until at least two standby Firefighters are in place.

Subsection (4) notes an exception to the rule:

“Initial attack operations must be organized to ensure that if, on arrival at the emergency scene, responders find a known rescue situation where immediate action could prevent the loss of life or serious injury, such action must only be permitted when *no less than three personnel (2-in/1-out) are present and equipped* (emphasis added) to provide emergency assistance or rescue of the team entering the hot zone. No exception must be allowed when there is no possibility to save lives or no “known” viable victims.”¹³

The Duty Chief also responds. This results in a total of four Firefighters and one command officer on the scene initially before the arrival of volunteer personnel.

Volunteer Program

WVFR appears to have strong and contemporary policies and procedures in place to hire and support a professional workforce. Given the relatively rural nature of the WVFR service area, supporting a sustainable volunteer program is crucial to the fire district's ability to serve the community well into the future.

In JAG's experience, volunteer participation fluctuates depending on several factors, including local economic conditions, the organization's reputation, and broader societal shifts related to declining volunteerism.

Nationally, volunteer fire departments still comprise most of the fire service. However, today's fire service is finding it more difficult to recruit, hire, and retain Volunteer Firefighters. The National Volunteer Fire Council noted this concern, stating:

“The number of volunteer firefighters in the U.S. reached a low in 2011. While there has been a slow increase since then, the growth is insufficient to meet the steady rise in call volume, which has tripled over the last 30 years, largely due to the increase in emergency medical calls. Major factors contributing to recruitment challenges include increased time demands, more rigorous training requirements, and the proliferation of two-income families whose members often lack the time to volunteer. Fire departments today are also expected to provide a wide range of services and multi-hazard response, creating further challenges for resource-constrained departments.”

Ensuring a stable and professional volunteer workforce takes considerable time and resources. WVFR should be commended on its ability to recruit and support a strong cadre of Volunteer Firefighters.

Full-Time/Career Employee Salaries & Benefits

The following figure summarizes the average annual salaries and benefits costs for full-time and part-time administrative employees.

Figure 18: Average Annual Salaries & Benefits (2025)

Position Title	Annual Salary	Annual Benefits	Total Costs
Fire Chief	\$133,702	\$49,321	\$183,043
Deputy Chief	\$107,226	\$40,200	\$147,426
Administrative & Finance Officer	\$107,226	\$40,200	\$147,426
Administrative Assistant	\$29,120	\$2,528	\$31,648
Lieutenant (career)	\$72,864	\$10,641	\$83,505
Firefighter/EMT (career)	\$60,747	\$11,119	\$71,866

The preceding figure indicates that the cost of benefits comprises approximately 21% of the total salary and benefits for uniformed employees, and 15% for the part-time Administrative Assistant position. FTE uniformed employees receive the following benefits:

- Length of Service Incentive
- Medical/Dental/Vision Insurance
- Deferred Compensation
- Workers' Comp
- Social Security
- LEOFF Pension
- Sick Leave
- Disability Insurance
- Vacation Leave

Volunteers are considered part-time "paid-on-call" employees and are compensated at the following pay rates:

- Captain \$20.70/hour
- Lieutenant \$18.67/hour
- Firefighter/EMT \$17.34/hour
- Firefighter \$16.85/hour
- Support Services \$16.65/hour

Volunteers are also enrolled in the Washington State Board for Volunteer Firefighters & Reserve Officers Pension Program and are eligible to collect a full pension amount at age 65, provided they have 25 years of service credit. They are also enrolled in a Length of Service Program and are eligible for American Family Life Assurance Company (AFLAC) supplemental insurance.

Personnel Management

JAG examined the policies and processes used to hire, retain, promote, and hold employees accountable as part of this study.

Policies, Rules, Regulations & Guidelines

WVFR has a comprehensive set of written personnel policies and procedures in place. These policies outline procedures and intended outcomes related to employee conduct, discipline, record confidentiality, grievance procedures, general safety, apparatus operations, leave usage, hiring requirements, fireground safety, and other relevant matters. These policies are summarized in an employee handbook, which is currently being updated.

Collective Bargaining

Uniformed career employees and paid-on-call staff are not represented by a bargaining unit and are considered "at-will" employees who may be terminated without cause. However, WVFR has formal policies and procedures (Policies 2101, 2106, 2110) that outline the necessary steps to administer discipline fairly and appropriately.

New-Hire Application & Testing Process

Entry-level FTE employees and Volunteer Firefighter candidates apply for employment through WVFR. The fire district reaches out to prospective candidates through social media, station signage, and presentations at local high schools.

Applicants must be at least 18 years of age (16 years of age for cadet candidates), possess a high school diploma or equivalent, have a valid driver's license and good driving record, and preferably live in WVFR's service area. Prospective cadet candidates must be Juniors or Seniors at West Valley High School.

Testing Process

Applications are reviewed by a committee of WVFR personnel, including command staff. The committee investigates the background of qualified applicants and conducts interviews. Volunteer candidates must then complete WVFR's recruit physical ability test, which consists of the following events:

- Stair climb (while wearing a SCBA).
- 24' ladder raise/lower.
- Equipment carry.
- Hose drag and pull.
- Victim rescue dummy drag.

FTE employee candidates must complete a different physical agility test patterned after the Firefighter Combat Challenge. This test consists of the following events:

- Hose carry/Stair climb.
- Hose Hoist.
- Forcible Entry sledgehammer prop (Keiser Force Machine).
- Hoseline advance.
- Victim rescue dummy drag.

These events are timed, and candidates receive points based on how quickly they complete the events. For example, 30 points are awarded for completing all events within five minutes, and points are gradually deducted for slower times up to nine minutes—which is considered a failure.

Candidates selected for hire are referred to the Fire Chief for a final interview and a conditional hiring offer. Upon conditional hire, volunteer and career candidates must pass a drug test and a physician-administered medical examination, based on the physical examination standards for Washington State Volunteer Firefighters (for volunteer candidates) and the physical examination standards for Washington State LEOFF II (for career candidates).

Employee Evaluations & Assessments

Staff Evaluations & Medical Examinations

WVFR assesses and documents staff performance via drill observations, annual performance evaluations, and annual physical agility tests. All employees and volunteers are subject to annual performance evaluations conducted by their assigned supervisor during the first quarter of the year.

These evaluations are documented using a standardized form, which is reviewed with the member and placed in their personnel file.

Fit-for-duty medical examinations are provided during the initial onboarding process and periodically during their tenure with WVFR. Annual medical examinations are not performed as NFPA 1582: *Standard on Comprehensive Occupational Medical Program for Fire Departments* recommends. Instead, the frequency of medical examinations is based on age, as identified in Yakima County Fire District 12 Policy 2110.

WVFR members are only required to undergo a medical examination upon reaching the ages of 50, 55, and 60 years old. Additionally, all members over the age of 63 are required to undergo a medical examination every three years. Members participating in the Washington State Board for Volunteer Firefighters & Reserve Officers retire/rehire program must pass an annual physical.

Promotional Processes

An assessment center approach is used to evaluate candidates' knowledge, skills, and abilities when applying for paid-on-call and full-time Captain and Lieutenant positions, as well as all staff positions. The assessment center components typically involve managing an emergency incident scenario using the Incident Management System (IMS), a personnel problem scenario, and an interview panel.

Member Support

Fire and EMS personnel respond to dynamic situations, some of which can be extraordinarily stressful and dangerous, and may result in cumulative or episodic negative effects on personal and family health. Contemporary fire service organizations recognize this and have implemented programs and engaged professional resources to help mitigate these stressors.

WVFR has three members who provide counseling and Critical Incident Stress Management (CISM) services: a Chaplain, a specially trained CISM Specialist, and a board-certified Counselor.

The Counselor is paid a monthly stipend and teaches stress management and personal well-being as part of the recruit training curriculum. They also develop a wellness manual, peer support program, and educational materials for all members. WVFR can also access the Yakima County CISM Team when necessary.

Capital Facilities & Apparatus

Apparatus and other vehicles, trained personnel, firefighting equipment, medical supplies, and fire stations are the essential capital resources necessary for fire districts to carry out their missions. No matter how competent or numerous the Firefighters are, if appropriate capital equipment is unavailable for operations personnel, it would be impossible for West Valley Fire-Rescue to effectively perform its responsibilities.

Since the essential capital assets for emergency operations are facilities, apparatus, and other emergency response vehicles, this section of the report will address those areas in the following sections.

Basic Features of a Fire Station

Fire stations play an integral role in delivering emergency services for several reasons. To a large degree, a station's location will dictate response times to emergencies. A poorly located station can mean the difference between confining a fire to a single room and losing the structure or survival from sudden cardiac arrest.

Fire stations also need to be designed to adequately house equipment and apparatus and meet the needs of the organization and its personnel. Fire station activities should be closely examined to ensure the structure is adequately sized and functional. Examples of these functions can include the following:

- Residential living space and sleeping quarters for on-duty personnel (all genders).
- Bathrooms and showers (all genders).
- Kitchen facilities, appliances, and storage.
- The housing and cleaning of apparatus and equipment, including decontamination and disposal of biohazards.
- System(s) for vehicle exhaust extraction.
- Administrative and management offices, computer stations, and office facilities.
- Firefighter fitness area.
- Training, classroom, and library areas.
- Public meeting space.

In gathering information from WVFR, JAG asked the fire district to rate the condition of its fire stations using the following criteria. The results will be seen in the figures that follow the criteria description.

Figure 19: Criteria Utilized to Determine Fire Station Condition

Excellent	Like-new condition. No visible structural defects. The facility is clean and well-maintained. The interior layout is conducive to function with no unnecessary impediments to the apparatus bays or offices. No significant defect history. Building design and construction match the building's purposes. Age is typically less than ten years.
Good	The exterior has a good appearance, with only minor defects. Clean lines, good workflow design, and only minor wear on the building interior. The roof and apparatus apron are in good working order, absent any significant full-thickness cracks, crumbling of the apron surface, or visible roof patches or leaks. Building design and construction match the building's purposes. Age is typically less than 20 years.
Fair	The building appears structurally sound, with a weathered appearance and minor to moderate non-structural defects. The interior condition shows normal wear and tear, but flows effectively to the apparatus bay or offices. Mechanical systems are in working order. Building design and construction may not align well with the building's purposes. Shows increasing age-related maintenance but with no critical defects. The typical age is 30 years or more.
Poor	The building appears cosmetically weathered and worn, with potential structural defects, although these are not imminently dangerous or unsafe. Large, multiple full-thickness cracks and crumbling concrete may exist on the apron. The roof has evidence of leaking and has been repaired multiple times. The interior is poorly maintained and shows signs of advanced deterioration, with moderate to significant non-structural defects. Problematic age-related maintenance and major defects are evident. It may not be well-suited to its intended purpose. Age is typically greater than 40 years.

WVFR Fire Stations

The following section describes the basic features of each of WVFR's fire stations.

Figure 20: WVFR Station 51

Address/Physical Location:		10000 Zier Road, Yakima, WA 98908											
		General Description: Station 51 is the newest fire station in the WVFR inventory. It is situated on a large tract of land and features administrative offices, a training center, training props, a storage building, and more. It has substantial office space and is the only fire station with sleeping quarters. It also houses an AMR ambulance crew.											
Structure													
Date of Original Construction		2005											
Renovation Dates		Added 2 drive-through bays & station area (2021)											
Auxiliary Power		Diesel Generator											
General Condition		Good											
Number of Apparatus Bays		Drive-through Bays		4 (8)		Back-in Bays		0					
ADA Compliant		Yes											
Total Square Footage		22,837 square feet											
Facilities Available													
Sleeping Quarters		6		Bedrooms		2		Beds		0		Dorm Beds	
Maximum Staffing Capability		7 career, 25 volunteer											
Exercise/Workout Facilities		Full gym											
Kitchen Facilities		2											
Bathroom/Shower Facilities		6 w/shower; two multi-occupant											
Training/Meeting Rooms		1 conference room, 2 large classrooms											
Washer/Dryer Clothes		1 of each											
Washer/Dryer PPE (Extractor)		Two extractors											
Safety & Security													
Station Sprinklered		Dry system											
Smoke/CO Detection		Smoke & heat detection											
Decontamination/Bio. Disposal		Decontamination rooms											
Security System		Yes (not utilized)											
Apparatus Exhaust System		Ward No Smoke, automatic exhaust removal											
Contamination Control Zones		Yes											

Figure 21: WVFR Station 52**Address/Physical Location:**

9102 Ahtanum Road, Yakima, WA 98903

**General Description:**

This is the busiest of the WVFR fire stations. It is over 40 years old, although a day room was added in 2018. Despite its age, the facility appears to be in good condition. However, the back parking area likely needs to be repaired or replaced. If needed, the day room could be divided into two spaces and used for sleeping quarters.

Structure

Date of Original Construction	1984
Renovation Dates	Added a day room (2018)
Auxiliary Power	None
General Condition	Good
Number of Apparatus Bays	Drive-through Bays 1 (2) Back-in Bays 1 (2)
ADA Compliant	Yes
Total Square Footage	4,598 square feet

Facilities Available

Sleeping Quarters	0	Bedrooms	0	Beds	0	Dorm Beds
Maximum Staffing Capability	0 (25 Volunteers)					
Exercise/Workout Facilities	Yes					
Kitchen Facilities	Yes					
Bathroom/Shower Facilities	1 male and 1 female facility					
Training/Meeting Rooms	Dayroom					
Washer/Dryer Clothes	Yes					
Washer/Dryer PPE (Extractor)	Yes					

Safety & Security

Station Sprinklered	No
Smoke/CO Detection	Heat detectors in bays and kitchen
Decontamination/Bio. Disposal	Apparatus bay
Security System	No
Apparatus Exhaust System	Ward No Smoke, manual ceiling exhaust
Contamination Control Zones	Apparatus bay only

Figure 22: WVFR Station 53

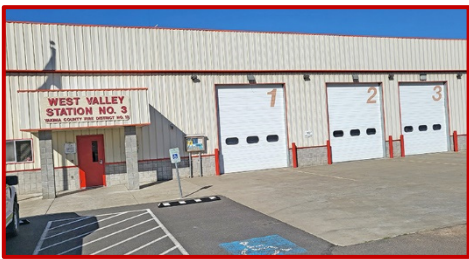
Address/Physical Location:		14901 Tieton Drive, Yakima, WA 98908					
		General Description: At nearly 30 years of age, Station 53 is nine years older than Station 51. It is located on a substantial tract of land with room for expansion if necessary. This station also lacks sleeping quarters. Turnout gear is stored in the apparatus bays.					
Structure							
Date of Original Construction		1996					
Renovation Dates		None					
Auxiliary Power		Diesel generator					
General Condition		Good					
Number of Apparatus Bays		Drive-through Bays		2 (4)	Back-in Bays		1
ADA Compliant		Yes					
Total Square Footage		6,473 square feet					
Facilities Available							
Sleeping Quarters		0	Bedrooms	0	Beds	0	Dorm Beds
Maximum Staffing Capability		0 (20 Volunteers)					
Exercise/Workout Facilities		Yes					
Kitchen Facilities		Yes					
Bathroom/Shower Facilities		1 male and 1 female					
Training/Meeting Rooms		Yes					
Washer/Dryer Clothes		Yes					
Washer/Dryer PPE (Extractor)		Yes					
Safety & Security							
Station Sprinklered		No					
Smoke/CO Detection		Heat detection					
Decontamination/Bio. Disposal		Apparatus bay					
Security System		No					
Apparatus Exhaust System		Ward No Smoke on apparatus & manual fans (2)					
Contamination Control Zones		Apparatus bay					

Figure 23: WVFR Station 54**Address/Physical Location:**

11 North Fork Road, Yakima, WA 98903

**General Description:**

Station 54 is situated at the far western end of the fire district. Originally built in 1965, it was renovated in 2000. The property size is large, with substantial room for expansion. There are no sleeping quarters. Additionally, it features a large community room with a separate entrance.

Structure

Date of Original Construction	1965		
Renovation Dates	2000		
Auxiliary Power	None		
General Condition	Fair		
Number of Apparatus Bays	Drive-through Bays	1	Back-in Bays 3
ADA Compliant	Yes		
Total Square Footage	5,024 square feet		

Facilities Available

Sleeping Quarters	0	Bedrooms	0	Beds	0	Dorm Beds
Maximum Staffing Capability	0 (15 Volunteers)					
Exercise/Workout Facilities	Yes					
Kitchen Facilities	Yes					
Bathroom/Shower Facilities	1 with another in the community room					
Training/Meeting Rooms	Yes					
Washer/Dryer Clothes	Dryer					
Washer/Dryer PPE (Extractor)	Extractor					

Safety & Security

Station Sprinklered	No
Smoke/CO Detection	Smoke and heat detection
Decontamination/Bio. Disposal	Apparatus bay
Security System	No
Apparatus Exhaust System	Ward No Smoke on apparatus; none in bays
Contamination Control Zones	Apparatus bay

Fire Station Apparatus & Staffing Assignments

Fire Station 51

Station 51 is located on Zier Road and includes the administrative offices, training center, training props, and a storage building. Based on 2024 incident data, Station 51 is the second busiest of the four fire stations. About 22 volunteer members are on the roster, and career staff are deployed from this facility.

Figure 24: Station 51—Apparatus & Staffing Assignments

Apparatus	Maximum Seating Capacity	Minimum Unit Staffing
Engine 51	6	2
Engine 251	6	2
Truck 51	4	2
Brush 51	5	2
Brush 251	5	2
Tender 51	2	1
Air 50	3	1
Rehab 50	6	1

Station 52

Fire Station 52 is on Ahtanum Road, east of Wiley City. Incident data from 2024 indicates it is the busiest station in the fire district. There are 24 members on the roster, and career staff are occasionally deployed from this facility.

Figure 25: Station 52—Apparatus & Staffing Assignments

Apparatus	Maximum Seating Capacity	Minimum Unit Staffing
Engine 52	6	2
Tender 52	6	2
Rescue 52	4	2
Brush 52	5	2
Brush 253	5	2

Fire Station 53

Station 53 is on Tieton Drive and—based on 2024 incident data—is the third busiest fire station in the fire district. There are 10 members on this station's roster.

Figure 26: Station 53—Apparatus & Staffing Assignments

Apparatus	Maximum Seating Capacity	Minimum Unit Staffing
Engine 53	6	2
Engine 253	6	2
Brush 53	5	2
Tender 53	2	1
Rescue 53	4	1

Fire Station 54

Station 54 is on the far west end of the fire district on North Fork Road in Tampico. Incident data from 2024 indicates it is the least busy station in the fire district. There are eight members on this station's roster.

Figure 27: Station 54—Apparatus & Staffing Assignments

Apparatus	Maximum Seating Capacity	Minimum Unit Staffing
Engine 54	5	2
Brush 54	5	2
Rescue 54	5	2

Summary Features of the WVFR Fire Stations

The following figure is a summary listing the basic features of the WVFR fire stations.

Figure 28: WVFR Fire Stations Features Summary

Station	Square Footage	Apparatus Bays	Staffing Capacity	General Condition	Station Age
Station 51	22,837 sq. ft.	8	32 ^A	Good	20 years
Station 52	4,598 sq. ft.	3	25	Good	41 years
Station 53	6,473 sq. ft.	5	20	Good	29 years
Station 54	5,024 sq. ft.	4	15	Fair	60 years
Grand Totals:	38,932 sq. ft.	20	60	Average:	38 years

^A Represents seven career staff and 25 volunteers.

WVFR Fire Stations Discussion

During its inspections of each WVFR fire station, JAG found these facilities well-maintained, clean, and in relatively good condition. It appears WVFR has done a commendable job of maintaining its fire stations.

As shown, WVFR fire stations ranged in age from 20 to 60 years, with an overall average of nearly 38 years. Combined, the four stations can house about 20 apparatus if all bays are open and available. The general condition of Stations 51, 52, and 53 is "Good," with Station 54 being in "Fair" condition. The combined staffing capacity of the four fire stations exceeds 85 personnel.

While there are sleeping quarters at Station 51, the other stations do not currently have them. However, minor modifications to Station 52 could accommodate sleeping quarters for two staff members. Using partitions, Station 53 could have sleeping quarters upstairs. At Station 54, the Community Center could be converted to allow for sleeping quarters.

WVFR Fleet Inventory

Apparatus must be sufficiently reliable to transport Firefighters and necessary equipment rapidly and safely to an incident scene. Additionally, such vehicles must be adequately equipped and function properly to ensure that the delivery of emergency services is not compromised.

The unique features of fire and EMS apparatus and vehicles tend to make them expensive and offer minimal flexibility in use and reassignment to other emergency services missions. The following section of this report provides an overview of WVFR's apparatus, vehicles, and other relevant capital equipment.

West Valley Fire-Rescue Fleet

The following figure lists the current frontline apparatus and other vehicles in the WVFR fleet.

Figure 29: West Valley Fire-Rescue Frontline Fleet Inventory (2025)

Unit	Type	Manufacturer	Year	Condition	Features
Engines & Aerials					
Engine 51	Type 1	KME	2023	Excellent	1500 gpm/1000 gal.
Engine 52	Type 1	KME	2017	Excellent	1500 gpm/1000 gal.
Engine 53	Type 1	Rosenbauer	2011	Excellent	1500 gpm/1000 gal.
Engine 54	Type 1	International	2004	Good	1000 gpm/500 gal.
Engine 251	Type 1	Central States	2004	Good	1500 gpm/750 gal.
Truck 51	Aerial	Pierce	2000	Good	1500 gpm/750 gal.
Wildland Apparatus					
Brush 51	Type 6 ¹	Ford F-550	2010	Good	180 gpm/400 gal.
Brush 52	Type 6	Ford F-550	2023	Excellent	275 gpm/400 gal.
Brush 53	Type 6	Ford F-550	2012	Good	180 gpm/400 gal.
Brush 54	Type 6	Ford F-550	2015	Excellent	180 gpm/400 gal.
Brush 251	Type 6 ^A	Ford F-550	2008	Good	180 gpm/400 gal.
Tender 51	Tender	GMC	2007	Good	500 gpm/2200 gal.
Tender 52	Tender ^B	Central States	1998	Good ^C	1500 gpm/2000 gal.
Tender 53	Tender	GMC	2007	Good	500 gpm/2200 gal.
Rescues & Other Apparatus					
Rescue 52	Rescue	Ford F-550	2017	Excellent	Non-transport
Rescue 53	Rescue	Ford	2012	Good	Non-transport
Rescue 54	Rescue	Ford F-550	2017	Excellent	Can transport
Rehab 50	Bus	Ford Bus	2004	Good	Rehab unit
Air 50	Air Truck	Ford F-350	1999	Good	Air compressor

^A Also functions as a Rescue. ^B Pumper/Tender; refurbished in 2025. ^C Refurbished in 2025.

In addition to the frontline apparatus listed in the preceding figure, West Valley Fire-Rescue maintains a 2004 engine (Type 1) and one 2008 brush truck in reserve status.

The following figure lists the various command and support vehicles utilized by WVFR.

Figure 30: WVFR Command & Support Vehicles Inventory (2025)

Unit	Type	Manufacturer	Year	Condition	Assigned To
Chief 50	Command	Toyota Tundra	2021	Excellent	Fire Chief
Officer 50	Staff Car	Ford Edge	2018	Excellent	Admin. Officer
Chief 2-50	Command	Ford F-150	2023	Excellent	Deputy Chief
Battalion 50	Command	Ford Expedition	2024	Excellent	Duty Chief
Duty 50	Command	Ford F-150	2023	Excellent	Duty Officer
Support 50	Support	Ford F-150	2013	Good	Support Services

WVFR Fleet Discussion

West Valley Fire-Rescue maintains a substantial fleet of apparatus and vehicles. Five frontline engines range in age from 2 to 21 years, with an average age of just over 13 years. The frontline engines were rated as being in "Excellent" or "Good" condition. Engines 54 and 251 are 21 years old but rated in "Good" condition.

The Type 6 brush trucks range in age from 2 to 17 years, with an average age of just over 11 years. The tenders are all in "Good" condition and range in age from 18 to 27 years, with an average of just over 21 years. The rescue units are rated in either "Excellent" or "Good" condition and range in age from 8 to 13 years, with an average age of nearly 10 years.

Except for Support 50, most of the command and support vehicles are relatively new and rated in "Excellent" condition. It does not appear that any of these will require replacement in the near future.

Fleet Maintenance

No piece of mechanical equipment or vehicle can be expected to last indefinitely. Repairs tend to become more frequent and complex as apparatus and vehicles age. Parts may become more difficult to obtain, and downtime for repair and maintenance increases. Since fire protection, EMS, and other emergencies prove critical to a community, downtime is one of the most frequently identified reasons for apparatus replacement.

Most fire districts develop replacement plans because of the expense of fire apparatus and other vehicles. To facilitate such planning, fire districts often adopt the accepted practice of establishing a life cycle for apparatus, which results in an anticipated replacement date for each vehicle.

The reality is that it may be best to establish a life cycle for planning purposes, such as the development of replacement funding for various types of apparatus—yet apply a different method (such as a maintenance and performance review) for determining the actual replacement date—thereby achieving greater cost-effectiveness when possible.

Capital Improvement Plan

WVFR updates its Capital Improvement Plan (CIP) on an annual basis. The most recent CIP was prepared by the Fire Chief and adopted and approved as part of the budget by the Board of Fire Commissioners in August 2024.

Future Apparatus Serviceability

An important consideration for fire districts is the cost associated with the future replacement of major equipment. The service life of an apparatus can be predicted based on factors such as vehicle type, call volume, age, and maintenance considerations.

NFPA 1900 recommends that fire apparatus 15 years or older be placed into reserve status and replaced by apparatus 25 years or older.¹⁴ This is a basic guideline, and the standard recommends using the following objective criteria in evaluating fire apparatus lifespans:

- Vehicle road mileage.
- Engine operating hours.
- Quality of preventative maintenance and availability of replacement parts.
- Quality of the driver-training program.
- Whether the fire apparatus was used within its design parameters.
- Whether the fire apparatus was manufactured on a custom or commercial chassis.
- Quality of workmanship by the original manufacturer.
- Quality of the components used in the manufacturing process.

It is essential to note that age is not the sole factor in evaluating serviceability and replacement. Vehicle mileage and pump hours on engines must also be taken into account. A two-year-old engine with 250,000 road miles may need replacement sooner than a 10-year-old engine with 2,500 miles.

Other Capital Equipment

Self-Contained Breathing Apparatus

WVFR utilizes 45 MSA Safety FireHawk® Self-Contained Breathing Apparatus (SCBA) in addition to 125 MSA face pieces and 100 bottles purchased in 2012. This equipment is deployed on multiple apparatus at each of the district's fire stations. In addition, WVFR maintains a SCBA compressor manufactured in 2012.

Cardiac Devices

WVFR maintains 14 Stryker® LIFEPAK® CR2 and three LIFEPAK® 1000 Automated External Defibrillators (AED) manufactured in 2019. An AED is carried on each frontline apparatus and Rescue.

Rescue & Extrication Tools

The fire district utilizes two sets of Hurst® battery-powered extrication tools manufactured in 2018 and 2020 and two sets of Holmatro® gas-powered extrication tools manufactured in 1993 and 2003.

Other Capital Items

WVFR has a substantial inventory of KENWOOD mobile and portable radios, Motorola Solutions™ radio pagers, and King portable radios. Additionally, WVFR has five Thermal Imaging Cameras (TIC), which were manufactured in 2020. Five gas detectors were replaced in 2025 with a Dräger® brand detector.

Service Delivery & Performance

The following section comprises an assortment of analyses of historical WVFR service delivery and performance. JAG conducted these evaluations and analyses utilizing multiple nationally accepted methods and processes.

Following this evaluation and accompanying analyses, it will be essential for the leadership of WVFR to ensure that incident reports are completed thoroughly and accurately, and that Yakima County Fire District 12 leadership monitors future operational performance. This will also be valuable in the planning processes.

Data Sources

The data obtained from WVFR for this study were acquired from the fire district's two records management systems (RMS). Incident data from the period prior to December 31, 2023, was documented in the Emergency Reporting® software. Afterward, WVFR converted to ImageTrend® Emergency Management Software, from which 2024 data was acquired.

Most of the analyses were based on records from January 1, 2020, to December 31, 2024. However, much of the 2020 data was incomplete and could not be utilized in every analysis. The following figure provides a summary of the data acquired from the WVFR datasets. There were some discrepancies between the volume of calls extrapolated from the datasets and the number reported by WVFR. The first row of the next figure represents all apparatus (unit) responses, while the second represents single incidents.

Figure 31: Summary of WVFR Data Sources

Sources	2020 ^A	2021	2022	2023	2024
NFIRS All (Units)	—	1,377	1,675	1,595	1,515
NFIRS Single (Incidents)	847	950	1,081	947	833

^A Individual unit data was not available for 2020.

The datasets for 2020–2023 did not include the necessary data elements to exclude the “Ambulance-Only” calls. However, the 2024 dataset did allow JAG to exclude those calls. Therefore, including those, the total number of single incidents for 2024 was 1,017.

Statistics Discussion

Mathematical and technological methodologies must be used judiciously to evaluate something as complex as an emergency incident response. There are instances of incorrect evaluations leading to severe consequences; thus, decision-makers must understand the statistical analysis and have a solid understanding of the service in general. This analysis is designed to quantify and analyze available information. It should be used as a starting place by WVFR as it seeks to improve performance.

Statistical Tools

Various statistical and analytical tools were employed to create this section. The fundamental tools used were categorization, percentile analysis, and regression analysis. This helps paint a picture of historical performance, with some inferences that may help leaders identify positive and negative performance trends.

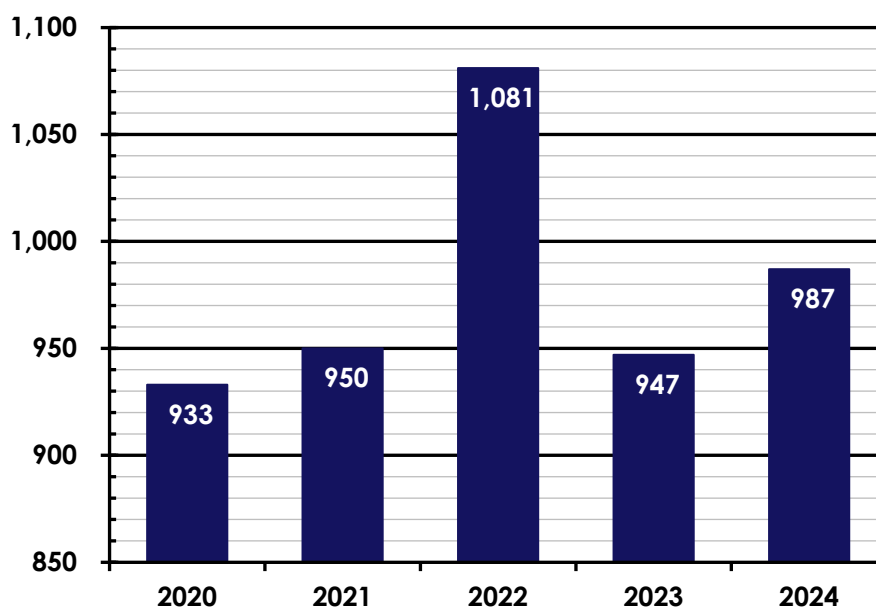
When incidents are documented using NFIRS codes, there is the potential for data entry errors. Such mistakes can alter the intended meaning of the information. Several mistakes within a fire agency's data may not be significant, but many can have a dramatic impact on the meaning of the data.

The same result occurs when data is generalized, such as the overuse of the codes for "Unknown," "None," or "Other." While certainly there are incidents that may be difficult to categorize, every effort should be made to document the type of incident accurately.

Service Demand

The service demand analysis reviews historical service demand by incident type and temporal variation. GIS software provides a geographic display of demand.

The following figure displays historical WVFR service demand for the previous five calendar years. Overall, service demand increased by approximately 5.6% from 2020 to 2024. This represents an average annual increase of just over 1%.

Figure 32: WVFR Service Demand (2020–2024)

The National Incident Fire Reporting System has developed a classification system with codes to categorize various types of incidents. These codes identify the various types of incidents to which the fire district responds. When analyzed in this manner, an agency is better able to determine the demand for service and what training may be of priority for their responders.

NFIRS incident data is also valuable in guiding community risk reduction programs. The codes consist of three digits and are grouped into a series by the first digit, as illustrated in the following figure.

Figure 33: NFIRS Incident Codes & Descriptions

Type Code	Incident Description
100 Series	Fires
200 Series	Overpressure Rupture, Explosion, Overheat (No Fire)
300 Series	Rescue and Emergency Medical Service (EMS) Incidents
400 Series	Hazardous Condition (No Fire)
500 Series	Service Call
600 Series	Canceled, Good Intent
700 Series	False Alarm, False Call
800 Series	Severe Weather, Natural Disaster
900 Series	Special Incident Type

Each of these series has various subcategories. For example, NFIRS 111–Building fire; NFIRS 113–Cooking fire; NFIRS 150–Outside rubbish fire, other; NFIRS 322–Motor vehicle accident with injuries; and NFIRS 350–Extrication, rescue, other. The benefits of these enable fire agencies to categorize incidents in more specific detail.

It is important to note that the NFIRS reporting system will be replaced by the new National Emergency Response Information System (NERIS) as of January 1, 2026. This has been a result of the U.S. Fire Administration partnering with the U.S. Department of Homeland Security's (DHS) Science & Technology Directorate (S&T) and the Fire Safety Research Institute (FSRI) to launch this new interoperable fire information and analytics platform.¹⁵

As illustrated in the next figure, most of the demand for services fell within the NFIRS 300 category of EMS and Rescue, with 2,776 incidents recorded over the four-year study period. This was followed by Fire incidents at 413 and Service Calls at 300 incidents. EMS incidents accounted for the largest percentage of calls for service, which is consistent with what is typically observed nationwide.

Figure 34: WVFR Service Demand by NFIRS Incident Type (2021–2024)

Incident Type	Count	% of Total
Emergency Medical Services (NFIRS 300)	3,426	70%
Fires (NFIRS 100)	529	11%
Service Calls (NFIRS 500)	340	7%
Good Intent Calls (NFIRS 600)	309	6%
False Alarm & False Calls (NFIRS 700)	183	4%
Hazardous Conditions–No Fire (NFIRS 400)	111	2%

Note: Percentages rounded to the nearest integer.

The following figure illustrates service demand for the WVFR based on property type for 2024. Residential occupancies account for the highest demand within all reported incident-type categories.

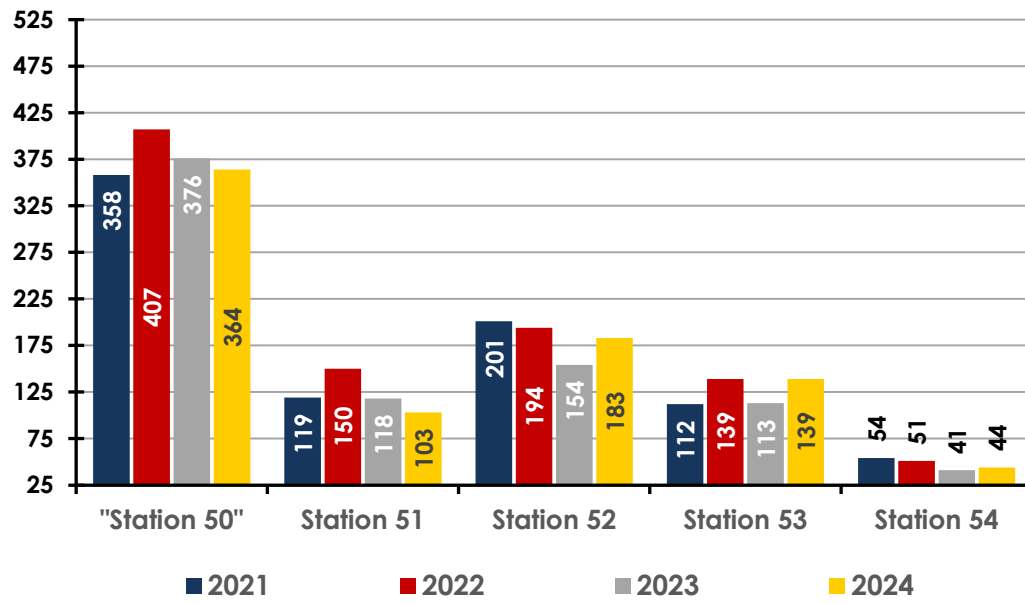
Figure 35: WVFR Service Demand by NFIRS Property Type (2024)

NFIRS Property Use Category	Fires (NFIRS 100)	EMS (NFIRS 300)	Alarms (NFIRS 700)	All Others
0–Property Use Other	0%	0%	0%	1%
1–Assembly (restaurant, bar, theater, library, church, airport)	1%	1%	7%	1%
2–Educational (school, daycare)	0%	4%	2%	1%
3–Healthcare, Detention, Correction (nursing home, hospital, medical office, jail)	0%	1%	0%	0%
4–Residential (private residence, hotel/motel, residential board)	75%	87%	78%	93%
5–Mercantile, Business (grocery store, service station, office, retail)	0%	0%	0%	1%
6–Industrial, Utility, Agriculture, Mining	0%	0%	4%	1%
7–Manufacturing	0%	0%	0%	0%
8–Storage	2%	0%	9%	1%
9–Outside Property, Highway, Street	21%	7%	0%	2%

Note: Percentages rounded to the nearest integer.

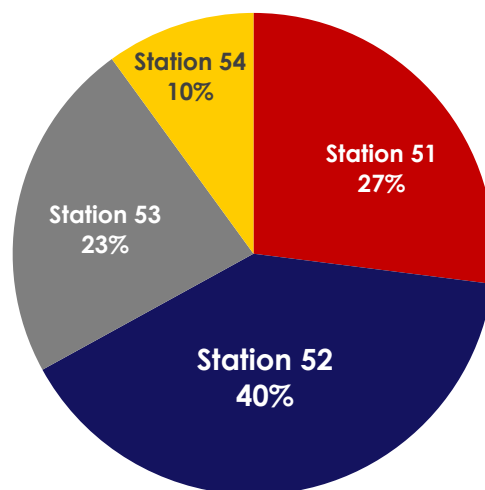
The next figure illustrates the total number of WVFR incidents by individual fire stations that occurred during 2021–2024. The “Station 50” designation is used to identify calls involving responses by Career Firefighters and is not an actual facility.

Figure 36: WVFR Service Demand by Fire Station (2021–2024)



The following figure illustrates the percentage of calls originating in each fire station's response zone during 2021–2024. As shown, Station 52 accounted for 40% of the call volume during the 48-month study period.

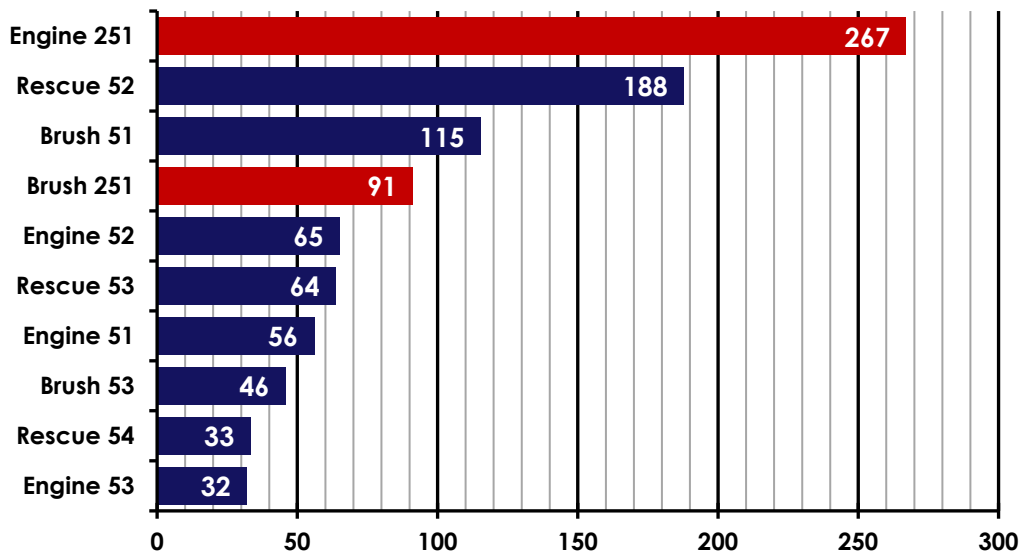
Figure 37: Percentage of Service Demand by Fire Station (2021–2024)



Although “Station 50” was excluded from this analysis, it must be noted that the paid Firefighters are usually deployed from both Station 51 and Station 52.

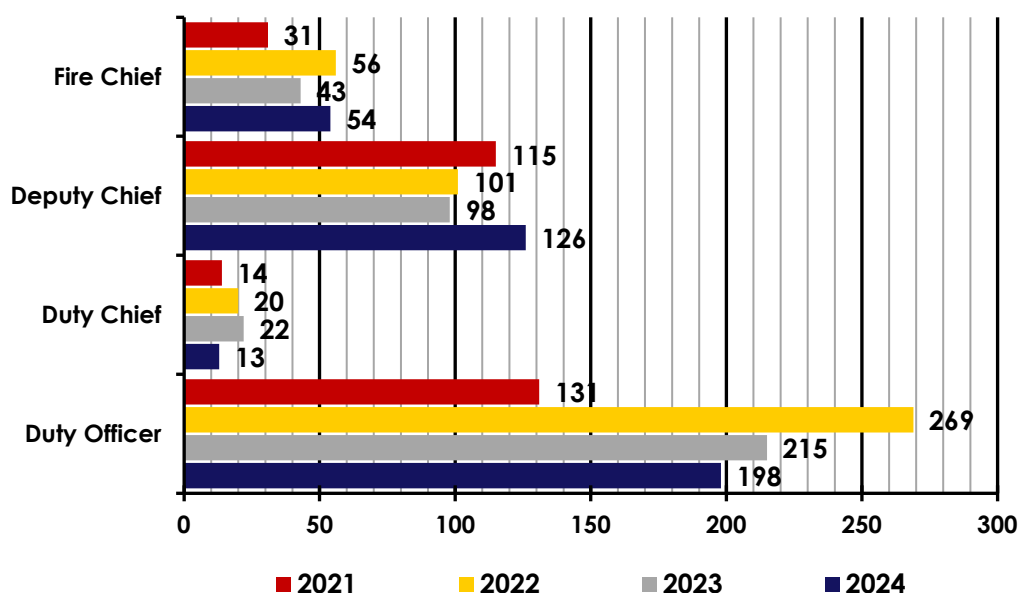
Figure 38The next figure illustrates the busiest apparatus for WVFR. Engine 251 and Brush 251 (represented by the “red” bars in the figure) are the apparatus typically assigned to the on-duty paid staff Monday through Friday, 0600–1800 hours.

Figure 38: Average Annual Service Demand of the 10 Busiest Apparatus (2021–2024)



In this figure, the average annual service demand for WVFR command units is shown for the combined 48-month study period. It is worth noting that the Fire Chief and Deputy Chief also take turns serving as the Duty Chief and are assigned this radio designation when fulfilling that role.

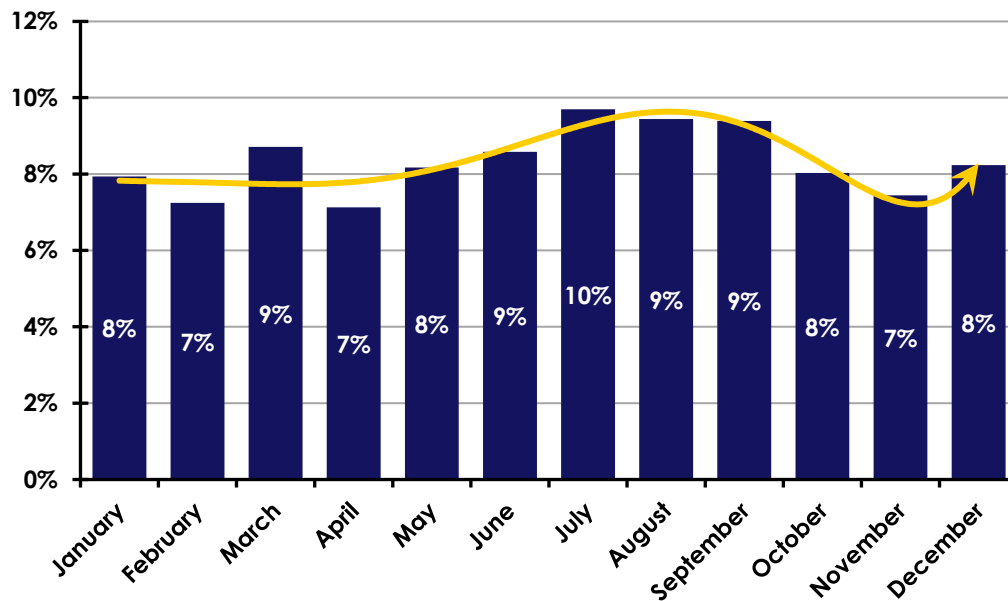
Figure 39: Average Annual Service Demand on Command Units (2021–2024)



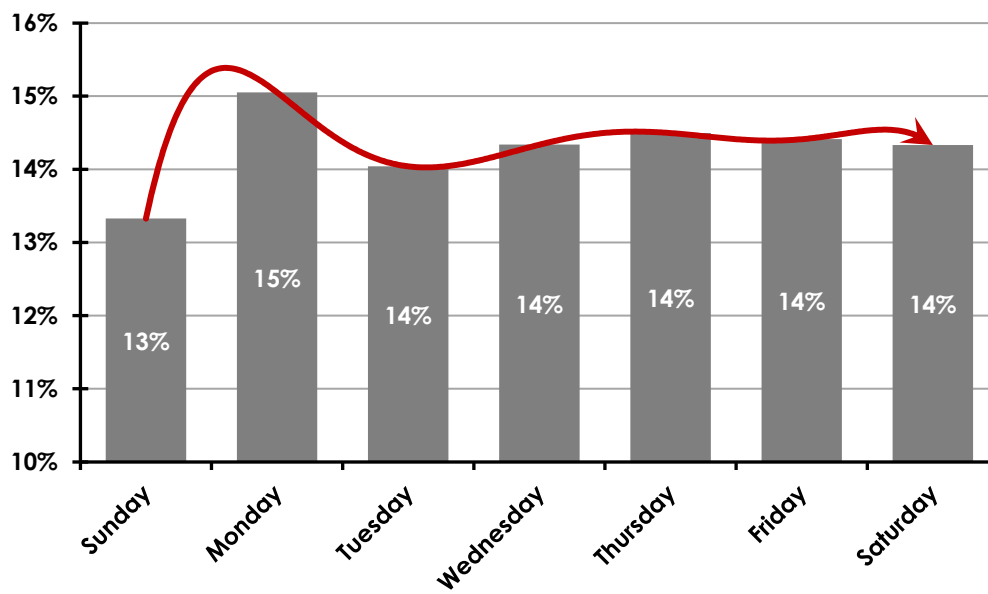
Temporal Analyses

The various temporal analyses can be essential when planning for the current and future delivery of services. With this knowledge, WVFR can better determine staffing needs and non-response activities such as hose testing, hydrant testing, incident pre-plans, training, and apparatus maintenance. Each temporal analysis is presented as a percentage relative to the total service demand during the four most recent full calendar years.

As illustrated in the following figure, service demand fluctuated throughout the year, with a difference of nearly 3% between the busiest and slowest months. On average, the lowest demand for services occurred in April, with a peak in July—the month that saw a slightly higher call volume.

Figure 40: WVFR Average Service Demand by Month (2021–2024)

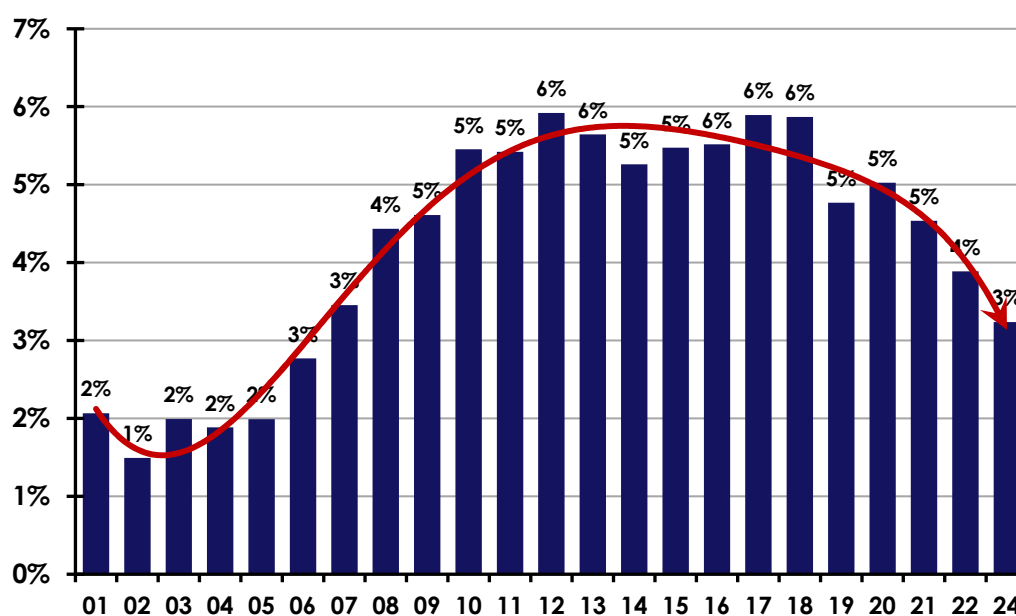
The next temporal analysis examined which day of the week indicates the greatest demand for service. As illustrated in the following figure, Sundays showed a slightly lower percentage of service demand compared to the other days. The difference between the days was not significant, with a variation of nearly 2% between the busiest and slowest days of each week.

Figure 41: WVFR Average Service Demand by Weekday (2021–2024)

The final temporal analysis concerns determining the time of day that service demand occurs. As illustrated in the next figure, the average demand for service began to increase in the early morning hours, coinciding with the typical start of human activity, which is consistent with most communities in the United States.

Throughout the morning, service demand continued to increase, peaking around 1200 hours through the afternoon and beginning to decline around 1900 hours. The slowest period was 0200 hours.

Figure 42: WVFR Average Service Demand by Hour (2021–2024)



Although service demand is lowest during early morning hours, according to the National Fire Data Center, fatal residential fires occur most frequently late at night or in the very early morning hours when many people are asleep.¹⁶

In the United States, between 2017 and 2019, fatal fires were highest from 2400 hours to 0400 hours. Fatal fires were most prevalent when residential fire incidence was generally at its lowest, making nighttime fires the deadliest. The eight-hour peak period (2300 to 0700 hours) accounted for 46% of fatal residential fires and 49% of deaths.¹⁷

The following figure captures the busiest consecutive periods of incidents occurring at WVFR. The information can be used to identify periods for increased staffing or placing additional apparatus in service.

Figure 43: WVFR Average Busiest Consecutive Periods (2021–2024)

Description	8-Hour Period	10-Hour Period	12-Hour Period
Time Intervals	1100–1900 hours	1000–2000 hours	0900–2100 hours
Percentage of Totals:	45%	55%	65%

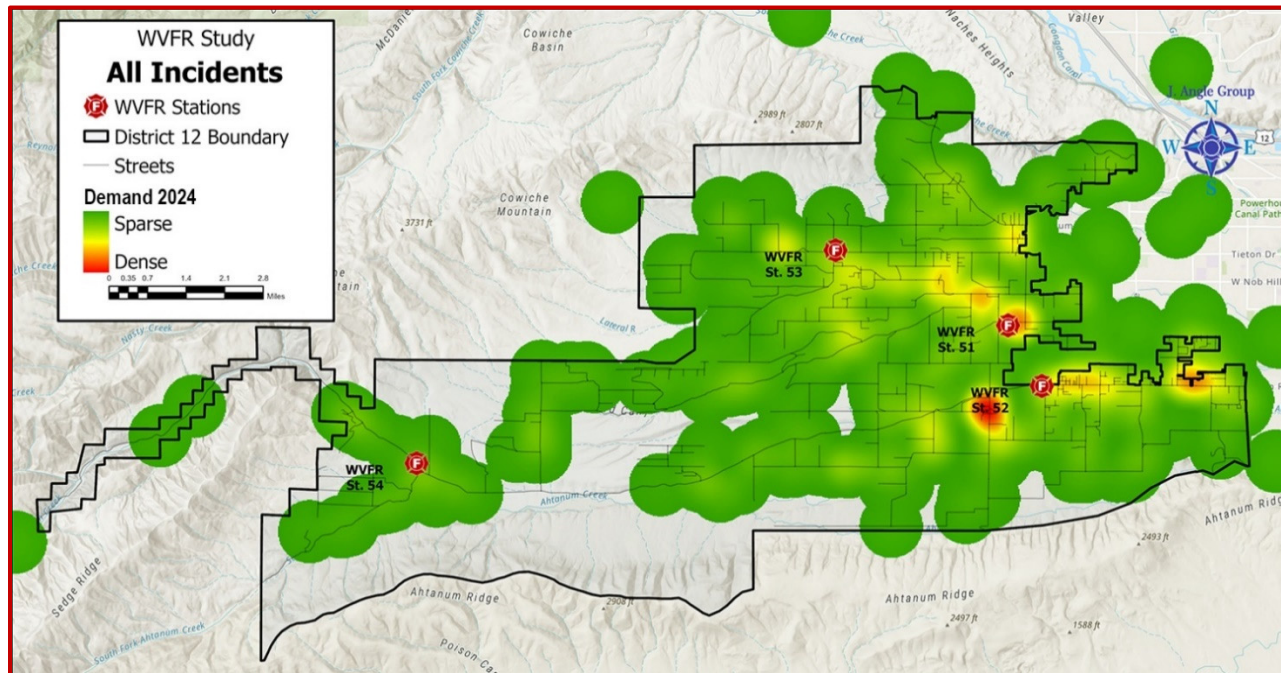
Resource Distribution Analysis

While the incident type and temporal analyses provide valuable information about the nature of WVFR calls and times of service demand, understanding the geographic distribution of service demand is also beneficial. JAG utilized GIS software to plot the historical location of incidents within WVFR's service areas and calculated the mathematical density of incidents.

Accurate and complete incident locations for calls that occurred between 2021 and 2023 were not available in the datasets for those years. Therefore, the incident density maps were developed using only 2024 data in the ImageTrend® RMS.

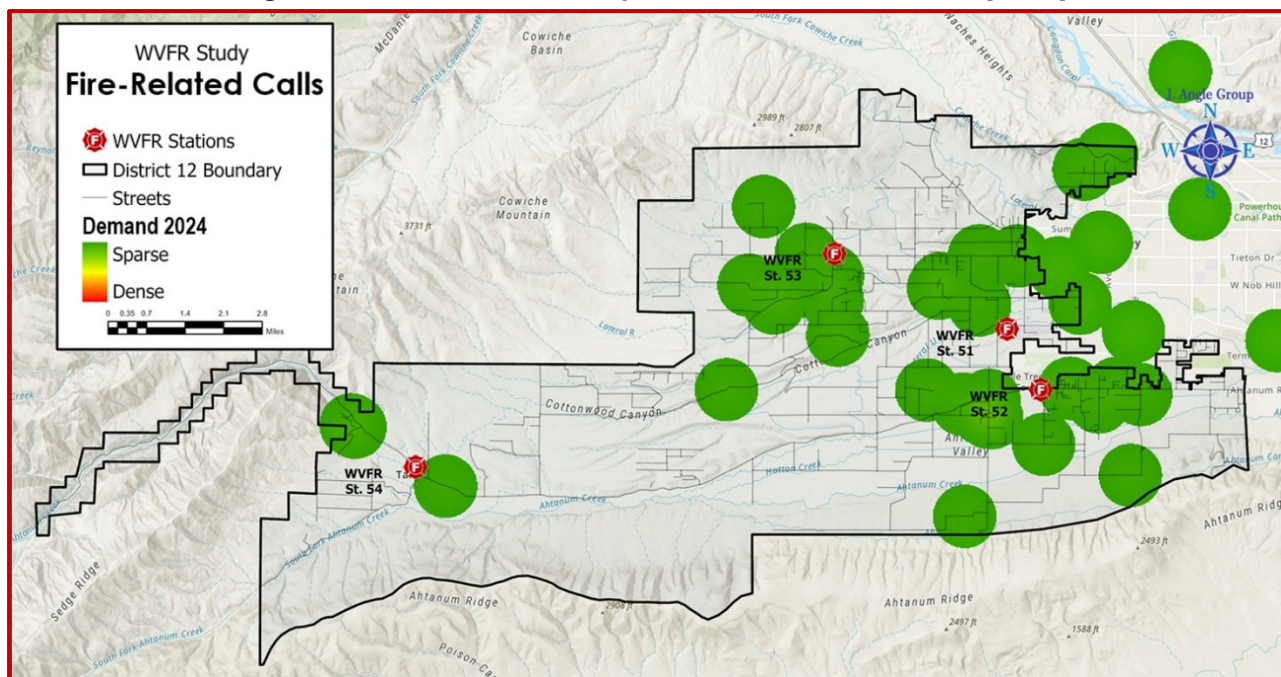
The next figure illustrates the incident density of all incident types within WVFR's service areas during 2024.

Figure 44: WVFR Call Density—All Incidents (2024)



As expected, the highest density of incidents occurred near Station 52, followed by calls occurring in and around the Station 51 service area.

The next figure illustrates the density of 2024 fire-related call types, excluding wildland-type incidents, within WVFR's service areas.

Figure 45: WVFR Call Density—Fire-Related Incidents (2024)

The next figure illustrates wildfire and other wildland-related incident density within WVFR's service areas for 2024.

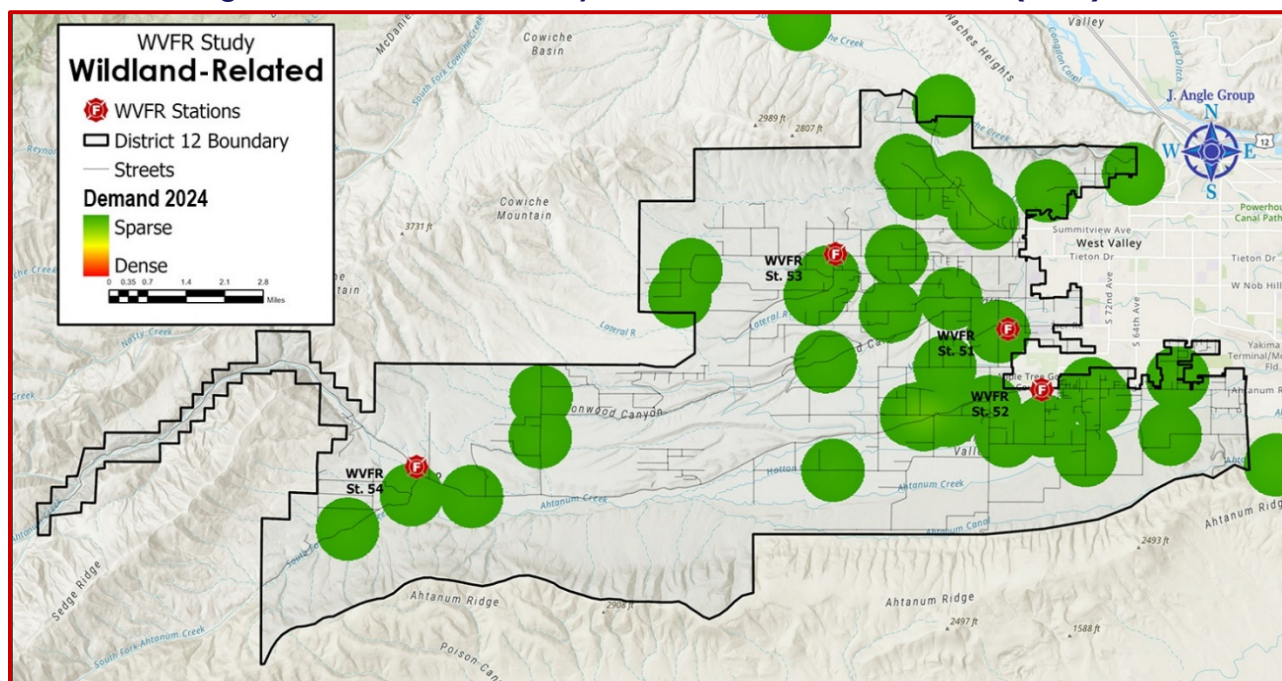
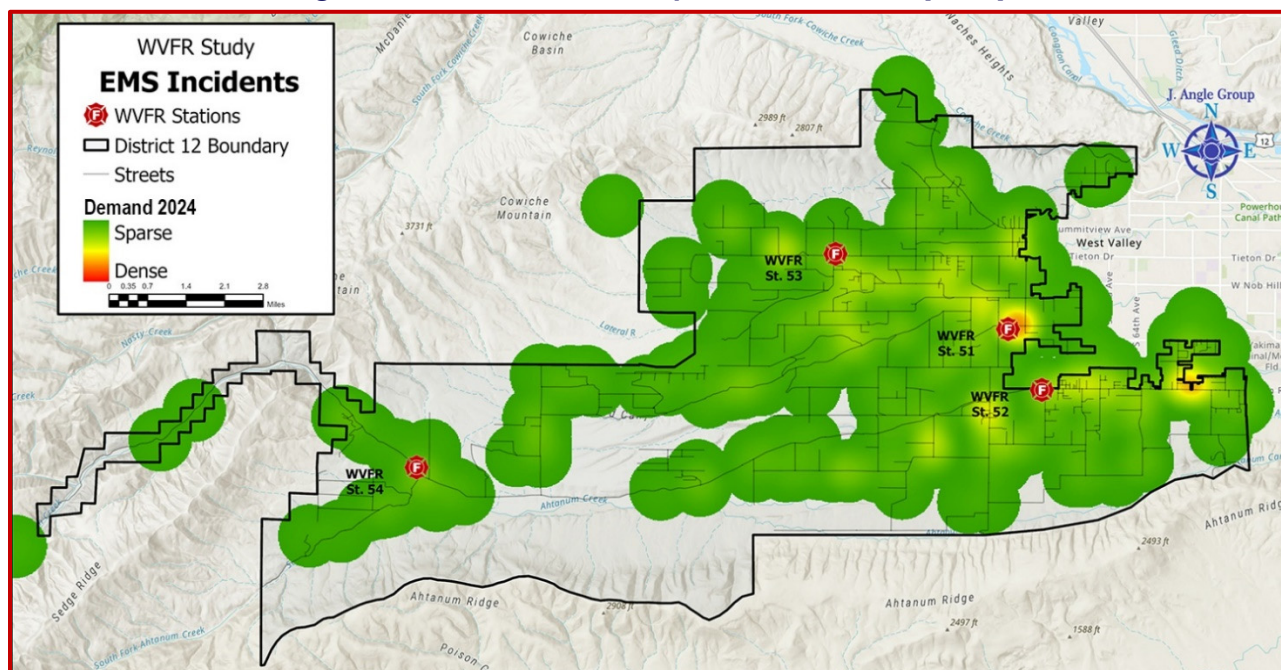
Figure 46: WVFR Call Density—Wildland-Related Incidents (2024)

Figure 47 illustrates EMS incident density within WVFR's service areas for 2024.

Figure 47: WVFR Call Density—EMS Incidents (2024)



Washington Surveying & Rating Bureau Criteria

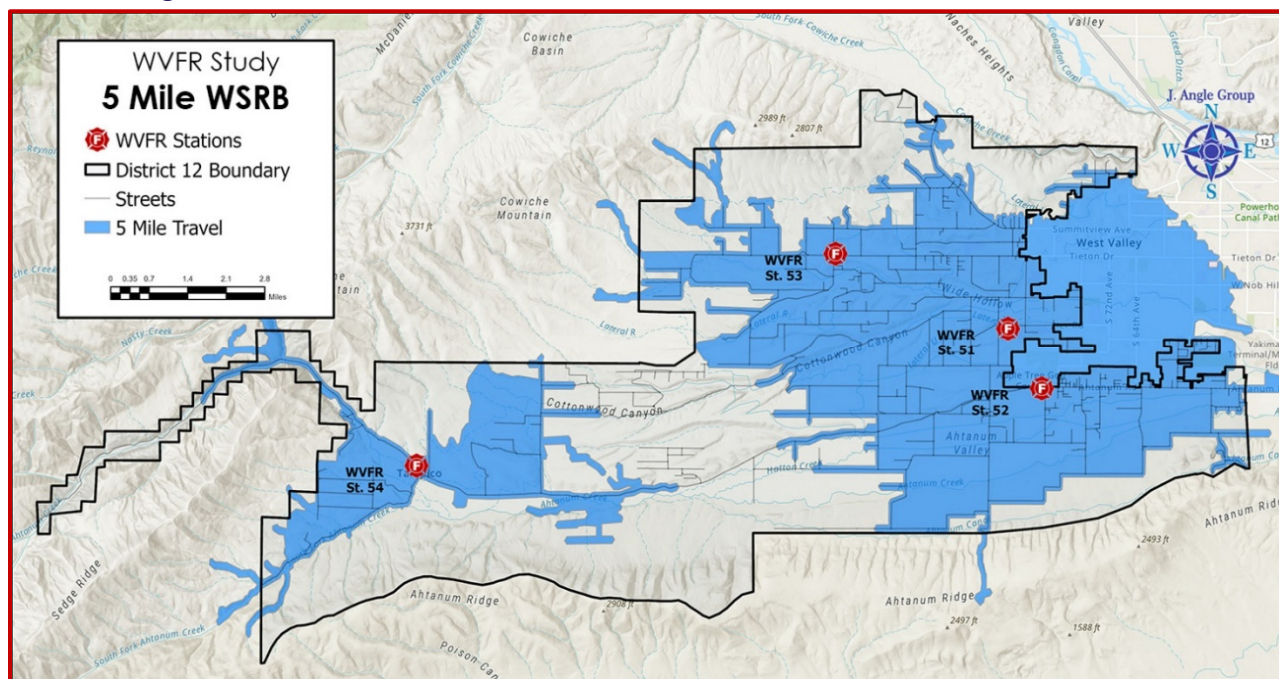
The Washington Surveying & Rating Bureau (WSRB) is an independent not-for-profit organization that utilizes criteria evaluated and approved by the Washington State Office of the Insurance Commissioner to evaluate fire protection for communities across Washington State. The WSRB assesses all areas of fire protection, categorized into four major areas: Emergency Communications, Fire Department, Water Supply, and Fire Safety Control. Following an on-site evaluation, a WSRB rating—specifically, a Community Protection Class (PC) number ranging from 1 (exemplary protection) to 10 (insufficient protection)—is assigned to a community.

A community's WSRB rating is a crucial factor when considering fire station and apparatus distribution and deployment, as it significantly impacts the cost of fire insurance for residents and business owners. The ability of a fire district to arrive on the scene of an incident equipped with personnel, equipment, and water to mitigate a fire effectively is a critical factor during a WSRB evaluation.

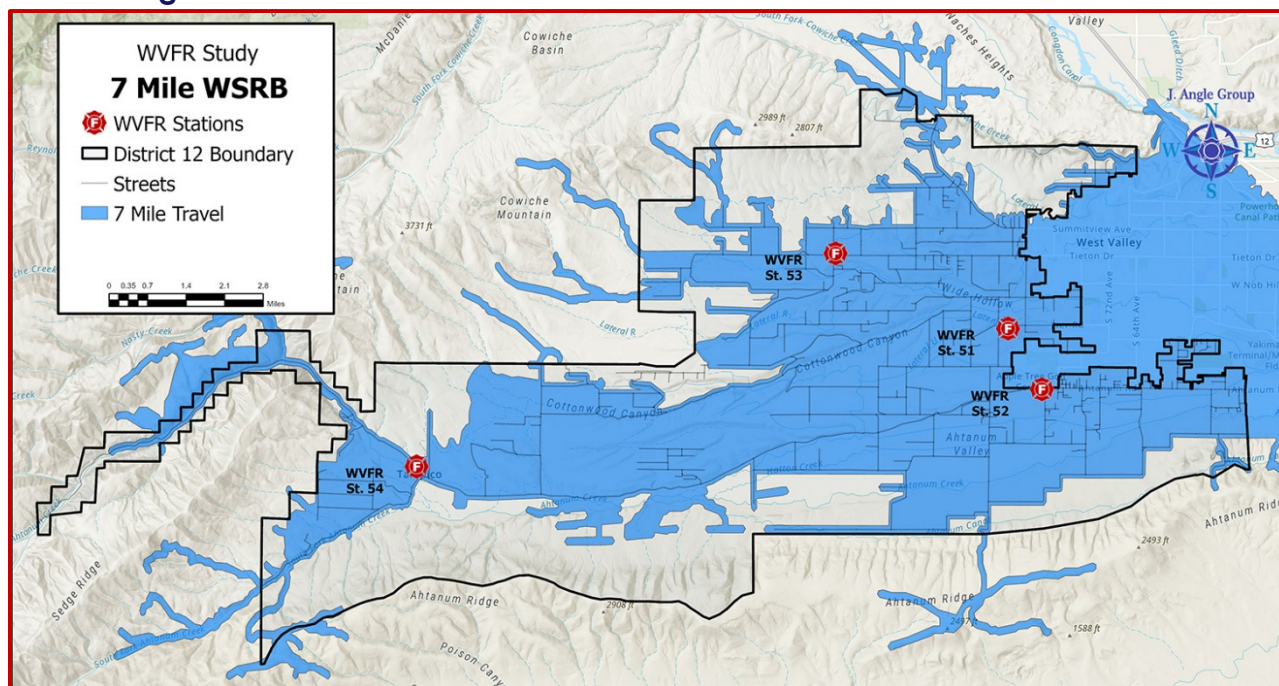
To receive maximum credit for station and apparatus distribution, WSRB recommends that all “built upon” areas in a community cannot be more than five road miles from a fire station. In addition, to receive maximum credit, WSRB evaluates the percentage of the community (contiguously built-upon area) that is within specific distances of both engine companies (1.5 miles) and aerial apparatus (2.5 miles).

The following figure illustrates fire station distribution for the WVFR service area and the roadways within the WSRB's recommended 5 miles of travel distance.

Figure 48: WVFR Station Distribution—WSRB 5-mile Travel Distance Criteria

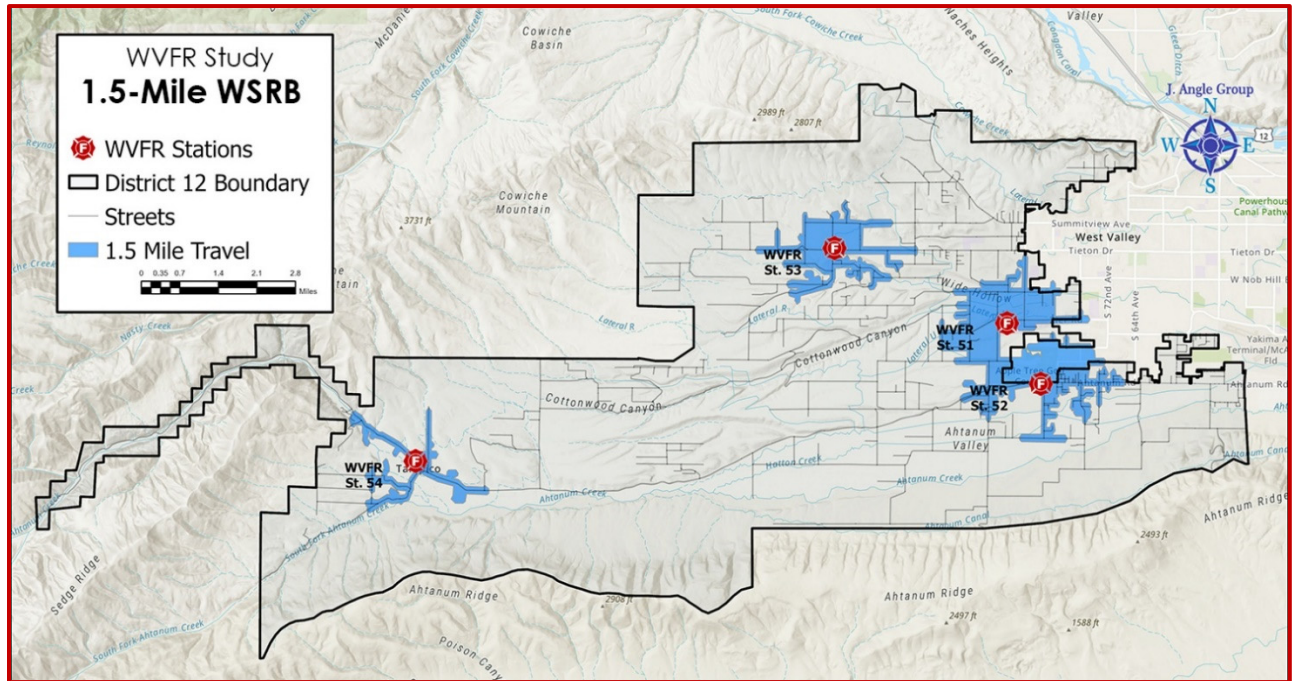


The next figure illustrates the distribution of WVFR stations within a seven-mile radius. Anecdotal information indicates that the Washington Surveying & Rating Bureau (in addition to the Insurance Services Office) is considering a 7-mile distance from the fire station as the rating standard for the PPC. Regardless of whether this becomes a standard, JAG has included this figure for informational purposes for WVFR.

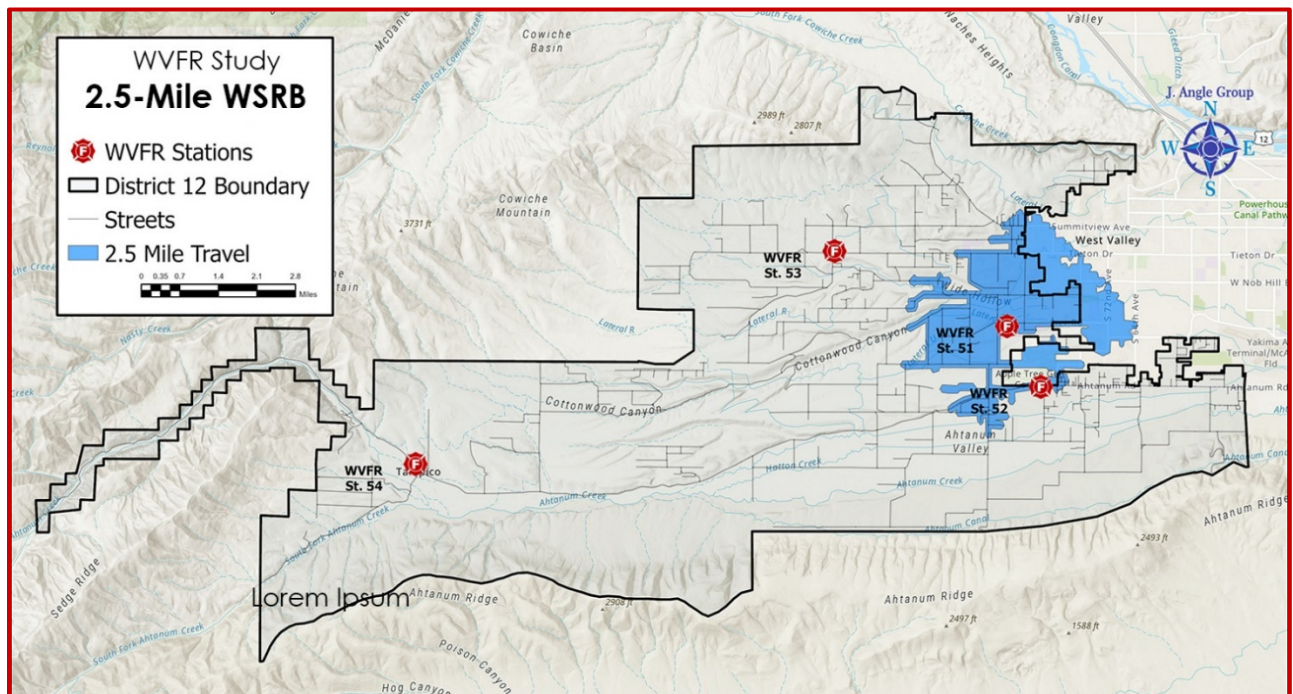
Figure 49: WVFR Station Distribution—WSRB 7-mile Travel Distance Criteria

As shown in the preceding figure, nearly all of Yakima County Fire District 12's road miles can be accessed within seven miles of its four fire stations. In addition, this seven-mile travel distance extends well into the westside area of the City of Yakima.

The next figure illustrates the engine company distribution for WVFR, as well as the roadways within the recommended 1.5-mile travel distance.

Figure 50: WVFR Station Distribution—WSRB 1.5-mile Travel Distance Criteria

The next figure shows the distribution of a single aerial apparatus deployed from Station 51.

Figure 51: WVFR Station Distribution—WSRB 2.5-mile Travel Distance Criteria

The following image lists the percentage of the area within Yakima County Fire District 12 boundaries that can be accessed within the various WSRB PPC mileage range rating standards. The fire district consists of approximately 213 road miles.

Figure 52: Accessibility of Road Miles by Fire Stations in the WVFR Service Area

Distance	Accessible Road Miles	Percent of District
1.5 Miles from Stations	48 miles	23%
2.5 Miles from Station 51	31 miles	15%
5 Miles from Stations	181 miles	85%
7 Miles from Stations	204 miles	96%

National Fire Protection Association Standards

When considering national standards, NFPA 1720 applies to West Valley Fire-Rescue.¹⁸ In accordance with this standard, WVFR is defined as a Combination Fire Department.¹⁹ In contrast, NFPA 1710 applies to fire departments that are primarily comprised of career personnel.²⁰

While a consensus of fire service experts has developed these standards, neither NFPA 1720 nor NFPA 1710 is a mandatory standard. The Board of Fire Commissioners and leadership of Yakima County Fire District 12 may elect to adopt a portion or all of the standards found in NFPA 1720, as well as apply some of the standards from NFPA 1710 to WVFR's career personnel.

Response Reliability Study

The workload of emergency response units can be a factor in response time performance. If a response unit is unavailable for any reason, then a unit from a more distant station (or mutual/automatic aid agency) must respond. This can increase the overall response time. Although fire stations and units may be distributed in a manner that provides quick response, as illustrated previously in the deployment model, that level of performance can only be achieved when the response unit is available in its primary service area.

Call Concurrency

Concurrent incidents and the amount of time that individual units are committed to an incident can affect a fire district's ability to assemble sufficient resources to respond to additional emergencies. A high number of calls that occur simultaneously can strain available resources, resulting in extended response times from other, more distant resources.

The next figure lists the incidents to which WVFR responded (regardless of the jurisdiction in which the incident occurred) from 2021 through 2024 to determine the frequency of multiple concurrent calls.

Figure 53: WVFR Concurrent Incidents (2021–2024)

No. of Incidents	2021	2022	2023	2024	Average
One Incident	87%	89%	88%	68%	83%
Two Incidents	12%	10%	11%	29%	16%
Three or More Incidents	1%	1%	1%	3%	2%

Data from 2021–2023 included "Ambulance-Only" calls, which could not be excluded. However, data from 2024 enable JAG to exclude those calls from the analysis.

On average, during the preceding four-year period, single incidents accounted for 83% of the overall WVFR incidents, while two incidents occurred simultaneously in 16% of the time. This indicates that 2% of the time (on average), WVFR or automatic aid partners were responding to three or more incidents simultaneously in the fire district.

Commitment Time

Commitment time refers to the duration during which an apparatus is actively engaged in an incident. Although related, Unit Hour Utilization (UHU) is a distinct metric from Commitment Time. It measures the percentage of time a unit is committed to incidents versus its total operational time. UHU is more commonly utilized in all-career departments with staffed apparatus.

The next two figures list the total time that WVFR's units were committed to an incident for each calendar year from 2021 to 2024.

Figure 54: Time Commitment of WVFR Apparatus (2021 & 2022)

Apparatus	— 2021 Incidents —		— 2022 Incidents —	
	Count	Average	Count	Average
Duty Chief	111	1:06:06	97	0:44:16
Duty Officer	123	1:04:32	266	0:41:18
Engine 51	54	1:31:54	46	1:06:58
Engine 52	64	1:11:38	56	0:52:18
Engine 53	31	1:17:56	31	0:56:52
Engine 54	8	1:25:44	6	2:12:47
Engine 251	296	1:04:36	287	0:38:33
Brush 51	108	1:05:15	148	0:38:08
Brush 52	14	1:52:00	26	1:43:47
Brush 53	99	0:59:00	36	1:02:10
Brush 54	9	1:46:54	5	0:43:45
Brush 251	43	1:12:02	90	0:51:22
Rescue 52	197	0:52:06	210	0:32:29
Rescue 53	—	—	96	0:40:40
Rescue 54	37	1:14:05	34	0:58:39

Figure 55: Time Commitment of WVFR Apparatus (2023 & 2024)

Apparatus	— 2023 Incidents —		— 2024 Incidents —	
	Count	Average	Count	Average
Duty Chief	94	0:58:28	117	0:52:12
Duty Officer	205	0:43:08	182	0:47:00
Engine 51	47	1:03:00	69	0:56:36
Engine 52	69	1:09:24	54	1:10:44
Engine 53	30	1:24:32	29	0:59:18
Engine 54	8	1:42:17	3	2:04:34
Engine 251	245	0:46:12	160	0:41:41
Brush 51	130	1:04:49	51	1:37:59
Brush 52	30	3:04:21	33	3:07:30
Brush 53	17	2:31:17	20	1:55:09
Brush 54	3	1:05:42	7	2:44:13
Brush 251	114	0:54:12	112	0:46:41
Rescue 52	161	0:35:43	153	0:32:46
Rescue 53	70	0:36:56	69	0:40:07
Rescue 54	34	0:54:35	20	0:47:45

Response Performance Analysis

This section provides a general overview of the relevant WVFR historical response performance. It has been developed to assist the fire district with identifying its recent performance and creating a baseline performance expectation. WVFR leadership and policymakers can utilize this information to develop policies and procedures, conduct deployment planning, and determine the need for potential response resources.

In analyzing response performance, a percentile measurement of the response time performance of WVFR is generated. The use of percentile calculations for response performance follows industry best practices and is considered a more accurate measure of performance than “average” calculations.

Commonly, the “average” measure is used as a descriptive statistic; it is also referred to as the mean of a dataset. The reason not to use the average measure for performance standards is that it may not accurately reflect the performance of the entire dataset and may be skewed by data outliers. One particularly good or bad value could skew the average for the entire set. Percentile measurements are a more accurate measure of performance, as they indicate that most of the data have achieved a particular level of performance.

Fire service best-practice documents, such as those from the Center for Public Safety Excellence (CPSE) and NFPA 1710, recommend measuring emergency response time performance at the 90th percentile, meaning that 90% of emergency responses occur in the stated value or less.^{21,22} NFPA 1720 utilizes both the 90th percentile and 80th percentile for response performance, depending on population density. In basic terms, the 80th percentile means that 20% of the values are greater than the stated value, and all other data are at or below this level. The same applies to the 90th percentile, with 10% of the data points having values greater than or equal to that. These metrics can then be compared to the desired performance objective to determine the degree of success in achieving the goal.

Measurement Processes

Industry best practices recommend measuring total response performance from the time an emergency call is received at a dispatch center to the time the first emergency response unit arrives and initiates action or intervenes to control the incident.

Tracking the individual components of the total response time allows for identifying deficiencies and areas for improvement. While progressing through the performance analysis, it is essential to understand that the components of response performance are not cumulative. Each is analyzed as an individual component, and the point at which the percentile is calculated exists in a set of data unto itself.

- **Alarm Processing Time:** The interval between the time when a dispatcher answers a 9-1-1 call and resources are dispatched. It is worth noting that since WVFR does not have direct control over the PSAP and dispatch center, the fire district cannot be held accountable for this time interval. However, this time interval does have an impact on the Total Response Time.

- **Turnout Time:** The interval between the time that an emergency response facility (ERF) and emergency response unit (ERU) are notified (by an audible alarm, visual annunciation, or both) and the time the unit begins to respond.
- **Travel Time:** The interval between the time a responding unit begins to respond and when it arrives at the incident scene.
- **Response Time:** The interval between the time a unit is dispatched and arrives on scene (a combination of the turnout time and travel time intervals). This measurement is indicative of a system's capability to staff, locate, and deploy response resources adequately.
- **Total Response Time:** The NFPA 1710 definition of total response time is the interval between the time an alarm is received at dispatch and the time a unit arrives on the scene. This measurement is also indicative of a system's capability to arrive at an incident scene rapidly. This metric was not included in JAG's response performance analyses.

NFPA 1720 Response Performance Objectives

The next figure outlines the recommended staffing and response time objectives that the Authority Having Jurisdiction (AHJ) should adopt for responses to structure fires involving low-hazard occupancies, such as a 2,000-square-foot, two-story, single-family home without a basement or exposures.

Figure 56: NFPA 1720 Staffing & Response Time Objectives²³

Demand Zone ^A	Demographics	Minimum Staff to Respond ^B	Response Time (minutes) ^C	Meets Objective (%)
Urban Area	>1000 people/sq. mile	15	9 minutes	90%
Suburban Area	500–1000 people/sq. mile	10	10 minutes	80%
Rural Area	<500 people/sq. mile	6	14 minutes	80%
Remote Area	Travel distance \geq 8 miles	4	Depends ^D	90%
Special Risks	Determined by AHJ	Determined based on risk		90%

^A A jurisdiction can have more than one demand zone.

^B Minimum staffing includes members responding from the AHJ's department & automatic aid.

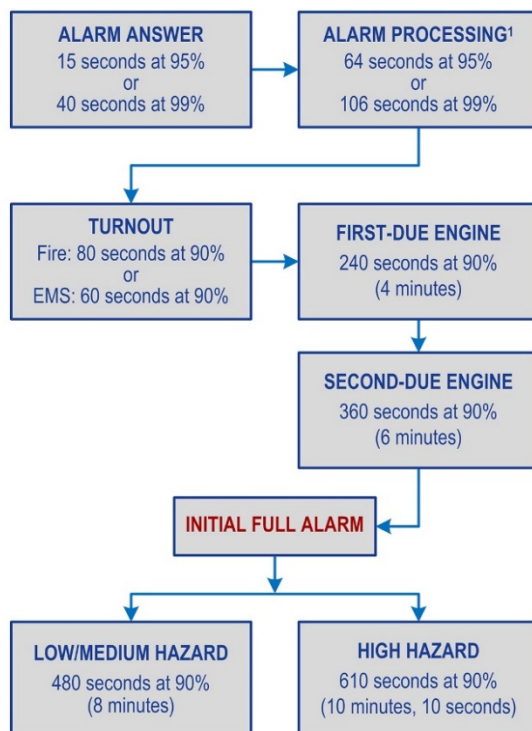
^C Response time begins upon completion of the dispatch notification and ends at the time interval shown.

^D Directly depends on travel distance.

NFPA 1710 Response Performance Objectives

Although not a standard directly applicable to West Valley Fire-Rescue, NFPA 1710 includes response performance objectives that the fire district could partially adopt. The following figure lists the response time performance standards recommended in NFPA 1710 for career departments.

Figure 57: NFPA 1710 Response Objectives



¹From NFPA 1710, which references NFPA 1221 (2019), and states high-priority incidents should be at 60 seconds or less at 90%.

As mentioned previously, Yakima County Fire District 12 could consider adopting some of these standards or adopting them as the standard for Career Firefighters (Duty Crew).

WVFR Adopted Response Objectives

As illustrated in the next figure, WVFR has established response standard goals for turnout time, response time, and an Effective Response Force (ERF) in rural areas. Career and Volunteer Firefighters have separate Turnout Time standards but share the same goals.

Figure 58: WVFR Response Performance Objectives

Description	Career Firefighters	Volunteer Firefighters
Turnout Time	1 minute ²⁴	5 minutes
Response Time	8 minutes or less within 1 mile of stations at 75%; 2 minutes for every mile after that	
Rural Responses	6 Firefighters on scene within 14 minutes (structure fires) ²⁵	

Discussion of Response Performance Data Analyses

Incident data provided by WVFR from its two records management systems came with limitations that prevented JAG from accurately analyzing the various components of the response-time continuum for the years prior to 2024. Therefore, these analyses were limited to incidents reported in 2024. Mutual and automatic aid incidents outside the service area, data outliers, and invalid data were removed from the dataset whenever possible.

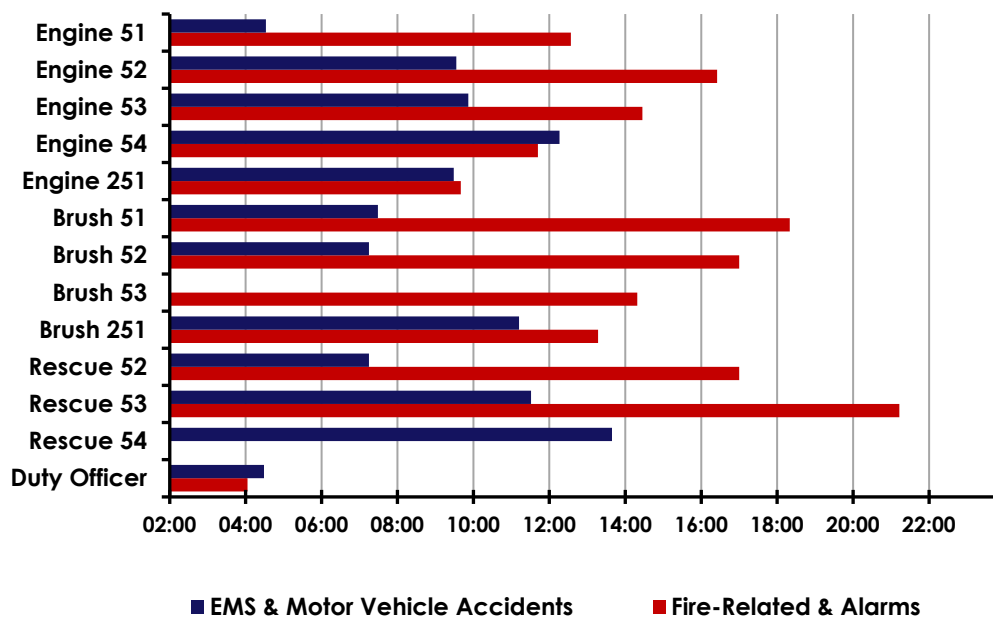
Turnout Time

Turnout time is a crucial component of response time performance and can be influenced by factors such as station design, apparatus staffing, and the performance of assigned personnel. Because of this, turnout time is one area of the overall response time over which field personnel have some control. NFPA 1720 does not list a Turnout Time in its standards for Volunteers.

The next figure illustrates the 2024 turnout times of the most frequently used apparatus utilized by WVFR Volunteer Firefighters. The data analysis excluded any calls that occurred between 0600 and 1800 hours, Mondays through Fridays (when paid staff were on duty). These turnout times were calculated on apparatus with the highest service demand and typically staffed by Volunteer firefighters.

Therefore, the following two figures are presented only for information purposes.

Figure 59: Volunteer Turnout Times at the 90th Percentile—By Apparatus (2024)



Excluding the turnout times of the Duty Officer, the combined apparatus averaged 15 minutes and 5 seconds for fire incidents and alarms, and 9 minutes and 28 seconds for EMS incidents and motor vehicle accidents.

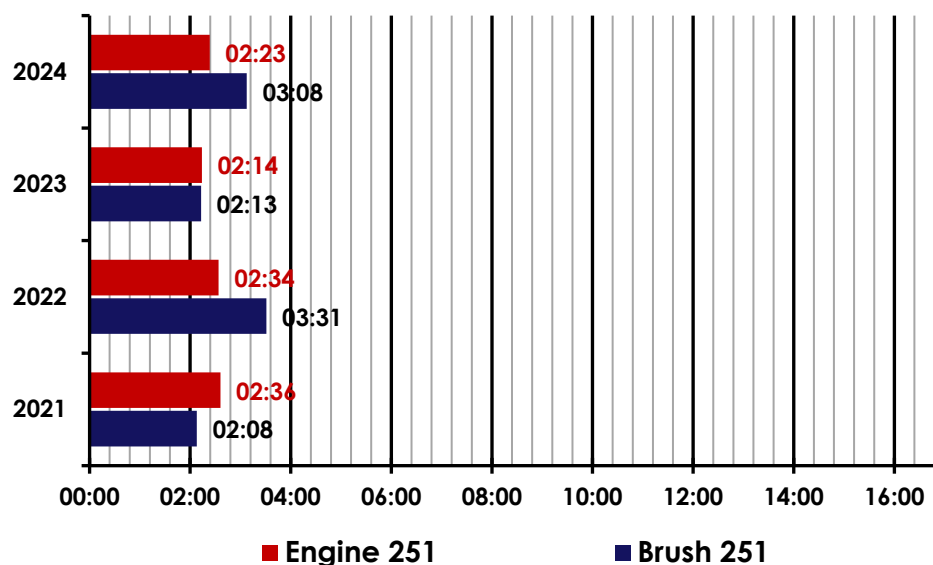
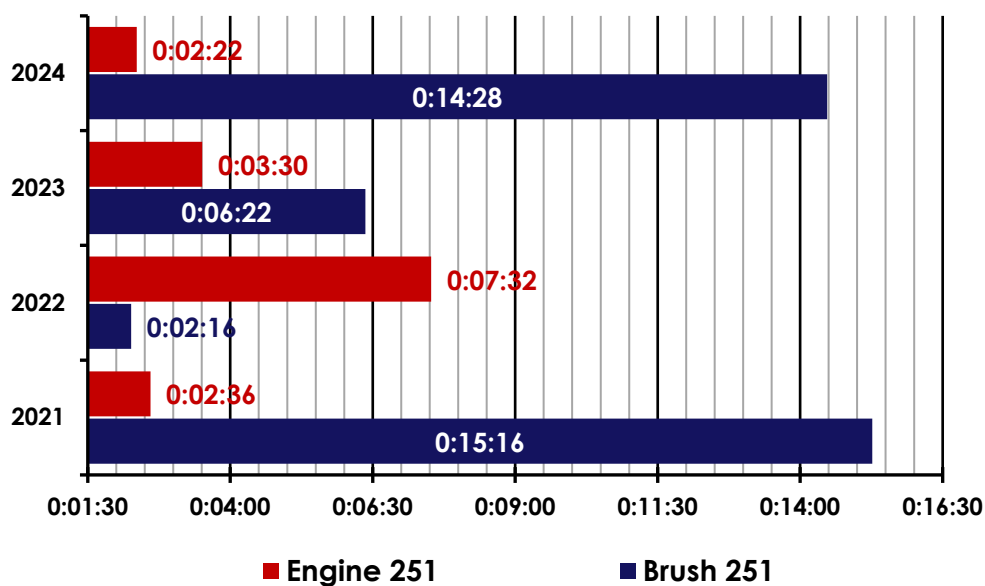
The next figure illustrates the annual range and average turnout times for the apparatus most frequently used by WVFR Volunteer Firefighters, broken down by incident type.

It is important to reiterate that NFPA 1720 does not recommend a Turnout Time standard for volunteers. In addition, there are likely some outliers in this data. For example, in some cases, Brush 52 may not have been dispatched for a considerable time following the initial alarm. Therefore, the results of the analyses may be misleading.

Figure 60: Turnout Times of Apparatus Staffed by Volunteer Personnel (2021–2024)**— Fire Incidents & Alarms —****— EMS Incidents & MVAs —**

Apparatus	Annual Range 2021–2024	Four-Year Average	Annual Range 2021–2024	Four-Year Average
Duty Chief	04:58–20:50	10 min., 23 sec.	07:01–08:58	8 min., 5 sec.
Duty Officer	03:08–04:13	3 min., 35 sec.	05:00–05:43	5 min., 25 sec.
Engine 51	09:57–15:03	12 min., 34 sec.	02:32–08:11	5 min., 11 sec.
Engine 52	09:16–19:31	14 min. 56 sec.	08:39–11:39	10 min., 45 sec.
Engine 53	11:05–19:30	14 min., 42 sec.	07:32–11:54	9 min. 53 sec.
Engine 54	11:18–16:38	14 min., 50 sec.	01:59–12:16	5 min., 40 sec.
Brush 51	—	—	09:14–49:27	20 min., 6 sec.
Brush 52	14:14–1:34:02	42 min., 53 sec.	07:15–22:59	15 min., 58 sec.
Brush 53	09:43–13:29	11 min., 24 sec.	02:02–17:09	9 min., 27 sec.
Brush 54	—	—	01:32–18:59	10 min., 34 sec.
Rescue 52	11:41–34:14	22 min., 7 sec.	08:12–08:51	8 min., 28 sec.
Rescue 53	21:13–46:09	31 min., 37 sec.	11:09–12:31	11 min. 44 sec.
Rescue 54	—	—	12:15–15:32	13 min., 52 sec.

The next two figures illustrate the turnout times for Engine 251 and Brush 251, which are the two apparatus most frequently staffed by WVFR Career Firefighters. These have been categorized as EMS incidents and Motor Vehicle Accidents (MVA) in the first figure, and as fire-related incidents and fire alarms in the second figure. Turnout times were calculated based on data from incidents occurring between 0600 and 1800 hours, Mondays through Fridays.

Figure 61: Career Staff Turnout Times at the 90th Percentile—EMS & MVAs (2021–2024)**Figure 62: Career Staff Turnout Times at the 90th Percentile—Fires & Alarms (2021–2024)**

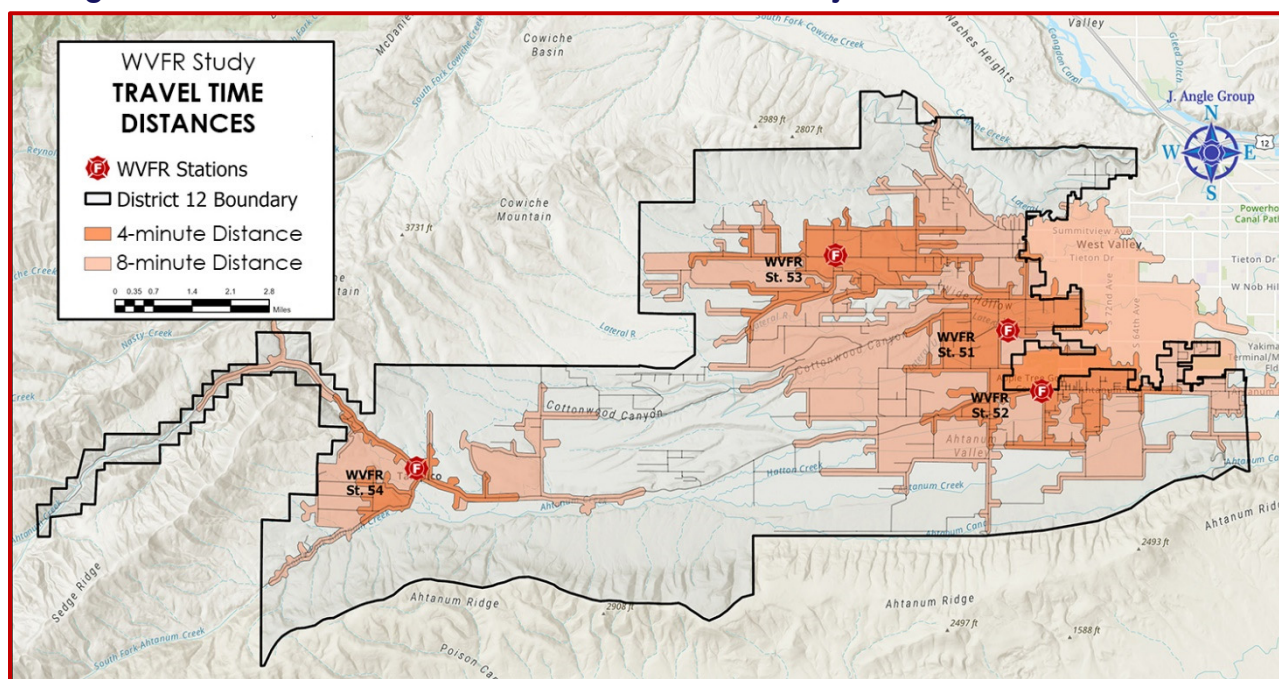
As shown, Engine 251 and Brush 251 tended to have the shortest Turnout Times. Combined, those apparatus averaged a Turnout Time of 3 minutes and 23 seconds for fires and alarms and 2 minutes and 57 seconds for EMS incidents and Motor Vehicle Accidents.

WVFR Travel Times

The following figure utilizes a GIS analysis to estimate travel time from each WVFR fire station. Travel time is calculated using the posted speed limit and adjusted for negotiating turns, intersections, and one-way streets.

The analysis shows that approximately 37% (78 road miles) of the WVFR service area is within 4 minutes of a fire station, and an additional 42% (90 road miles) is within 8 minutes from one of the four WVFR stations. In total, 168 road miles (79%) within Yakima County Fire District 12 can be accessed within an 8-minute travel time.

Figure 63: Station Distribution—4-Minute & 8-Minute Projected Travel Time Distances

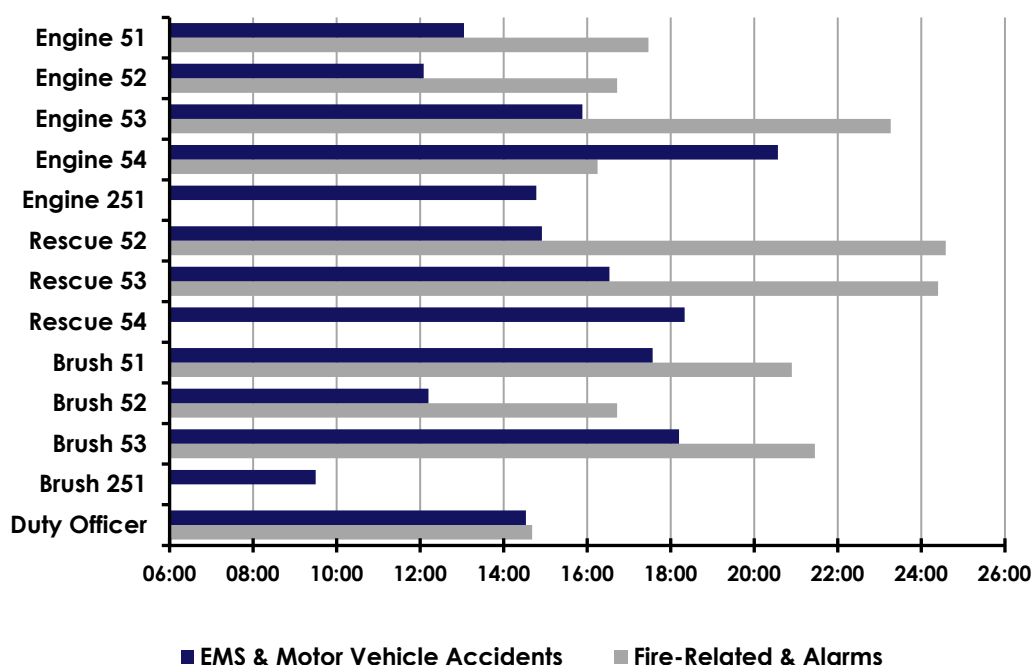


Response Time

The most common and visible measure of fire district performance is Response Time. As previously defined, it is the interval between when a unit (or the fire district) is notified by dispatch of a call and the time of the apparatus and personnel arriving on scene. WVFR has a response time objective of 8 minutes for the first mile and 2 minutes for each subsequent mile.

The next figure illustrates the 2024 response performance at the 80th percentile of the Duty Officer and the apparatus most frequently used by WVFR Volunteer Firefighters. The analysis was based solely on specific apparatus and all incidents that occurred on days and times when the Career Firefighters were off duty. Because of the low volume of incidents, in some cases, substantially long response times were excluded from the analysis to prevent anomalies from skewing the results.

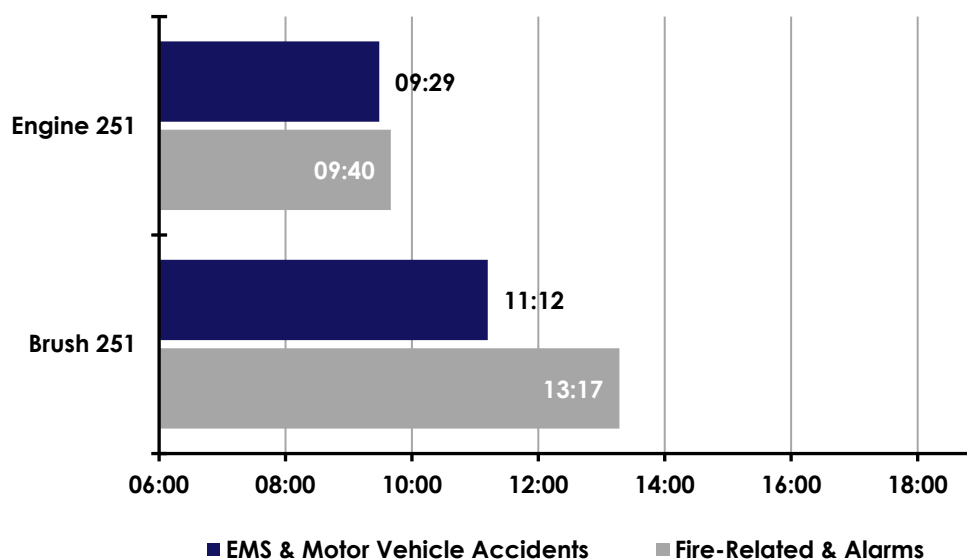
Figure 64: Response Times by Unit at the 80th Percentile—Volunteer Firefighters (2024)



During 2024, response time performance for apparatus staffed by WVFR's Volunteer Firefighters averaged 15 minutes and 18 seconds for EMS incidents and MVAs and 20 minutes and 12 seconds for fire-related calls and alarms.

The following figure illustrates the 2024 response time performance at the 80th percentile of the two apparatus typically staffed by WVFR Career Firefighters. Data included only calls occurring on Mondays through Fridays from 0600 to 1800 hours.

Figure 65: Response Times by Apparatus at the 80th Percentile—Career Staff (2024)



During 2024, response time performance for apparatus staffed by WVFR's Career Firefighters averaged 11 minutes and 28 seconds for fire-related calls and alarms and 10 minutes and 20 seconds for EMS incidents and Motor Vehicle Accidents.

The following figure compares the 2024 response time performance of Career Firefighters and Volunteer Firefighters by incident type. As shown, Career Firefighters had a combined overall Response Time performance that was nearly 5 minutes shorter than that of the Volunteer Firefighters. The intent of this analysis was not to criticize either firefighter group but only to illustrate the difference in performance.

Figure 66: Comparison of WVFR Response Time by Incident Types (2024)**— Response Times at the 80th Percentile —**

Incident Type	Paid Firefighters	Volunteer Firefighters
ALL CALLS	9 min., 53 sec.	14 min., 47 sec.
Fires & Fire Related	10 min., 42 sec.	14 min., 49 sec.
Emergency Medical Services	9 min., 51 sec.	14 min., 47 sec.
Motor Vehicle Accidents	9 min., 43 sec.	13 min., 50 sec.
Alarms	13 min., 9 sec.	14 min., 21 sec.
All Others	8 min., 18 sec.	14 min., 14 sec.

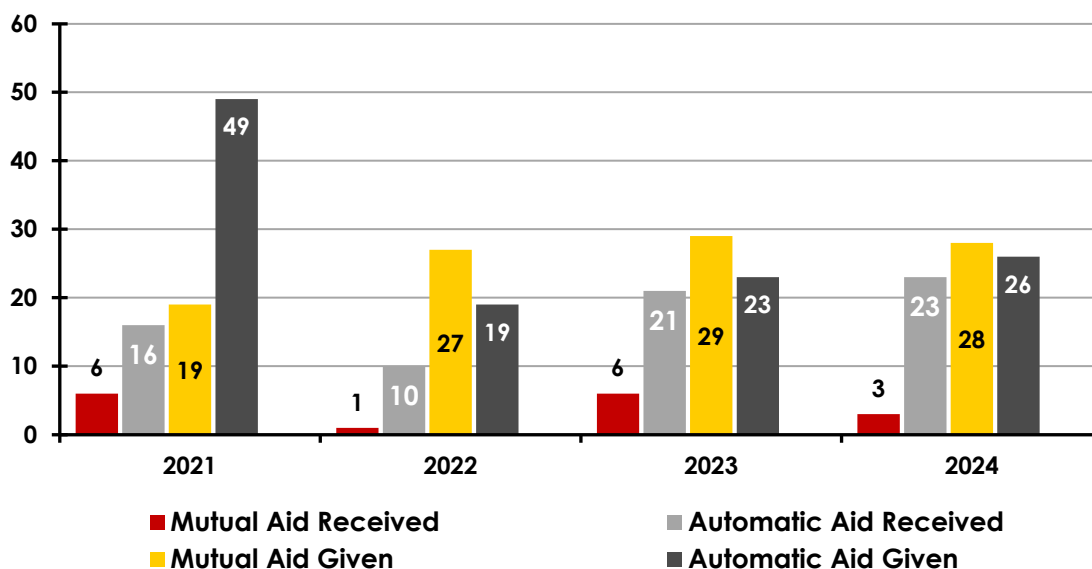
Mutual Aid & Automatic Aid Systems

Mutual Aid is typically employed on an as-needed basis, where units are specified by request of the Incident Commander. Automatic Aid differs from Mutual Aid in that, under certain mutually agreed-upon criteria, resources from an assisting agency are automatically dispatched as part of the initial response.

These agreements ensure the necessary number of personnel and that the appropriate equipment is available to respond to specific incidents. Automatic Aid resources are often defined in the dispatch run cards for the participating fire agencies. Mutual Aid and Automatic Aid operations are integral to emergency operations for WVFR, increasing the concentration of resources available to mitigate incidents.

The following figure shows the quantity of Mutual Aid Given and received, and Automatic Aid Given and received during 2021–2024.

Figure 67: Mutual Aid & Automatic Aid Given & Received (2021–2024)



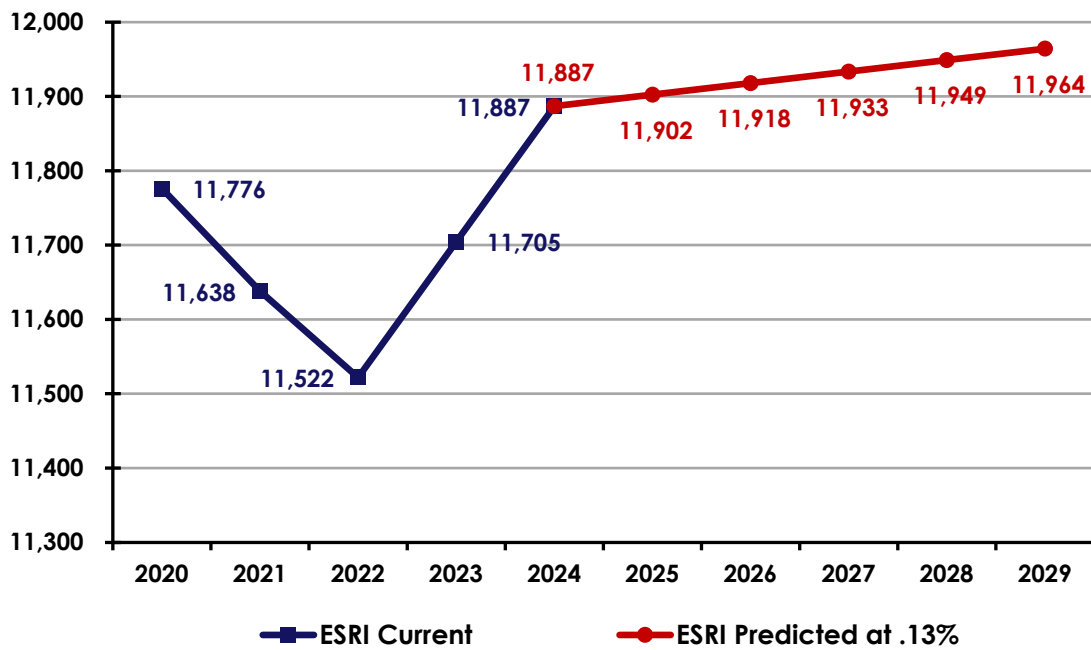
Combined, Mutual Aid and Automatic Aid given represented 72% of these calls. The remaining 28% consisted of Mutual and Automatic Aid received.

Population & Service Demand Projections

Population Growth Projections

Acquiring accurate population estimates is typically challenging because the United States Census Bureau does not maintain census data specific to the boundaries of local fire districts. In Yakima County, the Department of Emergency Medical Services (DEMS) uses fire district populations as part of its funding distribution formula for EMS Levy funds. DEMS obtains population data from the Yakima County GIS Department.

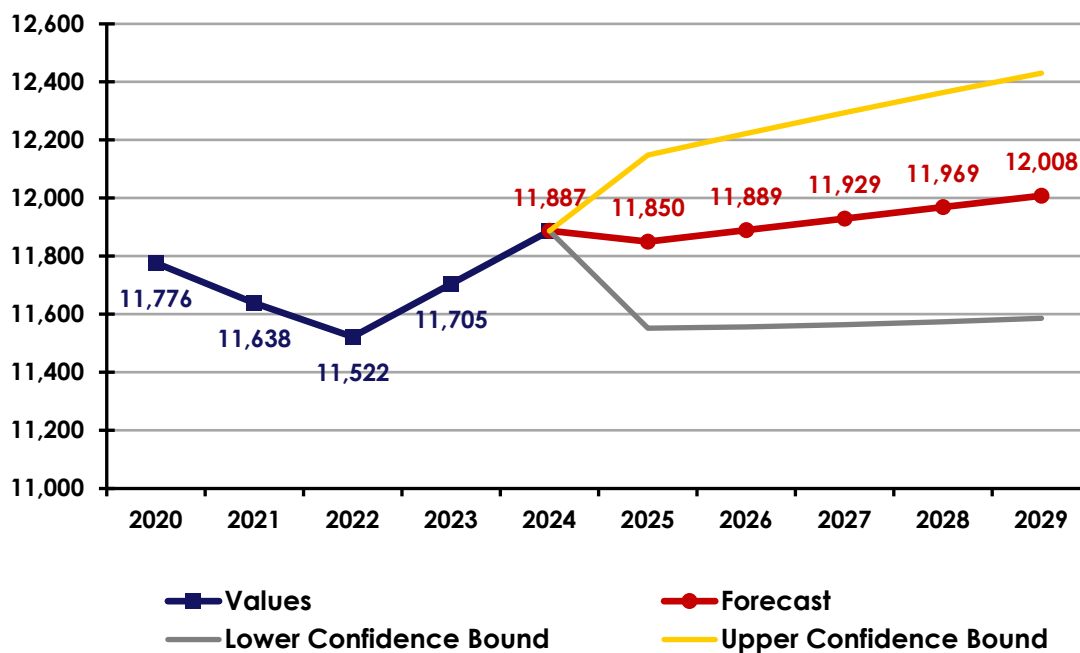
For this analysis, projections were based on the best historical population data that JAG could obtain. Two separate population projections were performed for the service area of Yakima County Fire District 12 (WVFR response area). The first utilized ESRI® data (ArcGIS Community Analyst), and the second was generated using Excel forecasting.

Figure 68: WVFR Service Area Population Projections—ESRI (2020–2029)

Based on the analysis in the preceding figure, using ESRI's compound annual growth rate of 0.13% between 2023 and 2028, it was estimated that Yakima County Fire District 12 will see a slight population increase of approximately 0.65% by 2029.

The next figure was generated using Microsoft® Excel forecasting and indicates an increase in population of 1% between 2024 and 2029.

Figure 69: WVFR Service Area Population Projections—Excel (2020–2029)

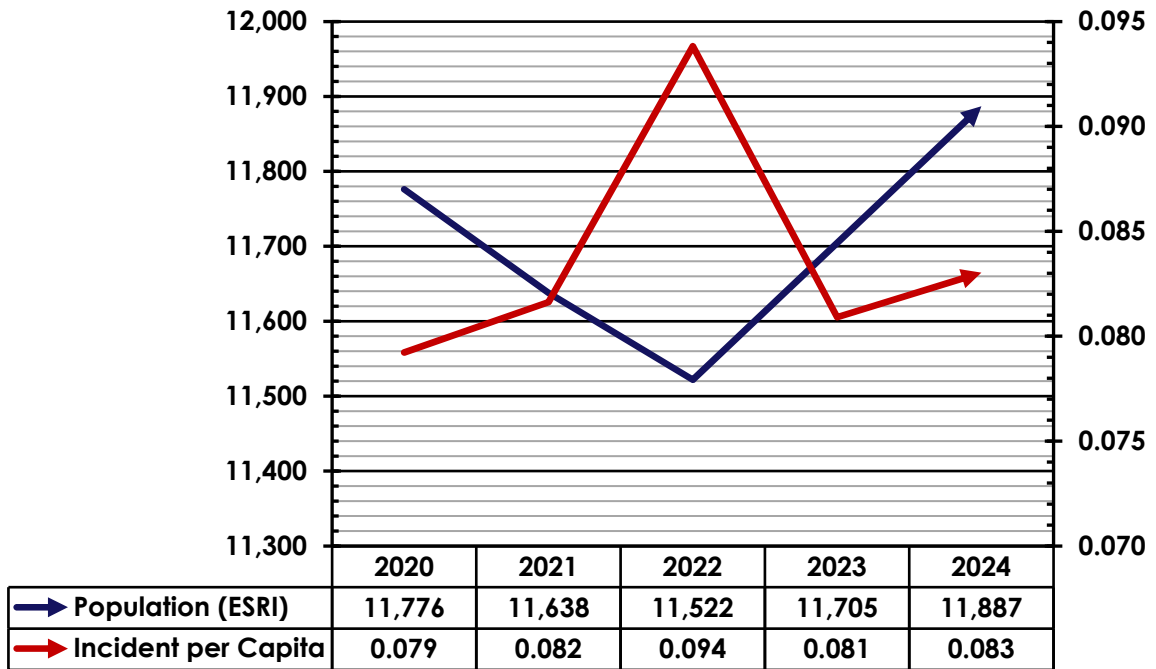
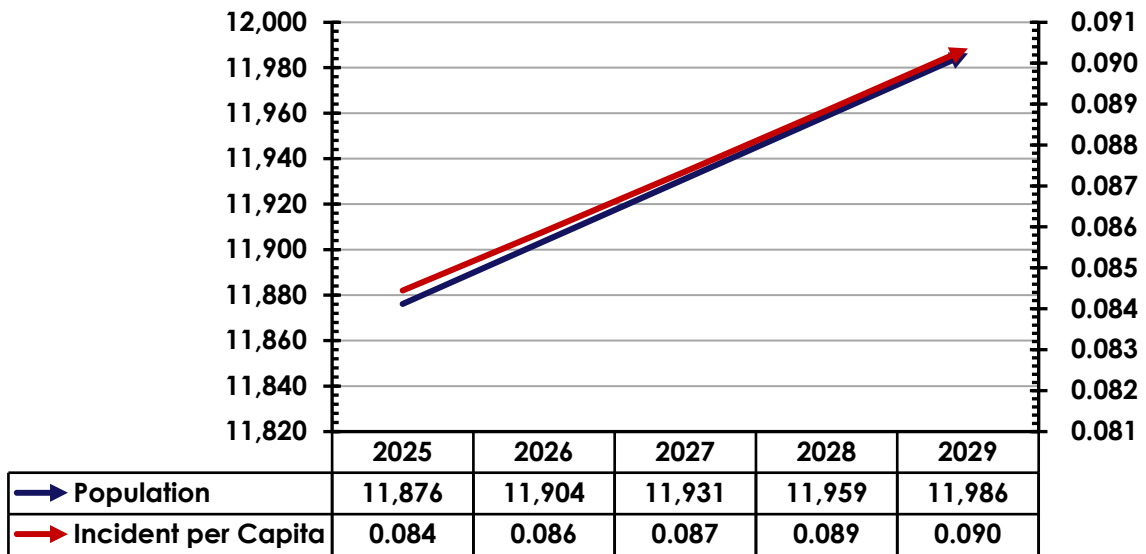


Service Demand Projections

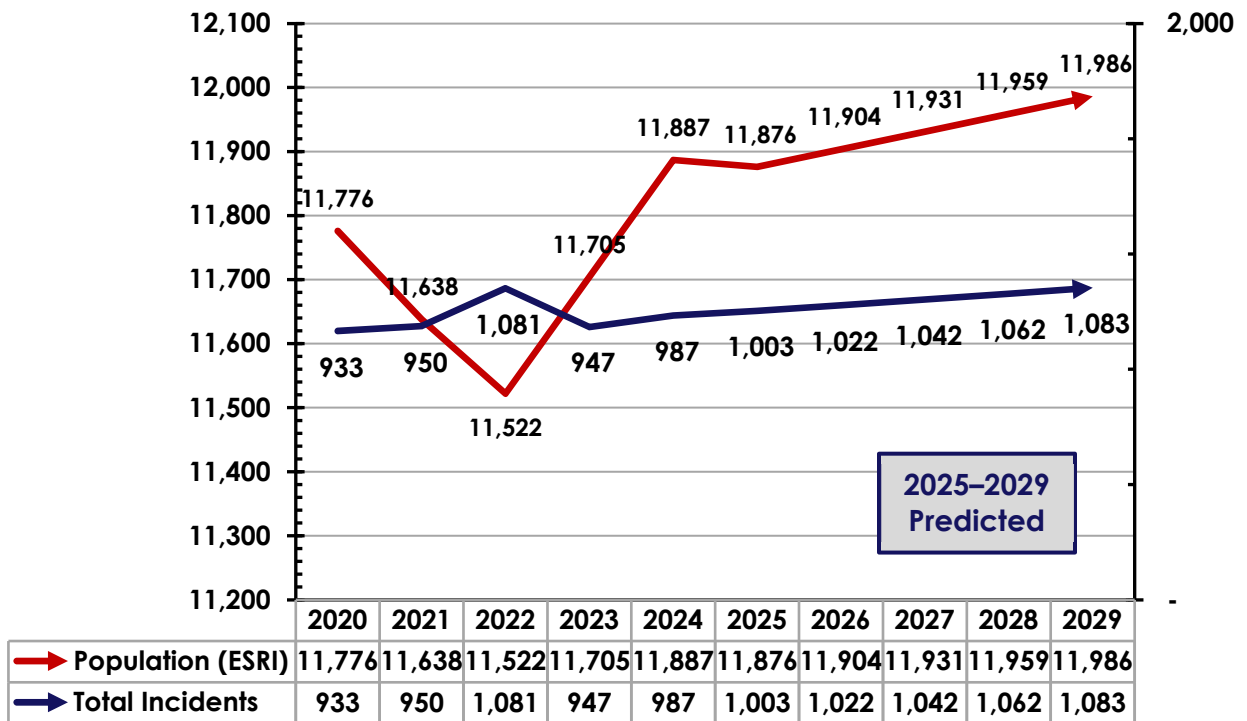
JAG utilized the average ESRI and Excel population projections within the WVFR service area to forecast future service demand. The population tends to be a relatively good indicator of service demand, and the current service demand per capita population can provide a standard for future service demand. The assumption is made that future demographics will be like current demographics.

The current service demand per capita population is determined by dividing the annual number of responses by the population in thousands. This analysis of the historical data considers the effects of the COVID-19 pandemic.

Based on historical data and as illustrated in the following figures, WVFR has had an average incident per capita of .084 between 2020 and 2024. The average growth in incidents per capita was 1.7% over the same period. Therefore, a growth factor of 1.7% was used to estimate future projections.

Figure 70: WVFR Historical Incidents Per Capita (2020–2024)**Figure 71: WVFR Future Incident Per Capita Prediction Rate (2025–2029)**

Based on these analyses, West Valley Fire-Rescue is projected to experience a 10% increase in service demand between 2024 and 2029.

Figure 72: WVFR Projected Population & Service Demand (2020–2029)

Section II:

OTHER PROGRAMS & DIVISIONS

Community Services Division

As described on its website, the Community Services Division (CSD) is a function of West Valley Fire-Rescue's Administration, which serves as the "voice" of the organization. Volunteer and career staff participate in developing media campaigns, community events, media relations, fire victim assistance, and addressing intergovernmental and legislative issues.

Community Programs & Events

The Community Services Division offers the following programs and services:

- Blood Pressure Checks—Citizens can get their blood pressure checked at Station 51 during regular business hours.
- School groups, civic organizations, businesses, or other community groups may:
 - Schedule a visit to any of the WVFR fire stations.
 - Request a fire engine to visit their school or other location.
 - Schedule a life safety class.
- Community Center Rental—the classroom and Community Center at Station 54 are available for rental by community groups.
- Blood Drive—Host Blood Drives are hosted on behalf of the American Red Cross.
- Training Center Rental—Classrooms and the Conference Room at WVFR Station 51 are available for public use.

Intergovernmental Affairs

This division of WVFR is responsible for intergovernmental affairs. While most of the fire district comprises unincorporated areas, there are several census-designated places (CDP) and unincorporated "communities" in the district. Firefighters and other staff collaborate with civic groups, attend neighborhood association meetings whenever possible, and meet with various other groups. WVFR staff work with elected and appointed officials to ensure their needs and issues are addressed.

WVFR maintains strong relationships with federal fire service organizations, the Washington State Department of Natural Resources (DNR), the Fire Marshal's Office of the Washington State Patrol, and other organizations regarding regulatory issues. In addition, WVFR participates in the Washington Interagency Incident Management Team, works with the Safe Kids Coalition, and attends meetings of the Yakima County Fire Chiefs Association.

Training Division

Delivering safe and effective fire protection and EMS requires a well-trained workforce. The components of emergency services are built on the foundation of training. The level of training a fire district provides determines a Firefighter's capacity to use resources and equipment successfully.

Delivering high-quality fire-related, rescue, EMS, and other training requires dedicating significant internal training resources and staff or contracting with external agencies and providers for such services. In addition, an effective training program requires specific written objectives, lesson plans, and methods to verify learning, knowledge comprehension, and retention.

Initial training of newly hired (career or volunteer) Firefighters is essential, requiring a structured recruit training and testing process. Regular, ongoing, and verifiable training is essential to ensure the retention of manipulative skills and knowledge. Competency begins after the recruitment or probationary period has ended.

Continuous, ongoing training is a career-long endeavor that requires sustained commitment from fire district management and operations staff throughout a Firefighter's tenure. The fire service is—and has always been—a dynamic environment of social and technological change. Fire and EMS agencies across the country must keep current with transformative environments so that progressive strategies are embedded into a fire district's processes, which can yield life-saving aid to those affected by significant events.

The following analysis summarizes West Valley Fire-Rescue's training equipment, facilities, execution, and effectiveness.

Training Administration

Training is a significant component of an efficient and capable fire district. WVFR maintains its Training Division under the direction of the Deputy Chief. It utilizes multiple instructors and subject matter experts (SME) with an assortment of certifications from the *International Fire Service Accreditation Congress (IFSAC)*, the *National Wildfire Coordinating Group (NWCG)*, and other organizations.

Administrative staff provide clerical and other support to the Deputy Chief. WVFR rates its facilities for training administration as "Good." The fire district hopes to hire a full-time Training Officer sometime in 2025 or 2026. A training report is included in the annual fire district report. West Valley Fire-Rescue budgets over \$50,000 annually for training.

The Training Division has specific goals and objectives and maintains a list of annual required training subjects. The following is the Training Division's Goal Statement:

West Valley Fire-Rescue Training Division Goal Statement

The Training Division is dedicated to the development of quality members through realistic and relevant training, practical evolutions, ongoing education, fire prevention awareness, officer development, support services, and disaster preparedness.

Training Records

West Valley Fire-Rescue maintains training records for its individual Firefighters and other staff, and the records are available to staff upon request. Training records are not in an electronic format, but the fire district is in the process of digitizing them. Additionally, WVFR monitors the certifications of its personnel, including EMS, fire, and other relevant credentials.

Training Facilities & Resources

West Valley Fire-Rescue maintains substantial training facilities and resources. Approximately five acres of property adjacent to Station 51 are available for training and continuing education activities. Facilities and props include:

- Large classroom.
- Two-story tower.
- House-search prop.
- SCBA confidence maze.
- Denver Drill prop.
- Roof prop.
- Confined space prop.

Live fire props and other fire-related training resources include:

- Class B Burn room (Fireblast Global®).
- Class B dumpster prop.
- Class B car prop (Yakima Training Center Fire Department).
- Smoke machine.
- Digital Fire Simulator (BulEx™).
- Propane Fire Extinguisher Prop (BulEx™).

In addition, the fire district maintains an assortment of EMS training supplies:

- CPR manikins (adult, child, and infant).
- Moulage kit.
- Training on Automated External Defibrillators.
- An assortment of other disposable supplies and durable goods.

General Training Competencies & Personnel Trained

The WVFR Training Division provides training and continuing education on various mandatory topics. The following figure summarizes the general competencies in training topics and certification levels provided by the fire district.

Figure 73: WVFR General Training Competencies

Training Competencies	West Valley Fire-Rescue
Incident Command System	IS 100, 200, 300, 400, 700, & 800
Accountability procedures	In Recruit Academy & ongoing
Training SOGs in place	Yes
Training safety procedures	Yes. Safety Officer during high-risk drills
Live fire training	Follows NFPA 1403 & WAC 296-305-05502
Scene operations training	Follows WAC 296-305
Respiratory protection training	Meets NFPA & WISHA standards
RIC training	Follows WAC 296-305
TIC training	Periodically incorporated into drills
Recruit Academy	Internal academy
Special Rescue Training	No
Hazmat certifications	All Awareness level, some Operations level
Wildland certifications	NWCG Firefighter Type 2 through Strike Team Leader
Vehicle extrication training	Periodically
Emergency driving & ops	EVIP 3.0 annually
Small tools & equipment	Both were taught during the Recruit Academy
Communications & dispatch	Recruit academy & periodically
Special hazards	Drills on LPG, LNG, electricity, EV, Li-Ion

In Washington State, Chapter 296-305 Washington Administrative Code (WAC) defines rules for Safety Standards for Firefighters, as adopted under the *Washington Industrial Safety & Health Act of 1973* (Chapter 49.17 RCW). As shown in the preceding figure, the WVFR Training Division ensures its Firefighters and officers are provided with their primary fundamental skill sets.

EMS Training

The Yakima County Department of EMS provides initial EMT-Basic training and administers and delivers the Ongoing Training & Evaluation Program (OTEP). If needed, the Department of EMS will loan EMS training supplies to WVFR. The Training Division provides Advanced First Aid training to its recruits during the Firefighter Academy.

Figure 74: Methodologies Utilized by WVFR in Training

Methods	West Valley Fire-Rescue
Manipulative skills & tasks	1–2 drills monthly
Skills performance evaluations	Recruit Academy & during drills
Annual Training—Fire requirements	Must attend mandatory & 50% of training
Annual Training—EMS requirements	EMT-Basics must attend 16 hours annually
Use of lesson plans	Varies depending on the training topic
Multi-company drills	At least quarterly
Night drills	48–50 times annually
Multi-agency drills	Yes, with various other departments
Inter-station drills	Every 2–3 months
Disaster drills conducted	Scheduled annually by OEM
Pre-fire planning	Occasionally & according to NFPA 1620
Safety policies/procedures in training	Yes
Post-incident analyses conducted	Yes

As shown in the preceding figure, the West Valley Fire-Rescue Training Division employs a range of methods to deliver training and ensure that minimum training and continuing medical education requirements are met.

Personnel Trained

In 2024, 82 personnel received training that totaled 7,730 hours. The following figure shows the number of hours of fire-related and EMS-related training.

Figure 75: WVFR Personnel Trained (2024)

Topics	Classroom or Online	Practical Skills Sessions
Fire-Related Training	564 hours	2,958 hours
EMS-Related Training	656 hours	656 hours
Other Training	595 hours	2,301 hours

The following figures show the training grounds and facilities behind Station 51.

Figure 76: WVFR Training Props & Facilities



Figure 77: WVFR Training Grounds



Fire Prevention Division

Mission & Vision of the Division

The Fire Prevention Division has established Mission and Vision Statements:

Mission Statement

We will work together to create a safer Yakima County through educational efforts, coalitions, and awareness by changing unsafe behaviors and impacting high-risk audiences based on community needs.

Vision Statement

We will work together through educational efforts to create a fire-safe and injury-free community.

Public Education & Prevention Programs

The Administrative & Finance Officer manages the Fire Prevention Division (FPD) with assistance from other fire district members. The AFO serves as WVFR's Public Education Officer (PEO). The FPD develops and provides various fire prevention and life safety programs that can be taught to citizens of all ages. Some of these include:

- **Exit Drill in the Home (EDITH)**—Teaches children and families at three grade schools in the fire district about safely exiting a fire.
- **Smoke & Carbon Monoxide Alarms Program**—WVFR installs both types of alarms at no cost for residents in the fire districts.
- **Injury Prevention**—The FPD provides a Kids' Day Bike Rodeo and bicycle helmets.
- **Juvenile Fire Setters Education Program**—The division works with the Yakima Fire Department to teach children about the dangers of fire.
- **Babysitting Classes**—Safe Sitter® program offered.
- **Wildland Interface Education**—West Valley Fire-Rescue offers public education and property inspections regarding wildland-urban interface, as well as occasional "Chipper Days" to help reduce wildfire risk.

The preceding is a list of various public education and prevention programs offered by WVFR. However, this is not an exhaustive list, as the fire district also offers additional programs, including blood pressure checks, occasional CPR training, and information on its social media platforms.

Community Risk Assessment & Community Risk Reduction Plan

West Valley Fire-Rescue has not completed a comprehensive Community Risk Assessment/Standards of Cover (CRA/SOC) or Community Risk Reduction (CRR) plan.

Yakima County Fire Marshal's Office

The WVFR Fire Prevention Division does not conduct regular fire and life safety inspections or fire code plan reviews but instead relies on the Yakima County Fire Marshal's Office (FMO) to perform them. Yakima County has adopted the 2018 International Fire Codes (IFC).

West Valley Fire-Rescue can determine the simple fire origin and cause, but will work with the Fire Marshal's Office (FMO) on more complex incidents and for fire investigations for incidents occurring within the fire district.

Wildland Interface Program

The FMO works to mitigate the risk to life and structures from wildland fire exposures and prevent fires from spreading from adjacent structures into the wildland fuels. The *North Fork Tampoico Firewise Community* was established approximately six miles west of Station 54. The Falcon Ridge Firewise Community was established in 2024 in Cottonwood Canyon.

Firewise USA® is a program created by the National Fire Protection Association. The purpose is to assist local communities and volunteers when working collaboratively to reduce wildfire risk through proactive measures. These can include neighborhood-level planning and individual home improvements to enhance wildfire resilience.

Support Services Division

The Support Services Division is responsible for several programs related to the physical necessities of West Valley Fire-Rescue.

Equipment Program

Equipment maintenance and purchases are the responsibility of the Equipment Program. These include at least the following:

- Self-Contained Breathing Apparatus (SCBA) and air bottles.
- Various sizes of fire hose and nozzles.
- Ladders of various sizes.
- Air compressors.
- Automated External Defibrillators.
- Assorted oxygen delivery devices.
- Emergency response and staff vehicles, and their associated equipment.

The Equipment Program also purchases and inventories equipment and parts, schedules and serves as a liaison with outside agencies and vendors, responds to incidents to support operations with rehabilitation, fuel, power, air, communications, and provides potential troubleshooting when indicated.

Apparatus Specification Program

The Apparatus Specifications Program is responsible for:

- Overseeing the bidding process.
- Organizing committees to create specifications for vehicles and apparatus.
- Making recommendations for purchases.
- Taking delivery of and placing vehicles and apparatus in service.

Communications Program

This program works closely with VFC and RACOM Communications to repair, assess, and upgrade its communications equipment, including cell phones, pagers, mobile radios, and portable radios. It also works with the Commissioners' Communications Committee.

Fire Hydrant Program

There are over 50 fire hydrants throughout the fire district. Some of these are owned by Yakima County Fire District 12. The program is responsible for:

- Inspecting and maintaining hydrants semi-annually.
- Managing tests on newly installed hydrants.
- Coordinating the repair of damaged and malfunctioning hydrants.
- Flow-testing hydrants annually.

Facilities Program

The Facilities Program is responsible for providing preventative maintenance and upkeep to the Maintenance Shop, the Administrative Building, and the WVFR fire stations. This work includes at a minimum the following:

- Managing maintenance.
- Installing new roofs (bidding, project management).
- Seal-coating parking lots. Electrical repairs.
- Painting.
- General remodeling.

Quartermaster Program

The Quartermaster Program manages the following:

- Small tools and equipment are used in operations.
- Uniforms and protective clothing.
- Emergency medical equipment and supplies.
- Office supplies and equipment.
- Household supplies and equipment.
- Multiple other tools and items.

Section III: FINDINGS, STRATEGIES, & RECOMMENDATIONS

Strategies & Recommendations

The following section lists the various recommendations that resulted from the J Angle Group's comprehensive evaluations and multiple analyses of West Valley Fire-Rescue.

Staffing & Personnel

Recommendation A-1: Consider hiring two Career Firefighters.

Description: WVFR should consider adding two FTE Career Firefighter positions, one of which should be a Captain position. This would result in two three-person teams and an additional company officer position that could be assigned additional responsibilities.

WVFR should modify the existing policy of the two-person Duty Crew staffing accordingly. When necessary, a three-person crew could be split to deploy a tender, brush truck, or other apparatus in addition to an engine.

Outcome: An improved ERF, better Firefighter safety, and additional staff who can be assigned responsibilities other than emergency operations.

Cost Estimate: Salary and benefits at approximately \$165,000 annually, in addition to the costs of uniforms, turnouts, and other miscellaneous costs. Captain's salary to be determined by the Board of Fire Commissioners.

Recommendation A-2: Consider assigning the new Captain to the Duty Crew to function primarily as a company officer with additional responsibilities.

Description: This individual should continue to serve in operations on the Duty Crew as a company officer and function as the daily supervisor of the Career Firefighters and the new Lieutenant. However, with this promotion, the Captain should be assigned additional ongoing projects and responsibilities. The Captain should be assigned to a crew opposite the new Lieutenant.

Outcome: Another FTE that can enhance emergency operations as a company officer and Firefighter in addition to managing important projects and responsibilities.

Cost Estimate: Staff time.

Recommendation A-3: Consider the development and implementation of a “Resident Firefighter” program.

Description: WVFR has a strong group of Volunteer Firefighters—some of whom may be seeking employment as career Firefighters—and the daytime-only schedule of the Career Firefighters. WVFR should consider expanding the volunteer program to include a “sleeper” program (also known as a resident firefighter program).

Implementing a Resident Firefighter program would require reconfiguring at least one station (preferably Station 52) to accommodate sleeping quarters and living spaces.

Outcome: A Resident Firefighter program can benefit the fire district and participating volunteers in various ways, including:

- **Additional Personnel could improve ERF:** Resident firefighters can be available to supplement Volunteer Firefighters and the Duty Crews.
- **Hands-on Experience:** Resident firefighters gain practical experience responding to emergency calls, participating in drills, and learning from experienced firefighters.
- **Free Housing:** Many programs offer free or low-cost housing at the fire station, thereby eliminating or reducing housing costs in communities with higher living costs.
- **Training and Certifications:** Resident programs often provide or subsidize training and certifications.
- **Career Advancement:** Resident programs can serve as a stepping stone to career Firefighter positions or other careers in public safety, and can be a potential source for future WVFR employees.
- **Financial Incentives:** Some programs offer stipends, tuition reimbursement, or other forms of compensation.
- **Networking Opportunities:** Living at a fire station offers a unique opportunity to build both professional and personal relationships with fellow Firefighters, thereby creating a strong support system.

Establishing a successful Resident Firefighter program would require an experienced officer(s) to maintain consistent support and program management. There are several examples of Resident Firefighter programs in Washington State (e.g., Walla Walla County Fire District #5, Grant County Fire District #3, Spokane Fire District #9, etc.).

Cost Estimate: To be determined, but will require a substantial amount of staff time.

Recommendation A-4: WVFR should consider the feasibility of restructuring the use of the Duty Officer and Duty Chief positions.

Description: JAG believes that it may not be necessary to assign individuals to the positions of “Duty Officer” and “Duty Chief,” and that a single qualified Duty Chief (DC) should be assigned 24 hours daily. During the four-year period of 2021–2024, command officers responded to an annual average of the following number of incidents:

- Duty Chief: 17 calls.
- Duty Officer: 203 calls.
- Fire Chief: 46 calls.
- Deputy Chief: 110 calls.

JAG recommends that the Fire Chief, Deputy Chief, and any other qualified officer fulfill the role of Duty Chief during the day shift on Mondays through Fridays, and that other qualified officers serve in that position for 24 hours on weekends and during the evenings and overnight on Mondays through Fridays.

If WVFR has sufficient qualified personnel who can serve as an Incident Commander, there should be no need for both positions. The Duty Chief would essentially function as a typical shift Battalion Chief. Historical service demand indicates that, if available, the Fire Chief and/or Deputy Chief would likely respond to any major incident without the necessity of being “on-duty.” JAG recognizes that there have been and continue to be challenges in attracting qualified officers to serve in the position of Duty Officer.

Other issues that should be considered:

- Substantially increase the pay for individuals who may serve as the Duty Chief.
- Determine if there are options for the career officers to occasionally fill the Duty Chief position.
- When necessary for the Chief and Deputy Chief to function in the position of Duty Chief beyond their normal work hours, create a policy that would give them paid time off (“comp time”) at 1.5 hours for every hour served as the DC.
- Consider discussions with Yakima County Fire District 1 (Highland Fire Department) to explore an operational collaboration that would involve sharing the position of Duty Chief between the two fire districts.

Outcome: During incidents and other activities, this could potentially simplify the identification of the Incident Commander for operations personnel, mutual aid providers, and Valley Fire Communications. This could also improve the work-life balance for the chief officers. However, this policy would not prevent either chief officer from responding to emergency incidents.

Cost Estimate: To be determined by the Board of Fire Commissioners.

Operations & Deployment

Recommendation B-1: Consider working with Valley Fire Communications to consolidate the designated Response Zones into a maximum of 5–6 zones.

Description: Currently, Yakima County Fire District 12 is partitioned into 11 separate Response Zones. These appear to be unnecessary and may potentially complicate dispatch procedures, data collection, and specific incident analyses.

Outcome: Improved dispatch efficiency, simplified data collection, and more comprehensive data analyses.

Cost Estimate: Staff time.

Recommendation B-2: Consider developing an EMS Division within WVFR that would allow for non-firefighter EMS providers.

Description: As with most communities, calls for EMS represent the most frequent demand for service in the fire district. Recruiting Volunteer Firefighters has become much more challenging in recent years. In addition, there are individuals (some with a healthcare background) who are interested in participating in prehospital EMS but not fire protection and other related activities. Consider assigning these individuals to Station 52.

WVFR should consider creating an EMS Division and utilizing volunteers who may be interested in acquiring BLS-level training at the First Responder or EMT-B level.

Outcome: Additional volunteer personnel to respond to EMS incidents and provide medical support at fire scenes and other incidents.

Cost Estimate: Staff time and other costs would need to be determined.

Recommendation B-3: Consider exchanging Rescue 52 with Rescue 54 to enable a transport-capable unit at Station 52.

Description: Rescue 54 is likely more valuable at Station 52, as it is capable of transporting patients in the event an ambulance is not available, multiple casualty incidents (MCI), or other cases. Station 52 has better proximity to the Yakima Airport in the event of an MCI at that location. If needed in Station 54's response area, it can be deployed to that location.

Outcome: A more strategic location for WVFR's transport-capable unit; closer to the higher population centers. When needed, it will be more likely that operations personnel will be available to staff the unit.

Cost Estimate: No cost.

Incident Reporting & Records Management

Recommendation C-1: WVFR should begin preparing for the implementation of the National Emergency Response Information System.

Description: Preparing for the National Emergency Response Information System (NERIS) implementation is about setting the fire district up for a smooth transition from NFIRS to a more modern, data-driven system. Key steps to prepare for NERIS includes:

- Identify the required timeline to implement (October 2025 in Washington State).
- Designate a NERIS lead.
- Evaluate the current records management system.
- Identify the fire district's reporting method.
- Engage the members of WVFR on the value and need for data collection.
- Educate and train the members on the new system and changes.
- Identify a date to go live.

Outcome: Improved accuracy of incident data, better insight into operational performance.

Cost Estimate: Primarily staff time, but possibly expenses from the RMS vendor.

Recommendation C-2: WVFR should consider developing a Data Outlier Management policy to help ensure the accuracy of incident records.

Description: In fire district data analysis, an outlier is a data point that significantly deviates from other observations in the dataset. These outliers can arise for various reasons, such as data entry errors, unusual events, or genuine variability in the data. Addressing outliers is crucial for maintaining data integrity and ensuring statistical accuracy. JAG identified many outliers during its various analyses of WVFR incident data.

Examples of outliers in fire department data include:

- **Unusual Incident Counts:** For example, if a particular fire station reports an exceptionally high or low number of incident volume compared to historical data or other stations, this could be an outlier.
- **Response Times:** Extremely short or long response times compared to the average can be considered outliers.
- **Damage Estimates:** Very high or low fire damage estimates might be outliers, especially if they differ significantly from typical values.
- **Casualty Numbers:** Anomalously high or low numbers of injuries or fatalities in incidents can also be outliers.

Outcome: The outcome would better reflect the WVFR's performance. Handling outliers is crucial for maintaining data integrity and ensuring statistical accuracy. A sample outlier policy is presented later in Appendix A.

Cost Estimate: Staff time only.

Recommendation C-3: As part of the NERIS implementation, adopt a system and written policy for incident data review and quality improvement.

Description: WVFR should consider developing a quality improvement (QI) system for regular review of completed incident reports. Reports should be evaluated for timely completion, accuracy, and thoroughness. This should include feedback to the report authors. WVFR should have a written policy describing the minimum requirements for completing an incident report.

Outcome: Ensures all incident reports completed using the NERIS standard are accurate, complete, and timely—resulting in more comprehensive and accurate knowledge of operational performance.

Cost Estimate: Staff time.

Recommendation C-4: Eliminate the “Station 50” identifier in the records management system and consider another alternative to identify responses by the Duty Crew.

Description: Currently, WVFR uses “Station 50” as an indicator of a unit in which the Duty Crew (career staff) responded to an incident. This causes an inconsistency in the number of incidents attributed to the actual stations that responded to the incident. It is recommended that units be added to the CAD system to indicate career staffing. For example, “Engine 251DC,” where “DC” would represent a career-staffed or Duty Crew apparatus.

Outcome: More accurate insight into Duty Crew responses.

Cost Estimate: Staff time.

Recommendation C-5: Add specific metrics and information to the final designated Response Zones.

Description: Annually summarize demand, demographics (as available), most common property uses, special hazards, and performance based on each response in the Yakima County Fire District 12 designated response zones.

Outcome: Improved monitoring of demand, risk, and performance in each designated response zone. An example summary table is included in Appendix B. However, this table will need to be updated to reflect the NERIS standards. A comparison of NFIRS versus NERIS codes can be found at: www.responserack.com/neris/cheat-sheet.

Cost Estimate: Staff time.

Health & Safety

Recommendation D-1: Develop a Risk Management Plan.

Description: Ensure the development and implementation of a Risk Management Plan to ensure compliance with NFPA 1550. The plan should be updated and monitored annually. Recommendations and revisions should be made based on annual accident and injury data, significant incidents that have occurred, and feedback from WVFR staff and personnel. Per NFPA 1550, the plan should be evaluated by an independent source.

Outcome: Compliance with NFPA 1550 and a safe and healthy work environment for all West Valley Fire-Rescue employees.

Cost Estimate: Staff time and the cost of an independent plan review.

Recommendation D-2: Offer all Firefighters and staff the option of an annual physical examination.

Description: Annual physicals for Firefighters are not only an industry best practice, but also a guideline of the NFPA 1582 Standard. Firefighters are at increased risk for conditions such as hypertension, diabetes, high cholesterol, obesity, heart attacks, and cancer. The NFPA 1582 guidelines aim to mitigate these risks by ensuring that Firefighters undergo regular medical evaluations.

Outcome: Compliance with NFPA 1582 and a potentially healthier workforce.

Cost Estimate: Based on the cost of a local healthcare provider.

Recommendation D-3: Ensure Firefighters have access to a second set of clean turnout gear following fire-related incidents.

Description: Because of the exposure to cancer-causing and other toxic substances in fires and other incidents, all Firefighters should be issued or have access to a second set of turnout gear. A second set of turnouts does not necessarily have to be purchased for each Firefighter. Having several sets in different sizes would be a cost-effective option.

Outcome: Reduced exposure to toxic substances.

Cost Estimate: Approximately \$3,500 per set of turnouts.

Recommendation D-4: Yakima County Fire District 12 should consider modifying its current long-range Capital Improvement Plan to address certain recommendations in this report.

Description: Some of the recommendations in this report, coupled with ongoing and anticipated future growth in the fire district, will require careful planning to ensure the current physical facilities can accommodate anticipated increased staffing needs, contemporary fire station design, and environmental hazard mitigation measures.

Outcome: Enhanced safety and health of assigned crew members, and adequate space to accommodate a potential future 24-hour daily staffing model.

Fire Stations & Facilities

Recommendation E-1: Consider renovating Station 52 to enable sleeping quarters for 4–6 personnel.

Description: A renovation of this station to enable sleeping quarters would be necessary to develop a successful “Resident Firefighter” program. Additionally, Station 52 is currently the busiest in the fire district. Should call volumes continue to increase and the need for career staff to work overnight shifts, it will be necessary to have adequate sleeping quarters.

Outcome: The capability to house Resident Firefighters and/or career (or volunteer) personnel with the addition of adequate sleeping quarters and any other necessary facilities (e.g., showers and bathrooms for both genders).

Cost Estimate: To be determined.

Recommendation E-2: Continue to look for options and/or grants for replacing the concrete on the south side of Station 52.

Description: Portions of the concrete on the south and east sides of Station 52 are in poor condition and disrepair. There are important facilities on the south side of the station, including a refueling station and a septic system. JAG recognizes that repairs would be expensive. If possible, WVFR should determine if the repair could be completed incrementally.

Outcome: Improved a safer property around Station 52.

Cost Estimate: Staff time. The estimated cost would range from \$175,000–\$200,000.

Apparatus & Equipment

Recommendation F-1: WVFR should consider evaluating its existing reserve and other apparatus inventory by conducting a comprehensive cost-benefit analysis.

Description: West Valley Fire-Rescue has a substantial inventory of apparatus in reserve, and others that are being utilized infrequently. JAG recommends that the fire district conduct a cost-benefit analysis (CBA) of its non-frontline apparatus to determine if some equipment can be surplus and sold. JAG recognizes that in cases of a Washington State Fire Services Resource Mobilization, there is potential for the fire district to earn revenue. Therefore, this should be taken into consideration during the CBA.

Outcome: Potential revenue from the sale of assets, reduced costs of maintenance, and additional storage space.

Cost Estimate: Staff time.

Recommendation F-2: West Valley Fire-Rescue should consider replacing its next Water Tender with “Tactical Tender.”

Description: A “Tactical Tender” should be an engine with at least the following features:

- Tank capacity with at least 2,000–2,500-gallon capacity.
- Pump with at least 250 gpm capability.
- All wheel drive.
- Class A foam system.
- Mobile attack capability (pump and roll).
- If possible, a four-person cab.

Outcome: A new resource and expanded capacity to mitigate wildland and other fires.

Cost Estimate: \$550,000–\$750,000.

Financial Management

Recommendation G-1: WVFR should consider seeking the assistance of a subject matter expert in public relations to assist with the development of a communications plan for restoring levy funding levels.

Description: West Valley Fire-Rescue exemplifies prudent fiscal management by adhering to statutory financial constraints and upholding a high standard of transparency. However, the cost of delivering emergency services continues to rise at a pace that outstrips the revenue growth permitted under Washington State's 1% annual property tax increase limit (RCW 84.55.010)—unless otherwise authorized by voters.

To address this recurring challenge, WVFR would benefit significantly from engaging a communications expert with specialized experience in public safety. Such an expert could design and implement a comprehensive, multi-platform funding communication strategy to inform and engage the community, thereby strengthening public understanding and support for sustainable fire district funding.

Outcome: increased success in funding measures, potential restoration of funding levels to the maximum allowable of \$1.50 per \$1000 AV, improved public awareness and understanding, stronger community trust and engagement.

Cost Estimate: Staff time and training. Cost of contracting agency fee to be determined.

Recommendation G-2: Continue pursuing alternative funding pathways.

Description: As outlined in the Capital Improvement Plan, WVFR demonstrates prudent fiscal stewardship by proactively securing alternative funding sources for both capital improvements and key operational roles. By leveraging external resources, including FEMA's Assistance to Firefighters Grant (AFG), the Bureau of Indian Affairs, the Washington State Department of Natural Resources, the U.S. Department of Agriculture, and contributions from private insurers, WVFR has successfully offset significant costs that local taxpayers would otherwise bear.

Given that the cost-of-service delivery is increasing at a rate that outpaces Yakima County Fire District 12's revenue growth—especially under Washington State's statutory 1% property tax increase limit—the fire district will need to continue pursuing targeted funding solutions such as excess levies, state and federal grants, and limited-term bonds.

Through active pursuit of alternative funding sources, the fire district reduces the need for significant tax increases, allowing the community to benefit from essential fire and emergency services without assuming the full financial burden. This diversified funding strategy lessens dependence on property tax revenues, strengthens long-term financial planning, and reinforces the fire district's commitment to transparent and responsible fiscal management.

Additionally, securing grants and bonds enables WVFR to expedite critical investments in equipment, facilities, and staffing—enhancing public safety and operational readiness more rapidly than traditional funding alone would allow. However, Recommendation G-1 should be prioritized to enhance the education of the fire district, as primary funding sources such as grants and extra levies are not guaranteed.

Outcome: Reduce local tax burden, improve service delivery without delay, attain greater fiscal stability.

Cost Estimate: Staff time.

General Recommendations

Recommendation H-1: Complete a community-driven Strategic Plan.

Description: While WVFR has taken the proactive step of completing a strategic plan, the current plan was noted not to include community feedback from citizens and business owners. JAG recommends a more holistic approach that involves all stakeholders served by Yakima County Fire District 12.

A community-driven Strategic Plan should be modeled after the Center for Public Safety Excellence. Should WVFR ever consider fire service accreditation, this document would serve as one of three foundational elements required. Upon completion of the strategic plan document, it should be formally adopted by the Board of Fire Commissioners, who should receive periodic updates on progress.

Outcome: A 3–5-year planning document that is designed to meet the needs of the community by WVFR.

Cost Estimate: Staff time if completed in-house, approximately \$25,000–\$30,000 if contracted to a third party.

Recommendation H-2: Eventually complete a formal Community Risk Assessment & Standards of Cover (CRA/SOC) study.

Description: While this report serves the fire district as a limited Standards of Cover, a comprehensive Community Risk Assessment based on the Center for Public Safety Excellence would be of value to WVFR. A CRA/SOC study should not be undertaken until WVFR has improved its data collection and has at least three years of adequate data.

Outcome: A comprehensive planning document can define the risks currently facing the fire district and ensure WVFR can handle future risks. This document would serve as one of three foundational elements should the district consider fire service accreditation.

Cost Estimate: Staff time if completed in-house. An approximate estimate of \$45,000–\$55,000 if contracted to a third party.

Recommendation H-3: Ensure an annual review of all Standard Operating Guidelines.

Description: Ensure all SOGs are reviewed annually for consistency, legal mandates, and best practices, as well as to help ensure compliance with state and/or federal regulations. If this is not possible due to available staff time, develop a schedule to ensure that a third of all SOGs are reviewed annually, leading to 100% review in a three-year timeframe.

It is further recommended to engage stakeholders across the ranks of West Valley Fire-Rescue to complete this task as a form of career development and improve further buy-in.

Outcome: Comprehensive and updated Standard Operating Guidelines.

Cost Estimate: Staff time.

Recommendation H-4: All Mutual and Automatic Aid agreements should be reviewed and modified as necessary to ensure that all parties receive the maximum benefit.

Description: Mutual Aid and Automatic Aid operations are integral to WVFR's emergency operations by enabling an increase in the concentration of resources available to mitigate incidents.

Outcome: Ensure that all parties to such agreements are receiving optimal service without compromising coverage within each jurisdiction.

Cost Estimate: Staff time.

Recommendation H-5: WVFR should consider drilling more frequently with Yakima Fire Department crews housed at YFD stations with which they are most likely to work during Mutual and Automatic Aid incidents given and received.

Description: WVFR should attempt to arrange such drills 2–3 times annually. Drilling with YFD Station 94 crews is especially important for Station 52 personnel, as they provide Automatic Aid at significant airport incidents.

Outcome: Safer and more effective and efficient operations at incidents involving both WVFR and YFD.

Cost Estimate: Staff time.

Recommendation H-6: Improve consistency, compliance, and accountability in the performance of WVFR operational policies and procedures.

Description: During its interviews with Volunteer Firefighters and Career Firefighters, there was a consistent theme that not all individuals are held accountable for following WVFR policies and procedures. WVFR officers should perform a self-assessment to determine if they inadvertently revert to favoritism when addressing compliance with WVFR Standard Operating Guidelines or other fire district policies.

Outcome: Safer and more effective work environment. Improved morale and respect for the chain of command.

Cost Estimate: Staff time.

Recommendation H-7: Consider updating WVFR's current response performance goals and objectives.

Description: Using the results of the data analyses contained in this report should allow WVFR to re-evaluate and consider updating its existing response time performance goals and objectives. Although JAG does not recommend specific performance standards, the fire district should compare its objectives with those described in NFPA 1710 and NFPA 1720.

Outcome: Potential improvement in response performance standards.

Cost Estimate: Staff time.

Section IV: APPENDICES

Appendix A: Sample WVFR Data Outlier Management Policy

West Valley Fire-Rescue has established a series of thresholds for the inclusion of data in ongoing analysis of fire district operations. The purpose of these thresholds is to identify data outliers and exclude them from analysis designed to assist WVFR in discerning trends and operations. Anomalous data makes that process more difficult. These will include, but not limited to:

- The upper threshold for first-unit emergency response times in the jurisdiction under normal operating conditions and not staged is 20 minutes.
- The Duty Officer, Chief Officer, or company officer shall ensure that any response time exceeding 10 minutes that meets the criteria above will ensure that the stated reason for or explanation of the response time is documented in the report.
- Any response time greater than 15 minutes and meeting the criteria above, including those values outside the 20-minute threshold, shall be documented with an explanation of the response time and a determination as to whether the causes are correctable.
- If the cause of the outlier is correctable, the Duty Officer, Chief Officer, or company officer shall determine what action should be taken and who will be responsible.

Appendix B: Example Data Summary Table

RESPONSE ZONE DESCRIPTION:							
Number of Parcels in Zone:							
Property Use Description (Top Five)						Count	
WVFR INCIDENT DEMAND							
NFIRS Type	2025	2026	2027	2028	2029	2030	
Structure Fires (111–112 & 120–123)							
Other Fires (100 except above)							
Motor Vehicle (322, 323, 324, 352)							
EMS & Rescue (300 except above)							
Hazardous Condition (No Fire) (400)							
Service Call (500s)							
Good Intent Call (600)							
False Alarm and False Call (700)							
Other (200, 800, 900)							
TOTALS:							
SPECIFIC INCIDENT TYPES (included in totals above):							
Call Type	2025	2026	2027	2028	2029	2030	
Cardiac Arrest							
Trauma Alert							
Structure Fires							
Wildland Fires							
Response Performance Description (2019–2023)							

Appendix C: Table of Figures

Figure 1: West Valley Fire-Rescue Organization Chart (2025)	2
Figure 2: Comparison of Population Numbers by Data Source	3
Figure 3: Population Density of Yakima County Fire District 12 (2024)	5
Figure 4: Yakima County Fire District 12 Boundaries (2025)	7
Figure 5: Yakima County Fire District 12 Response Zones	8
Figure 6: WVFR Staffing Needs Based on Risk	11
Figure 7: Critical Tasking—Fire Incidents	12
Figure 8: Critical Tasking—EMS Incidents	13
Figure 9: Critical Tasking—Wildland Incidents	14
Figure 10: Mutual & Automatic Aid Resources Available to WVFR	17
Figure 11: Mutual Aid Stations	18
Figure 12: WVFR Regulatory Documents	21
Figure 13: WVFR Internal Communications Methods	22
Figure 14: Yakima County Fire District 12 Planning Processes (2025)	25
Figure 15: WVFR Historical General Fund Budget	28
Figure 16: WVFR Administrative & Support Staffing	33
Figure 17: WVFR Operational Staffing (2025)	34
Figure 18: Average Annual Salaries & Benefits (2025)	37
Figure 19: Criteria Utilized to Determine Fire Station Condition	43
Figure 20: WVFR Station 51	44
Figure 21: WVFR Station 52	45
Figure 22: WVFR Station 53	46
Figure 23: WVFR Station 54	47
Figure 24: Station 51—Apparatus & Staffing Assignments	48
Figure 25: Station 52—Apparatus & Staffing Assignments	48
Figure 26: Station 53—Apparatus & Staffing Assignments	49
Figure 27: Station 54—Apparatus & Staffing Assignments	49
Figure 28: WVFR Fire Stations Features Summary	50
Figure 29: West Valley Fire-Rescue Frontline Fleet Inventory (2025)	51
Figure 30: WVFR Command & Support Vehicles Inventory (2025)	52
Figure 31: Summary of WVFR Data Sources	55

Figure 32: WVFR Service Demand (2020–2024)	57
Figure 33: NFIRS Incident Codes & Descriptions	58
Figure 34: WVFR Service Demand by NFIRS Incident Type (2021–2024)	59
Figure 35: WVFR Service Demand by NFIRS Property Type (2024)	59
Figure 36: WVFR Service Demand by Fire Station (2021–2024)	60
Figure 37: Percentage of Service Demand by Fire Station (2021–2024)	60
Figure 38: Average Annual Service Demand of the 10 Busiest Apparatus (2021–2024)	61
Figure 39: Average Annual Service Demand on Command Units (2021–2024)	62
Figure 40: WVFR Average Service Demand by Month (2021–2024)	63
Figure 41: WVFR Average Service Demand by Weekday (2021–2024)	63
Figure 42: WVFR Average Service Demand by Hour (2021–2024)	64
Figure 43: WVFR Average Busiest Consecutive Periods (2021–2024)	65
Figure 44: WVFR Call Density—All Incidents (2024)	66
Figure 45: WVFR Call Density—Fire-Related Incidents (2024)	67
Figure 46: WVFR Call Density—Wildland-Related Incidents (2024)	67
Figure 47: WVFR Call Density—EMS Incidents (2024)	68
Figure 48: WVFR Station Distribution—WSRB 5-mile Travel Distance Criteria	69
Figure 49: WVFR Station Distribution—WSRB 7-mile Travel Distance Criteria	70
Figure 50: WVFR Station Distribution—WSRB 1.5-mile Travel Distance Criteria	71
Figure 51: WVFR Station Distribution—WSRB 2.5-mile Travel Distance Criteria	71
Figure 52: Accessibility of Road Miles by Fire Stations in the WVFR Service Area	72
Figure 53: WVFR Concurrent Incidents (2021–2024)	73
Figure 54: Time Commitment of WVFR Apparatus (2021 & 2022)	74
Figure 55: Time Commitment of WVFR Apparatus (2023 & 2024)	75
Figure 56: NFPA 1720 Staffing & Response Time Objectives	77
Figure 57: NFPA 1710 Response Objectives	78
Figure 58: WVFR Response Performance Objectives	79
Figure 59: Volunteer Turnout Times at the 90 th Percentile—By Apparatus (2024)	80
Figure 60: Turnout Times of Apparatus Staffed by Volunteer Personnel (2021–2024)	81
Figure 61: Career Staff Turnout Times at the 90 th Percentile—EMS & MVAs (2021–2024)	82
Figure 62: Career Staff Turnout Times at the 90 th Percentile—Fires & Alarms (2021–2024)	82
Figure 63: Station Distribution—4-Minute & 8-Minute Projected Travel Time Distances	83
Figure 64: Response Times by Unit at the 80 th Percentile—Volunteer Firefighters (2024)	84

Figure 65: Response Times by Apparatus at the 80 th Percentile—Career Staff (2024)	85
Figure 66: Comparison of WVFR Response Time by Incident Types (2024)	86
Figure 67: Mutual Aid & Automatic Aid Given & Received (2021–2024)	87
Figure 68: WVFR Service Area Population Projections—ESRI (2020–2029)	88
Figure 69: WVFR Service Area Population Projections—Excel (2020–2029)	89
Figure 70: WVFR Historical Incidents Per Capita (2020–2024)	90
Figure 71: WVFR Future Incident Per Capita Prediction Rate (2025–2029)	90
Figure 72: WVFR Projected Population & Service Demand (2020–2029)	91
Figure 73: WVFR General Training Competencies	97
Figure 74: Methodologies Utilized by WVFR in Training	98
Figure 75: WVFR Personnel Trained (2024)	99
Figure 76: WVFR Training Props & Facilities	99
Figure 77: WVFR Training Grounds	99

Appendix D: References

- ¹ American Community Survey, U.S. Census Bureau.
- ² ESRI Infographics.
- ³ Washington State Office of Financial Management (OFM).
- ⁴ American Community Survey, U.S. Census Bureau.
- ⁵ Ibid.
- ⁶ Ibid.
- ⁷ American Community Survey, U.S. Census Bureau.
- ⁸ Yakima County Geographic Information Services.
- ⁹ Protection Classification Report for: Yakima County F.P.D. 12; January 1, 2024. Washington Survey & Rating Bureau.
- ¹⁰ Ibid.
- ¹¹ Ibid.
- ¹² Yakima County Office of Emergency Management website.
- ¹³ Washington Administrative Code (WAC) 296-305-05002.
- ¹⁴ NFPA 1900: Standard for Aircraft Rescue and Firefighting Vehicles, Automotive Fire Apparatus, Wildland Fire Apparatus, and Automotive Ambulances (2024).
- ¹⁵ www.usfa.fema.gov/nfirs/neris
- ¹⁶ Civilian Fire Fatalities in Residential Buildings (2018–2020), USFA, National Fire Data Center.
- ¹⁷ Ibid.
- ¹⁸ NFPA 1720 Standard on Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments (2020).
- ¹⁹ NFPA 1720, Section 3.3.16.1.
- ²⁰ NFPA 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (National Fire Protection Association (2020).

²¹ Center for Public Safety Excellence (CPSE) *Quality Improvement for the Fire and Emergency Services* (2020).

²² NFPA 1710: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* (National Fire Protection Association (2020).

²³ NFPA 1720, Section 4.3.2.

²⁴ West Valley Fire-Rescue Standard Operating Guideline 4.1.7.

²⁵ NFPA 1720: *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments* (2020).