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SCOTT
AIR-PAK

FIREFIGHTER

FREDERICK

FIRESTONE

2025

FREDERICK-FIRESTONE FIRE DISTRICT

COMMUNITY RISK ASSESSMENT AND STANDARDS OF COVER

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Frederick-Firestone Fire District would like to recognize and thank the following members and partners for the time, effort, and attention to detail in the creation of this document.

Fire Chief Jeremy A. Young

Assistant Chief of Operations Doug Prunk

Assistant Chief of Planning Steve Iacino

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Battalion Chief Chris Edwards

Finance Director Mike Cummins

Human Resources Manager Kara Docheff

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Carbon Valley Emergency Management Agency Director Merrie Gardner

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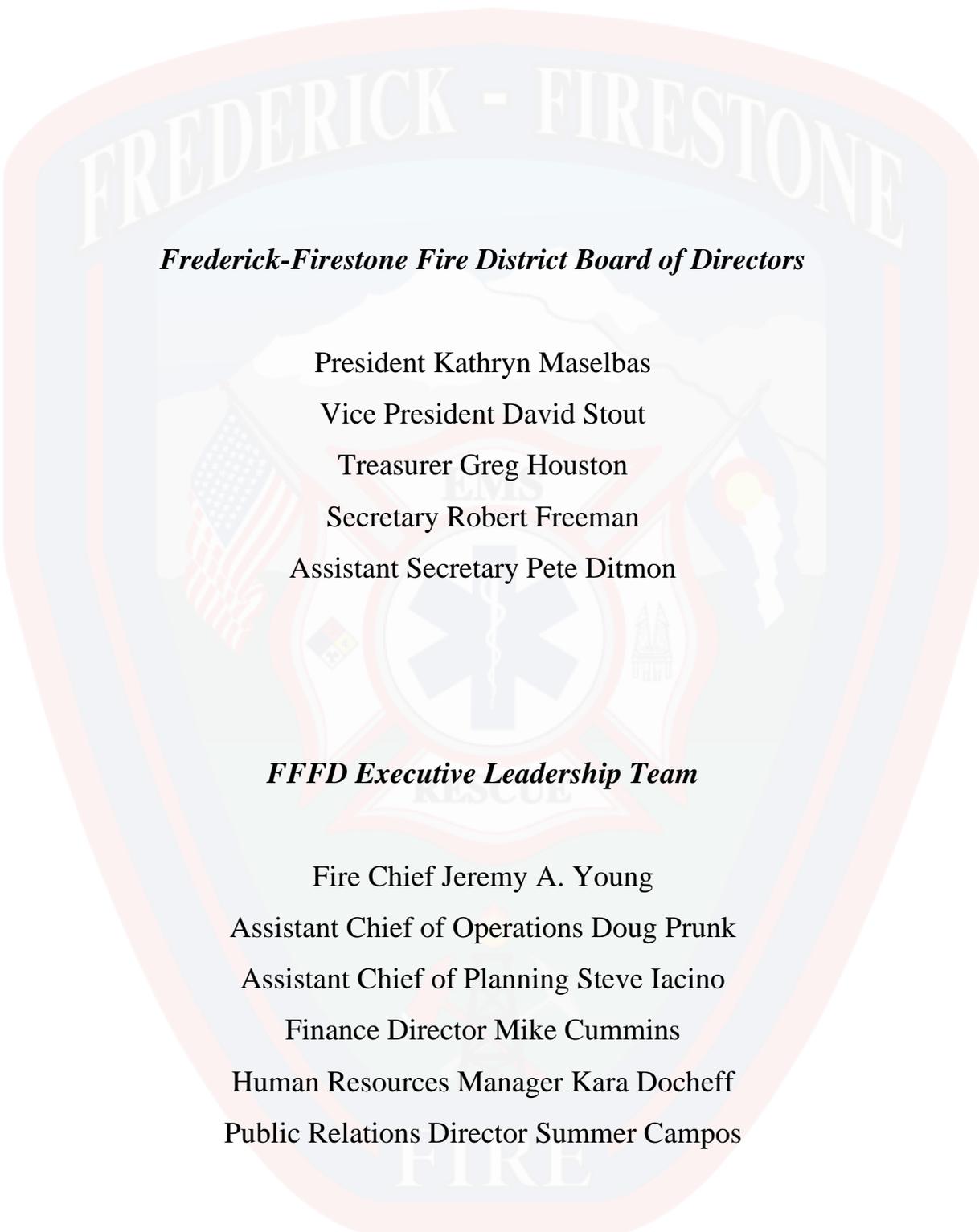
Record of Document Changes

All updates and revisions to the Community Risk Assessment/Standard of Cover document will be tracked and recorded. This process will ensure that the most recent version of the document is disseminated and implemented. This CRA/SOC is a working document and will be reviewed annually.

First Publication: April 9, 2024

Author: Accreditation Manager Summer Campos

Date of Change	Name of Person Making Change	Description of Change	Page Number(s)
9/26/2024	S. Campos	Changed title date from 2023 to 2024	Title Page
9/26/2024	S. Campos	Updated data from 2020-2022 to 2021-2023 to remain current	Throughout
10/3/2024	S. Campos	Updated 2022 Financials to 2023 data.	14
10/7/2024	S. Campos	Updated call data and baseline performance to reflect 2021-2023	60-73
1/9/2025	Scampos	Changed title to 2025 and updated Table of Contents	Title Page; 7-9
1/9/2025	S. Campos	Updated community statistics to include 2024	15-17
1/9/2025	S. Campos	Updated call data to include 2024 and 2022-2024 stats and District information	38; 40-41; 44-56; 60
1/13/2025	S. Campos	Updated baseline performance to reflect 2022-2024	62-75
1/30/2025	S. Campos	Added Appendices for Emergent and Non-Emergent Benchmarks/Baselines	91-106

The logo for Frederick-Firestone Fire District is a shield-shaped emblem. At the top, the words "FREDERICK - FIRESTONE" are written in a large, white, serif font, arched across the top of the shield. The central part of the shield features a Maltese cross, a common symbol for fire departments. Within the cross, there are several smaller symbols: an American flag on the left, a fire hydrant on the right, and a caduceus (a staff with two snakes) in the center. Below the cross, the word "RESCUE" is written in a smaller, white, serif font. The entire shield is outlined with a thick, light-colored border.

Frederick - Firestone

Frederick-Firestone Fire District Board of Directors

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Vice President David Stout

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FFFD Executive Leadership Team

Fire Chief Jeremy A. Young

Assistant Chief of Operations Doug Prunk

Assistant Chief of Planning Steve Iacino

Finance Director Mike Cummins

Human Resources Manager Kara Docheff

Public Relations Director Summer Campos



RESOLUTION 2024-03

A RESOLUTION ADOPTING THE FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT'S COMMUNITY RISK ASSESSMENT AND STANDARDS OF COVER

WHEREAS, the Frederick-Firestone Fire Protection District ("**District**") has established a strategic plan, including a mission and vision statement to guide the District in providing emergency fire and medical services to the community and,

WHEREAS, the District's Board of Directors ("**Board**") has established particular service level objectives that are in accordance with specific operational directives and policies for response to fires, emergency medical services, hazardous materials incidents, wildfires, and special operations incidents; and,

WHEREAS, the District, as part of the District's Strategic Plan 2021-2026, Goal No. 7, has applied for accreditation through the Commission on Fire Accreditation International (CFAI) as a "Registered Agency" and

WHEREAS, the development of the Community Risk Assessment and Standards of Cover document is a critical element of the accreditation process; and,

WHEREAS, District Staff has developed the attached Community Risk Assessment and Standards of Cover document, consolidating the District's service level objectives into a single document to guide future planning and resource development.

NOW, THEREFORE, be it resolved that the Frederick-Firestone Fire Protection District Board of Directors adopts the attached Community Risk Assessment and Standards of Cover document, which defines the District's written policies and procedures that establish the distribution and concentration of the District's fixed and mobile resources.

ADOPTED THIS 8th DAY OF APRIL 2024, BY THE BOARD OF DIRECTORS OF FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT


Kathryn Maselbas, Board President


Robert Freeman, Board Secretary

Frederick-Firestone Fire
Protection District Seal:



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FREDERICK-FIRESTONE FIRE PROTECTION DISTRICT 2025 COMMUNITY RISK ASSESSMENT AND STANDARDS OF COVER

Executive Summary

The Community Risk Assessment (CRA) for the Frederick-Firestone Fire District (FFFD or the District) evaluates the risk from natural and man-made sources to the Towns of Frederick and Firestone, Colorado, as well as the surrounding area. While the CRA identifies, defines, and quantifies the hazards and risks within the community, the Standards of Cover (SOC) will identify how FFFD prepares and responds to those identified risks and hazards. Once the response quality is identified, this document will also show how FFFD plans to maintain or improve its response capabilities. To do this, FFFD examined its historical emergency responses within its District to understand the decisions made regarding the placement of field resources in relation to the potential demand placed on them by the type of risk or historical need of the community.

This document is a rational and systematic way of looking at the basic services provided by an emergency service agency. The purpose of the document is to provide a system which will assist with:

- Assessing community fire and non-fire risks;
- Defining baseline and benchmark emergency response standards;
- Planning future station locations;
- Determining apparatus and staffing patterns;
- Evaluating workload and ideal unit utilization;
- Measuring service delivery performance; and
- Supporting strategic planning and policy development relative to resource procurement and allocation.

The key elements of the Community Risk Assessment and Standards of Cover Document include:

- A community risk assessment that provides a greater understanding of the risks, fire and non-fire, that the communities collectively face, the people that live and work in the community, and unique and common challenges faced by the District served.
- A determination of levels of service to be provided to the areas protected by our department.
- An analysis of the department's current response capabilities in terms of on-scene performance for personnel and equipment; and
- A development of standards describing how department resources shall be allocated and deployed to deliver an Emergency Response Force (ERF), which represents the complements of apparatus, people, and equipment required to mitigate a specific emergency.

The CRA/SOC describes and defines a community-based risk assessment and documents historical performance based on call type, risk, and population. After evaluating these factors, performance baselines (how we are currently performing) and benchmarks (where we would like to be) will be established to ensure that service is maintained or in some cases improved based on recommendations on current data collected.

This document is considered a working document and will undergo many additions and revisions over time. With each revision it will further refine risk, or more specifically, risk that is uniquely related to the scope of fire and emergency service delivery and how the FFFD plans to maintain or improve its response capabilities to such risks. This CRA document is not meant to identify and examine every potential risk in the community as that process would be an arduous task but specifically will look at local elements as each one relates to emergency response. The overarching intent of this CRA is to drive discussion on risk mitigation strategies and make data-driven and research-based decisions on how to best address risk, with the resources available, in the areas served by FFFD. Empowered by this data, this document serves as a starting point for discussions on Community Risk Reduction planning and implementation. This document will also show how FFFD responds to risks in the form of emergency operations, including responses to fire, medical, special operations, hazardous material (HazMat), and wildland.

Summer Campos
Accreditation Manager
Frederick-Firestone Fire District

Section 1 – Community Baselines

Agency Legal Basis

The Frederick-Firestone Fire Protection District is a special district organized under Title 32 of Colorado Revised Statutes providing fire protection and rescue services within its boundaries. The agency was established in 1975 pursuant to Title 32-5-301 to 346, under the 1973 Colorado Revised Statutes, and was known as the Frederick Area Fire Protection District in Weld County, State of Colorado. The District continues to operate in accordance with the statutory requirements provided under this Title of Colorado law. The agency was established to provide all legally available fire protection services under Title 32, as well as having the purposes, powers, and authority provided to serve a public use and promote the health, safety, prosperity, security, and general welfare of the inhabitants of such district and the people that reside there. For The District this included but was not limited to, providing all forms of fire prevention and rescue service, adopting and enforcing fire codes, establishing property tax, fire prevention activities, acquiring and disposing of firefighting equipment, and creating and maintaining a pension fund.

Organizational History and Profile

The Frederick-Firestone Fire District provides an all-hazards approach to the protection of the lives and property of the residents, businesses, and visitors of the towns of Frederick and Firestone and unincorporated areas of Weld County, Colorado. The District is in Southwest Weld County and was founded in 1915 as a volunteer fire department. In the beginning, FFFD originally only provided volunteer fire services with a total of eight volunteers.

In 1975, the residents of a nine-square-mile area voted to form the Frederick Area Fire Protection District. The District was formed to provide services that could be supported with property taxes collected from residents who lived within the boundaries. In 1975, it was also determined that The District would be governed by a Board of Directors that would be made up of five community members. On June 30, 1975, at Frederick Fire Station 1, a meeting was held, and the first Board of Directors was elected, which consisted of Gilbert Vidaurri, Allen Conway, Gilroy Fragale, John DiGregorio, and Dominec Chioda.

In 1981, the District purchased the Frederick Water Plant to build the current Fire Station 1, located in old town Frederick.

By 1988, the District had grown financially and was able to hire its first full-time employee whose job was to maintain equipment, housekeeping, conduct fire prevention classes and business inspections, and record keeping.

In 1995, the District decided to provide better service to the I-25 corridor and residents west of I-25; Fire Station 2 was built to serve the central and western areas of the District.

In 1998, 10 years after the District had hired its first full-time employee, the District expanded to three full-time firefighters, each working a 24/7 shift on a rotating basis. Two years later, in

2000, the district expanded its full-time employee base to six, allowing two firefighters per 24-hour shift.

In 2003, the Town of Firestone requested it be included in the protection area for the Frederick Area Fire Protection District. On February 2, 2003, the District Court approved changing the District's name to the Frederick-Firestone Fire Protection District. With the expanded protection area, the District looked to voters for more funds, which came through a District voters approved General Obligation Bond for apparatus and the construction of future fire stations.

A significant change came again in 2006, when FFFD took full ownership of the Tri-Area Ambulance Service to provide advanced life support transport services to the District. This change allowed the District to expand its medical services to the towns of Frederick and Firestone and the businesses and residents within the District.

From 2008 through 2016, the District was involved in many property inclusions, exclusions, and court orders of the District boundaries as both towns grew in size and population.

In 2011, the District moved the Administration Offices from Fire Station 1 in downtown Frederick to its current location next to Fire Station 2 on the West I-25 Frontage Road.

As the District and the towns it served continued to grow, the District eventually opened Fire Station 3 in Firestone to help serve the northeast portion of its boundaries.

In March 2019, the District added Fire Station 4 on the border of Frederick and Firestone in the northwest area to meet current and future service needs.

In 2019, the District's voters passed a mill-levy increase to provide additional staffing for firefighters and paramedics. In early 2020, the District began this process and, by the end of the year, had hired 16 full-time firefighters, paramedics, and emergency medical technicians. This expanded the District's full-time operations staff to 72 personnel.

Today, the District has five fire stations, with Fire Station 5 being the newest, with crews first responding out of it in August 2024. Station 5 provides services to the southwest area of the District. Future plans include Fire Station 6 in the northwest portion of the District, a maintenance facility and training grounds, and the relocation of Station 2 to a more central location. As an all-hazard emergency service provider, the current five fire stations include fire suppression, fire prevention, public education, technical rescue, water and ice rescue, hazardous material response, community risk reduction, emergency management, and advanced life support (ALS) emergency medical transport services. Currently, District boundaries account for 38 square miles and approximately 40,000 residents.

The District currently owns and operates four Type I Engines, two Aerial Apparatus, one Heavy Rescue, two Type VI Engines, one Water Tender, five ALS Transport Ambulances, and 10 additional support vehicles.

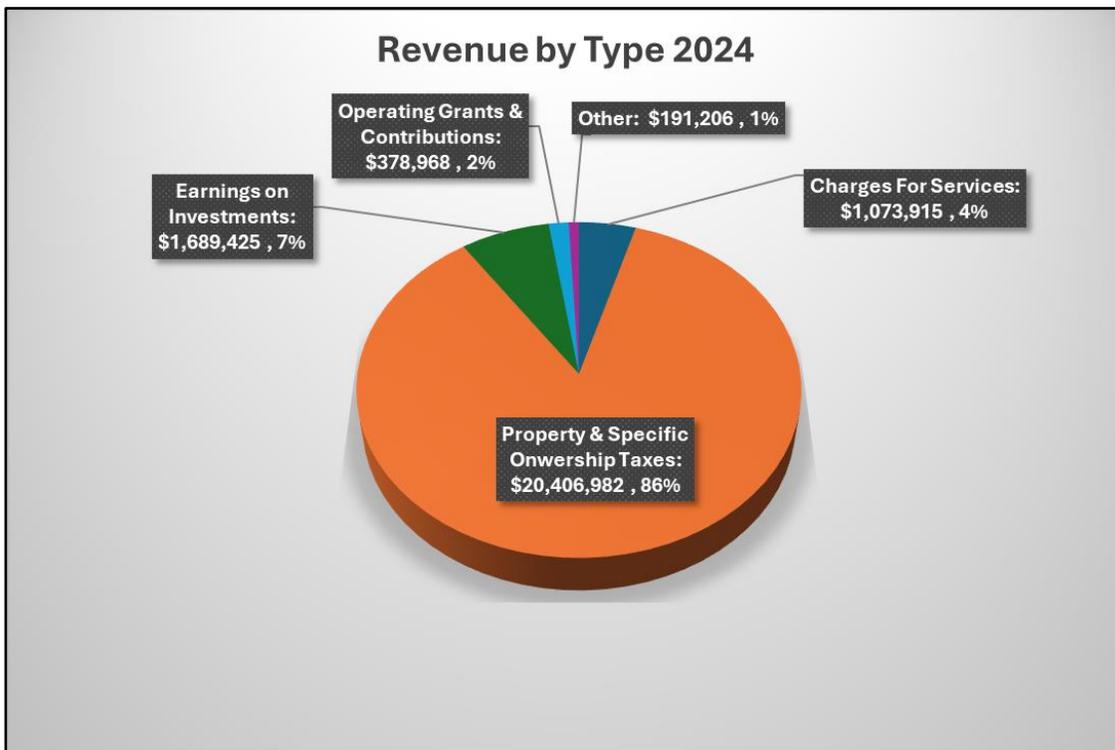
Financial Basis

The following verbiage and illustration are based upon unsuitable data for 2024. The data is preliminary, and the data cross-section does include accruals or the complete data set as of this presentation date (1/7/2025). At this point, the District has not received all revenue allocable to 2024 nor performed the required GAAP accruals.

The Frederick-Firestone Fire Protection District is funded primarily through property tax revenue, which is a 13.9 mill levy on property within the District boundaries. In 2024, an additional 1.218 mills were levied for debt service for the General Obligation Loan approved by voters in 2002. In May 2022, voters approved long-term debt in the form of a general obligation loan for capital infrastructure in the net amount of \$19,680,000. This resulted in an additional 1.218 mills in 2024.

Total revenues for 2024, as of January 7, 2025, were \$23,740,496, an increase of 16.5% over the previous year. Property and Specific Ownership taxes accounted for 85.96% of overall revenue. Other revenue included charges for services, which amounted to \$1,073,915 and \$2,259,599 from intergovernmental agreements, investment earnings, contributions and donations, and other revenue services. The District received \$391,806 in impact fee revenue in 2024, as of January 7, 2025, which is accounted for in the newly formed “Impact Fee Fund” instituted in 2023.

The District operates using a General Fund. As of January 7, 2025, the fund balance is \$28,902,590, a decrease of \$2,038,733 from the prior year.



In June 2023, the District began collecting new construction impact fees which resulted in the creation of an Impact Fee Fund. This fund will account for revenues, which are collected at the time a building permit is issued, and expenditures for the acquisition, construction, expansion, and improvement of the District’s assets (facilities and apparatus).

Frederick-Firestone Fire Protection District is subject to funding restrictions. TABOR, or the Taxpayer Bill of Rights, is an amendment to the Colorado Constitution approved by voters in 1992. This amendment places limits on the amount of revenue a government agency can collect and spend and requires voter approval for certain changes in tax policy.

Community Profiles

The FFFD provides services to the Towns of Frederick and Firestone, as well as surrounding areas of unincorporated Weld County. Both towns are part of the Carbon Valley Community and are about 20 miles north of Denver, Colorado. Both municipalities have expanded their boundaries in recent years and are challenged with meeting the demands for water and infrastructure with current and projected population growth. As two of the fastest-growing towns in Colorado with Frederick currently growing at a rate of 7.22% [Figure 1] and Firestone at 5% annually [Figure 2], FFFD continues to plan for increased emergency service response areas and call volume. As the growth in boundaries and population continues, FFFD will be challenged to continue providing the best fire protection and emergency medical services possible.

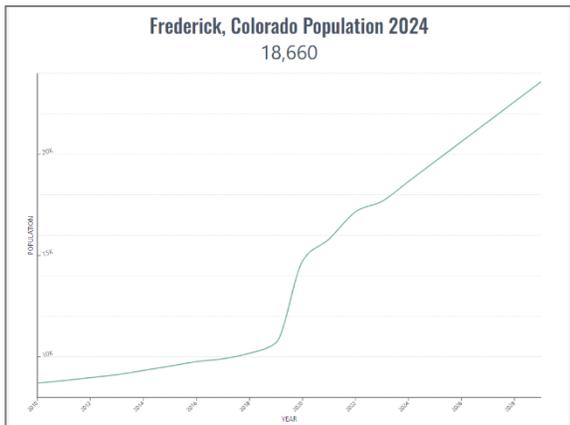


Figure 1: Frederick Population Increase

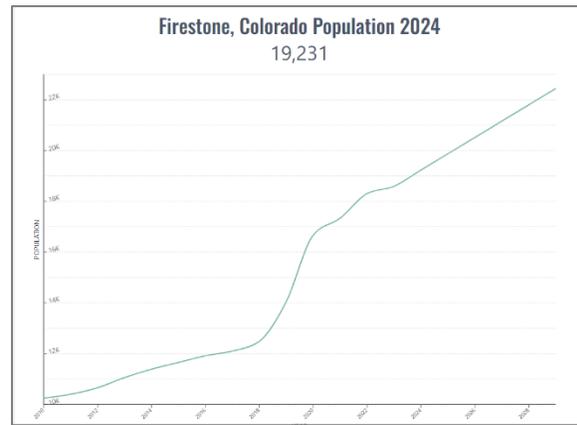


Figure 2: Firestone Population Increase

Town of Frederick

The Town of Frederick accounts for 15.96 square miles of FFFD’s coverage area and is located east and west of Interstate 25 and is along the northside of Colo. State Highway 52 [Figure 3]. Frederick originated as a mining camp and was incorporated in 1907. The current population is 18,660 (2024), up from 14,724 in 2020 and encompasses 594 acres of open space, 26 developed parks, and 17 miles of trails. While the majority of Frederick is residential and commercial, there are still rural areas.

FFFD stations 1, 2, 4, and 5 cover portions of Frederick. Notable critical infrastructure in these station zones include Milavec Reservoir, Central Weld County water tank storage, Town of Frederick water tank storage, Spindle Hill Energy, Public Service Power Site, Left Hand Water District Storage Tank, Central Colorado Water Conservancy District Reservoir, Colorado Department of Transportation (CDOT) Public Works Facility, and Town facilities including town hall, police department, and public works. Other large facilities include six public schools, Carbon Valley Recreation Center, Carbon Valley Gymnastics and Senior Center, Comcast, Agilent Technologies, Otterbox, Indian Peaks Medical Center, and Rocky Mountain Christian Church. Soon, Frederick will be the home of the largest King Soopers marketplace, 123,000 square feet, in Colorado. Each station response zone has oil and gas production, storage, and transmission sites.

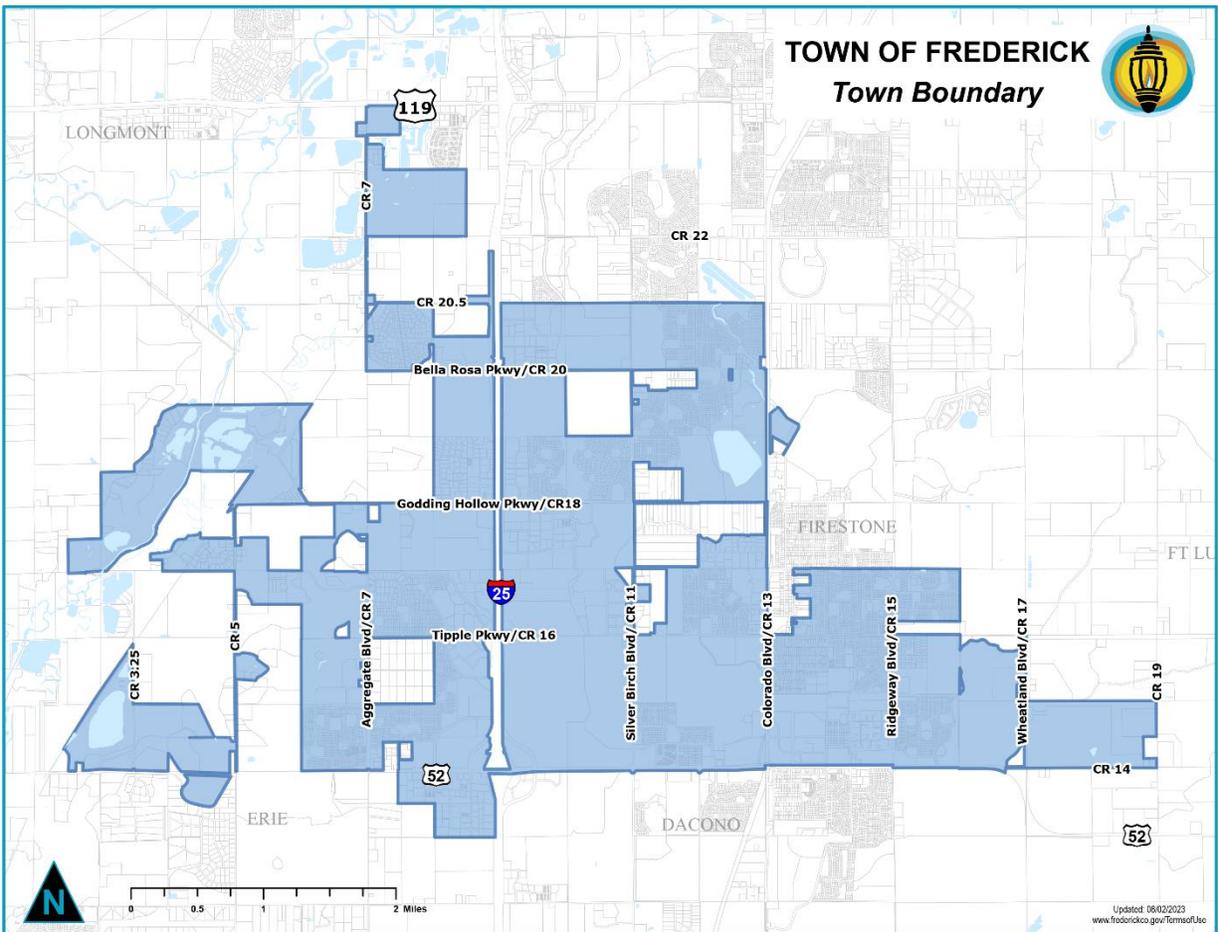


Figure 3: Town of Frederick Boundaries

Town of Firestone

The Town of Firestone was established in 1908 to support local coal miners and their families. Firestone’s boundaries include just over 14 square miles [Figure 4], with a planning area of about 36 square miles. Within Firestone’s boundaries lies Colo. State Highway 119, State Highway 66,

and Interstate 25. Firestone has continued to grow at about 4 percent per year since 2020. The current population is 19,231, which is up from 16,663 in 2020.

Frederick-Firestone Fire Protection District stations 1, 2, 3, and 4 serve portions of the Firestone community. Within Firestone’s boundaries, there are several critical infrastructures that FFFD must be aware of and be ready to respond to. These include CDOT Park and Ride, Lakeview Reservoir, Barefoot Lakes Reservoir, St. Vrain River, and the St. Vrain State Park. In partnership with the St. Vrain Water Authority, the Town of Firestone will open a new treatment plant to provide potable water for the benefit of the Town of Firestone and the Little Thompson Water District in 2023. The St. Vrain Authority owns and will operate the plant. Other large facilities that must be considered include four public schools, The Cove Recreation Center, Safeway and King Soopers shopping centers, Firestone Regional Sports Complex, Home Depot, American Furniture Warehouse, and town facilities including town hall, police department, and public works. Each FFFD station response zone within the boundaries of the Town of Firestone has oil and gas production, storage, and transmission sites.

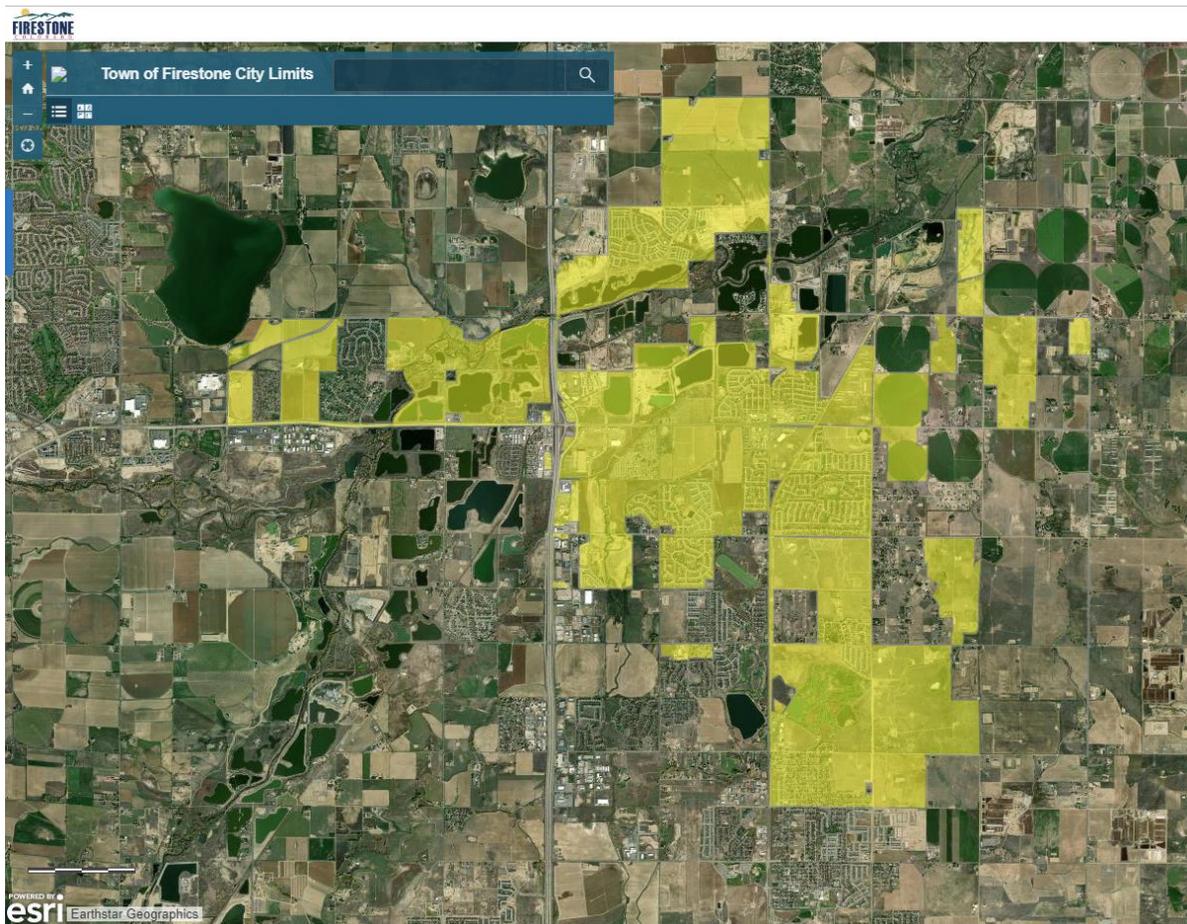


Figure 4: Town of Firestone Boundaries

Community Demographics

The communities that FFFD provides services to are mainly suburban, with small rural and urban areas [Figure 5]. Outside of the towns of Firestone and Frederick, the unincorporated Weld County areas of FFFD’s coverage area are mainly classified as rural but relatively close to the urban areas. The Frederick and Firestone communities have a median age of 36 years, which is younger than the U.S. median of 38.1 years. Only 9% of the Frederick and Firestone population are seniors 65 and older [Figure 6]. This information shows FFFD that in 30 years if current demographics remain the same, the senior population will substantially increase. Other notable demographics to note for the communities are that 77% of the population is white and non-Hispanic, and the most common language spoken is English. Education is relatively high in the area, with 96% of the population having a high school diploma or higher, and the average household income is well above the national and state averages at \$110,296.

The Town of Firestone is characterized by a mix of medium-low to medium-high levels of social vulnerability. Compared to the rest of Weld County, most residents of Firestone are in the bottom 20% of social vulnerability. The owner-occupied housing rate is 84.5%.

The homeownership rate in the Town of Frederick is 93.5%. The Town contains areas with low social vulnerability to medium-high levels, with a poverty rate of 2.87%. Within the District’s boundaries, only 3% live in poverty, compared to the national benchmark of 13%.

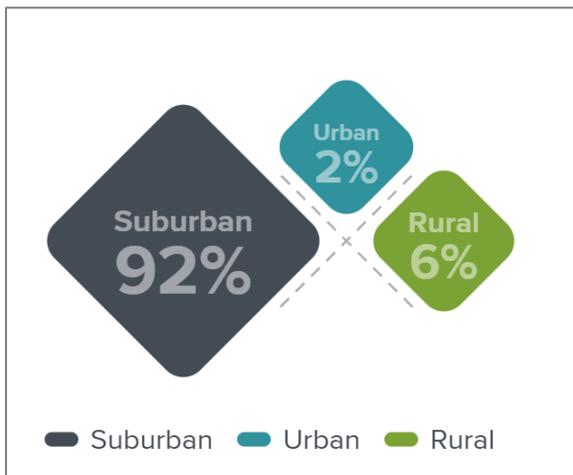


Figure 5: Suburban & Rural Population

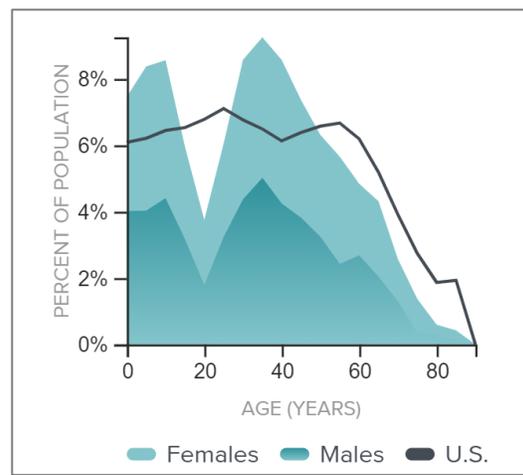


Figure 6: Age Distribution Chart

Community Boundaries

The District’s response area includes the towns of Frederick and Firestone, as well as areas of unincorporated Weld County. The District’s boundaries encompass 38 square miles and are in Southwest Weld County, Colorado [Figure 7]. Portions of Interstate 25, Colorado State Highway 52 and 119, and the St. Vrain State Park are included within the District’s response areas. Most of the District’s response area and population of approximately 40,000 residents are located

within Frederick and Firestone. FFFD utilizes the parcel information in the Weld County Assessor's office and works with Weld County GIS to validate agency boundaries annually.

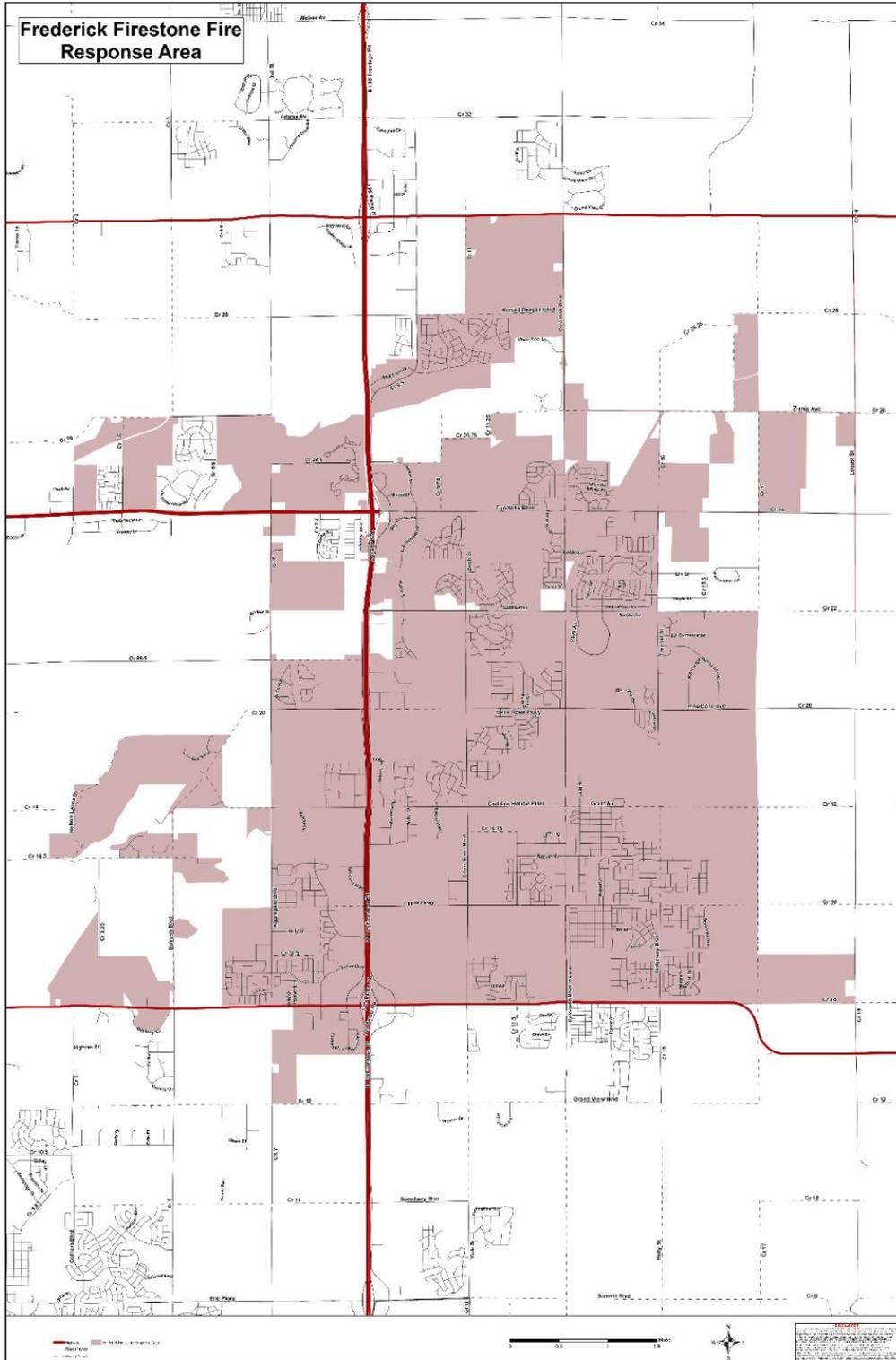


Figure 7: Frederick-Firestone Fire District

Surrounding Jurisdictions

The towns of Frederick and Firestone are surrounded by the towns of Platteville, Fort Lupton, Mead, Longmont, Erie, and the City of Dacono [Figure 8]. These towns and cities receive emergency services from other fire protection districts. FFFD maintains effective and mutually beneficial relationships with these emergency services agencies, whose borders are adjacent to its District boundaries. Automatic and mutual aid agreements have been established, approved, and reviewed annually with all surrounding districts. The following is a brief overview of each district.

Platteville Gilcrest Fire Protection District

Platteville Gilcrest Fire Protection District (PGFPD) shares the northeast border with FFFD and covers the towns of Platteville and Gilcrest. PGFPD is an all-hazards department and covers approximately 144 square miles.

Fort Lupton Fire Protection District

Fort Lupton Fire Protection District (FLFPD) is north-south of FFFD's boundaries. FLFPD covers approximately 88 square miles, including the Town of Fort Lupton and areas of unincorporated Weld County. FLFPD provides fire emergency services and basic life support services. FFFD provides backup ALS services for FLFPD.

Mountain View Fire Protection District

Mountain View Fire Rescue (MVFR) is a full-service fire department that provides emergency services to the following areas that border FFFD boundaries: the City of Dacono, the towns of Erie and Mead, and areas of unincorporated Weld County. MVFR borders the District on the south, southwest, and northeast and is the largest district that borders FFFD. MVFR serves approximately 250 square miles.



Figure 8: Weld County, Colorado

Community Planning/Response Zones

Frederick-Firestone Fire District's Administration Building has response capabilities of support vehicles during the week. It serves as the primary office for the Operations Section, Planning Section, Training Division, Finance and Administrative Services Section, Public Relations Section, and the Office of the Fire Chief. The current deployment of the District comprises five stations geographically located throughout the towns of Frederick and Firestone to ensure that FFFD meets the response time requirements identified in current intergovernmental agreements (IGAs) with the two towns. The District provides 24/7 emergency fire and medical response staffing at all five stations. In addition to first-due apparatus, each fire station also houses reserve, secondary, and/or support apparatus.

Current Deployment

The District's boundaries are divided into four response zones, which correspond to each station response zone [Figure 9]. The response zones assist FFFD in planning responses for each area. Community planning areas and response zones are reviewed annually to ensure that the proper coverage is allotted. Historical data reflects that calls for service continue to increase annually.

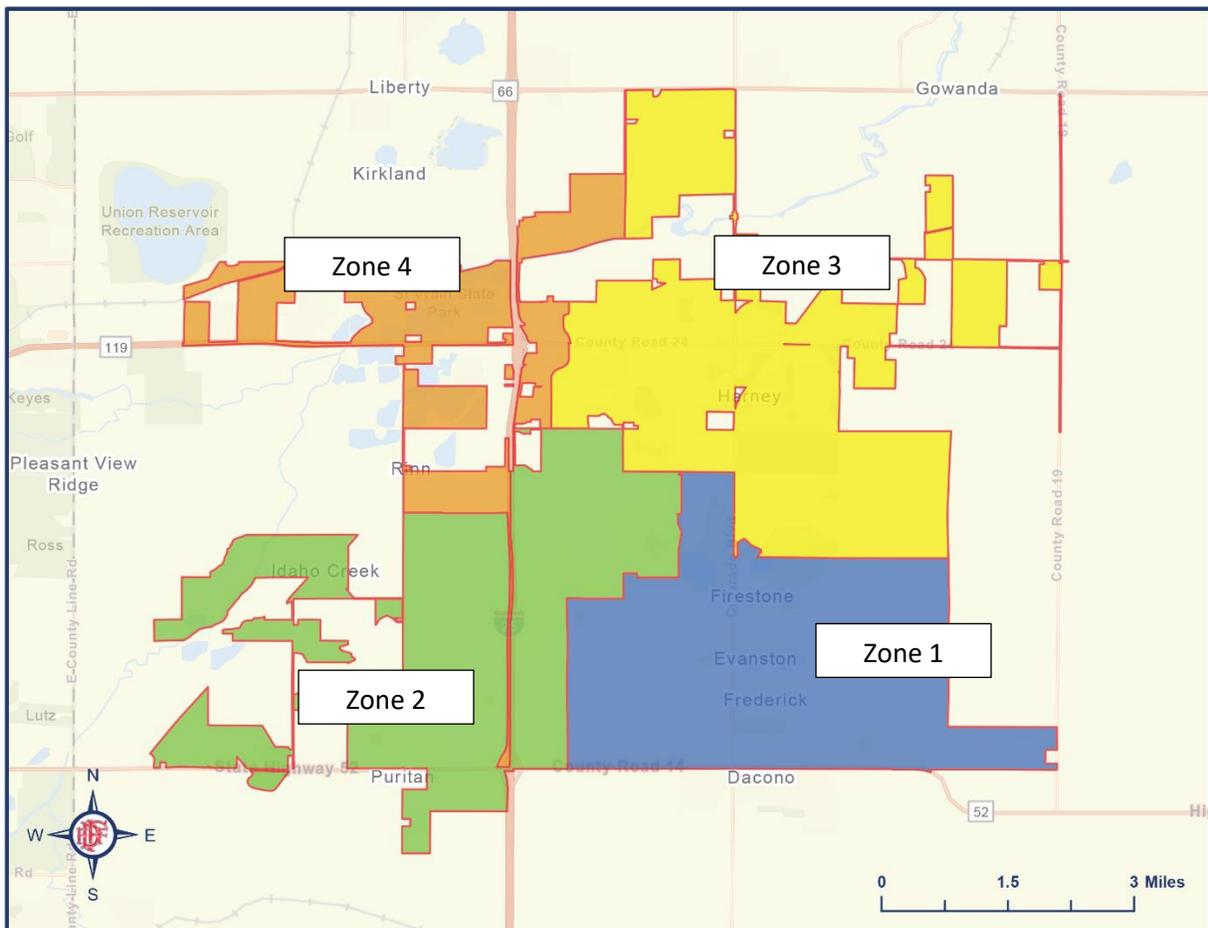
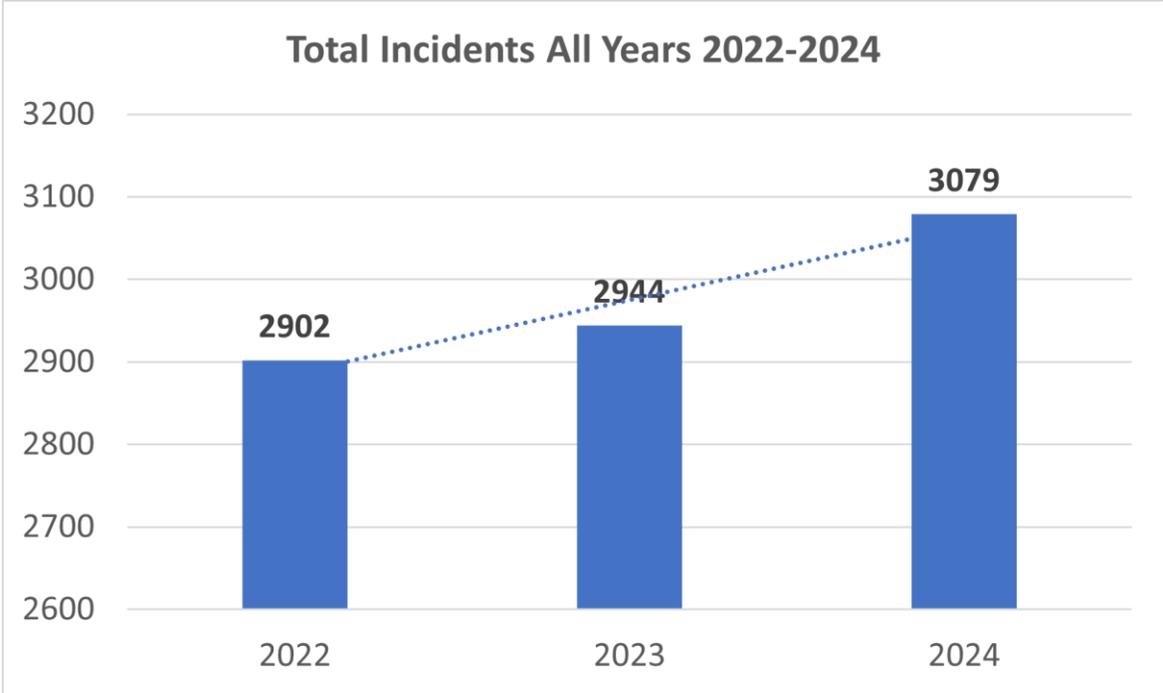


Figure 9: FFFD Station Response Zones



Fire Station 1 / Response Zone 1

Fire Station 1, located in downtown Frederick, is FFFD's oldest and historically busiest station. The District began running out of the station in 1975 after leasing it from the Town of Frederick Water Department. The building was purchased by FFFD in 1980 and has since undergone several renovations as the District has grown. This zone covers 9.35 square miles and accounts for 12,396 residents. Station 1 houses an engine, ambulance, tender, and a shift safety captain.

Typical station assignments include:

- Engine 3401: One Company Officer, one Engineer, one EMT/Firefighter
- Ambulance 3421: One Paramedic/Firefighter, one EMT/Firefighter
- Tender 3431: Cross-Staffed with 3401 staffing matrix.
- Safety Captain 3470: One On-Duty Safety and Training Captain

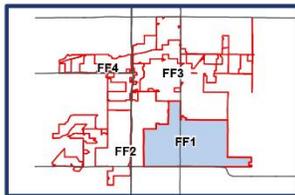
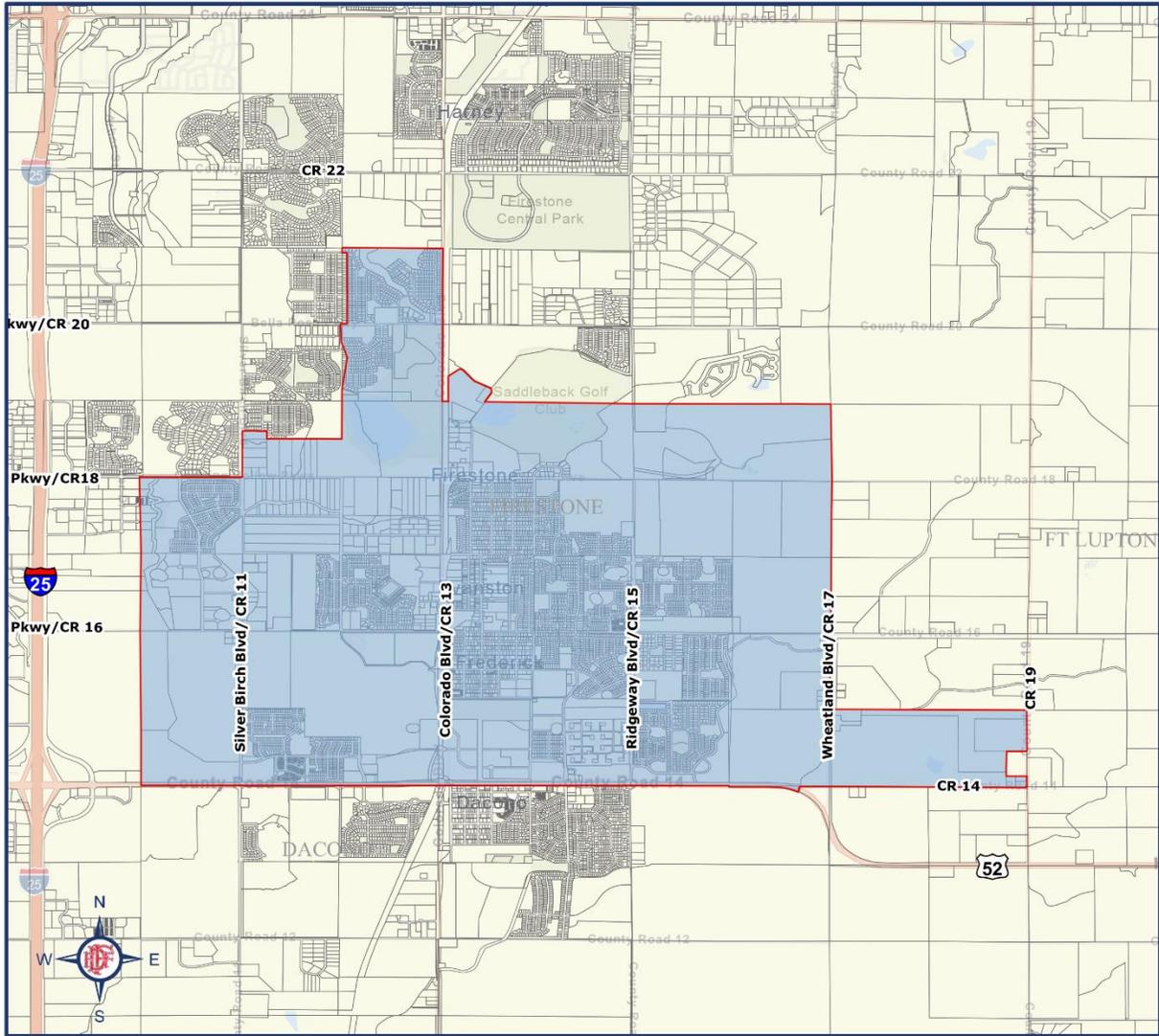


Station 1 protects residential and commercial areas, including several critical infrastructures. Areas to note: Milavec Reservoir, Eagle Business Park, Miners Park Town Centre, water storage tanks for Central Weld County and the Town of Frederick, and the Spindle Hill Energy Plant. This area also includes several public schools and town facilities. Special and unique hazards for this response zone include Agilent Technologies, Spindle Hill Energy Plant, and several oil and gas wells. Residential areas include old town Frederick and Firestone, Savannah, Angel View Estates, Carriage Hills, Prairie Greens, Maplewood, Coal Ridge Estates, Maple Ridge, Hidden Creek, Parkview, Overlook, Silverstone, Countryside, Westview, No Name Creek Estates, Moore Farms, Summit View, and Eagle Valley.



Frederick - Firestone Fire Protection District

FF1



Population
Daytime Worker: 2,712
Resident: 12,396



9.35 sqMi

Data Note: Household population includes persons not residing in group quarters. Average Household Size is the household population divided by total households. Persons in families include the householder and persons related to the householder by birth, marriage, or adoption. Per Capita Income represents the income received by all persons aged 15 years and over divided by the total population.
Source: Esri forecasts for 2023 and 2028. U.S. Census Bureau 2000 and 2010 decennial Census data converted by Esri into 2020 geography.

Fire Station 2 / Response Zone 2

Fire Station 2 was first placed into service in 1995 and is in the southwest portion of the District off the west I-25 Frontage Road in Frederick. This response zone covers 9.73 square miles and accounts for approximately 6,964 residents. It houses the on-duty Battalion Chief and a cross-staffed engine and ambulance.

Typical station assignments include (Jan. 2024-July 2024):

- Engine 3402: One Company Officer, one Driver/Operator, one Paramedic/Firefighter.
- Ambulance 3422: Cross-staffed with 3402 staffing matrix.
- Battalion Chief 3460: One On-Duty Battalion Chief.



Typical station assignments include (August 2024-December 2024):

- Battalion Chief 3460: One Battalion Chief.
- Reserve Engine 3402, no daily staffing.

Station 2 protects residential and commercial areas. Identified areas of risk include the Left Hand Water District storage tank, the Colorado Department of Transportation (CDOT) park and ride and public works facility, Treatment Technologies chemical storage, Glacier Business Park, several elementary schools, Otterbox, and oil and gas wells. The Fire Station 2 response zone is first due to Interstate 25 calls. Residential neighborhoods noted: Raspberry Hill, No Name Creek West, Del Rey, Fox Run, Cottonwood Estates, Wildflower, Morningside Estates, and Wyndham Hill.

Fire Station 5 / Response Zone 2

In August 2024, the District opened and began operations out of Station 5, which is in the southwest portion of the District in Frederick. Station 5, on August 12, 2024, began making calls out of response zone 2. Station 2 began just housing the on-duty Battalion Chief and a reserve engine until it can be relocated to a more central location in the District. Station 5's location allows quicker responses to calls on Interstation 25 and Colorado Highway 52. It also responds to large residential developments within the southwest portion of the District.



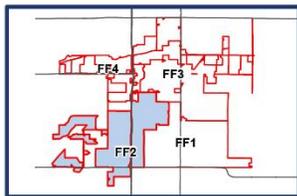
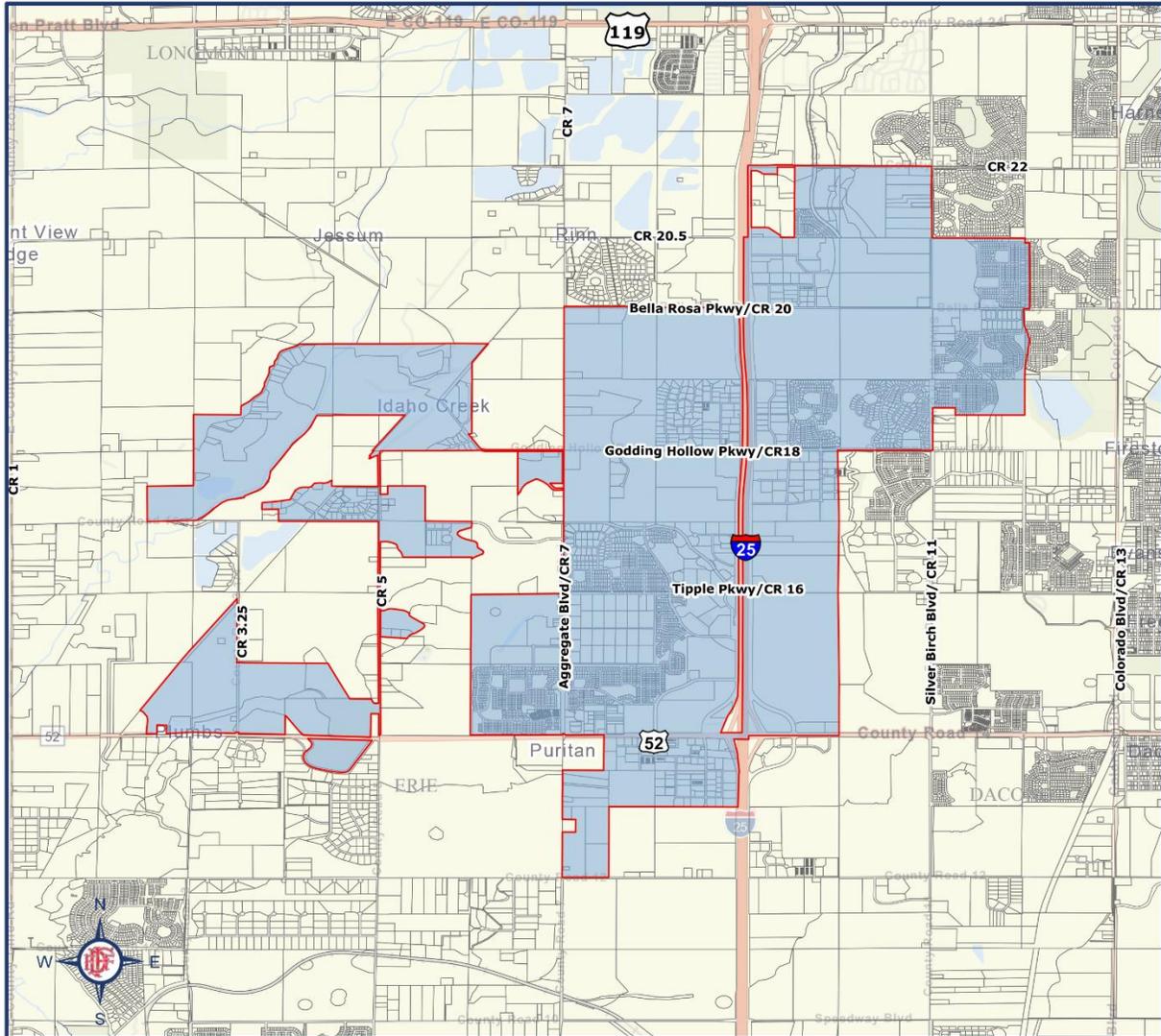
Typical station assignments include:

- Tower 3415: One Company Officer, One Engineer, One EMT/Firefighter.
- Ambulance 3425: One Paramedic/Firefighter, One EMT/Firefighter.
- Brush Truck 3434: Cross-staffed with 3415.
- Reserve Tower 32415, no daily staffing.



Frederick - Firestone Fire Protection District

FF2



Population
Daytime Worker: 4,958
Resident: 6,964



9.73 sqMi

Data Note: Household population includes persons not residing in group quarters. Average Household Size is the household population divided by total households. Persons in families include the householder and persons related to the householder by birth, marriage, or adoption. Per Capita Income represents the income received by all persons aged 15 years and over divided by the total population.
Source: Esri forecasts for 2023 and 2028. U.S. Census Bureau 2000 and 2010 decennial Census data converted by Esri into 2020 geography.

Fire Station 3 / Response Zone 3

Fire Station 3 was first put into service in 2007 and is located in Firestone in the northeast portion of the District. This response zone covers 10.57 square miles and has 15,016 residents. It houses an engine, ambulance, cross-staffed brush truck, and reserve ambulance.

Typical station assignments include:

- Engine 3403: One Company Officer, one Engineer, two EMT/Firefighter.
- Ambulance 3423: One Paramedic, one EMT/Firefighter.
- Brush Truck 3433: Cross-staffed with 3403 staffing matrix.
- Reserve Ambulance 3428, no daily staffing.

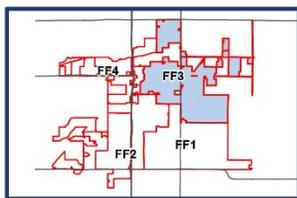
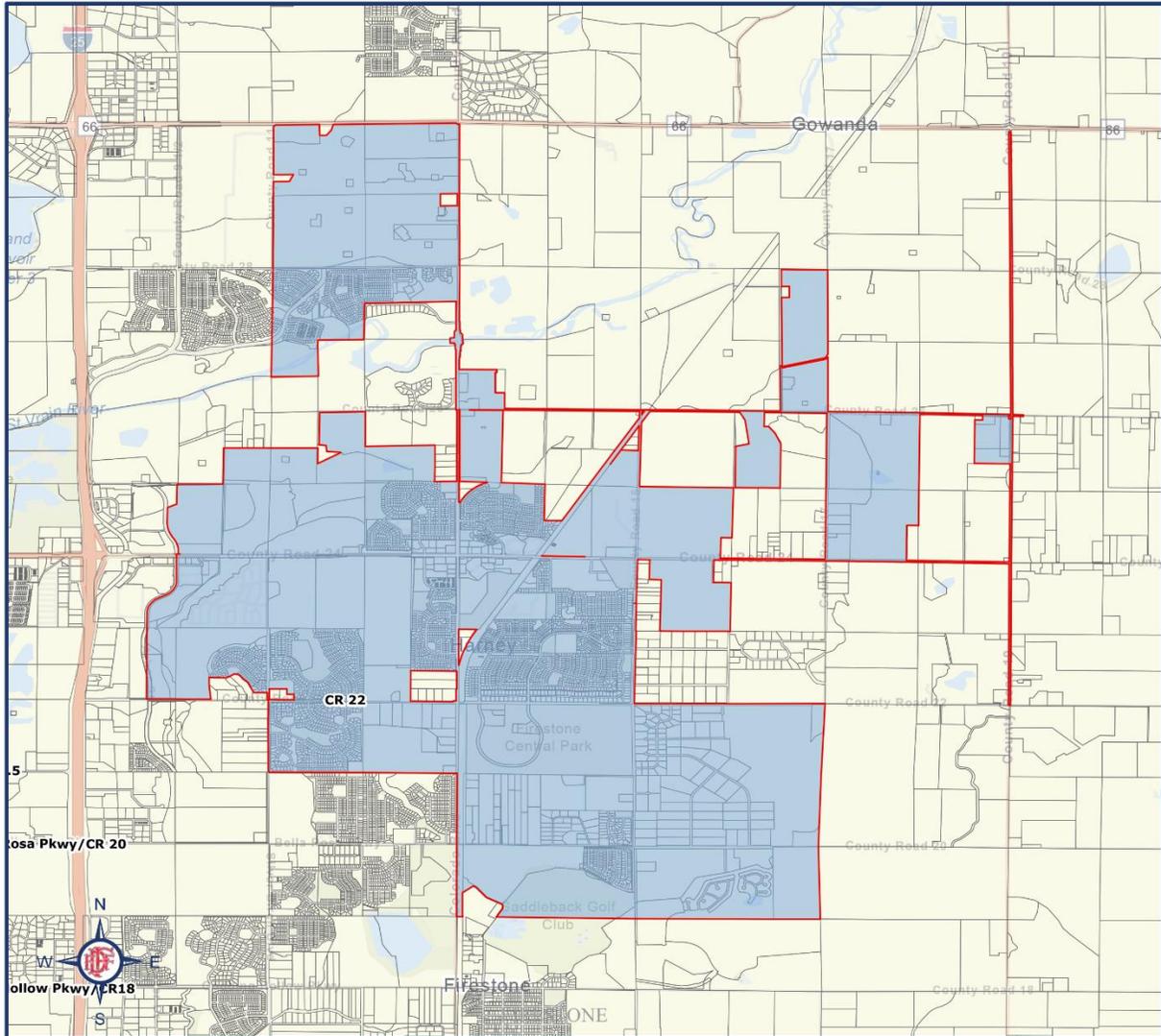


Fire Station 3 protects residential and commercial areas. Critical infrastructure responses include the town of Firestone services, Lakeview Reservoir, the future St. Vrain Water District, Firestone Regional Sports Complex, several large-capacity retail stores, and several public schools. Subdivisions in the response zone include Owl Lakes, Saddleback and Saddleback Heights, Casa Grande, St. Vrain Ranch, Ridgecrest, Sagebrush, Oak Meadows, Mountain Shadows, The Shores, Eagle Crest, Monarch Estates, Neighbors Point, Stoneridge, Booth Farms, and the east portion of Barefoot Lakes.



Frederick - Firestone Fire Protection District

FF3



Population
Daytime Worker: 3,376
Resident: 15,016



10.57 sqMi

Data Note: Household population includes persons not residing in group quarters. Average Household Size is the household population divided by total households. Persons in families include the householder and persons related to the householder by birth, marriage, or adoption. Per Capita Income represents the income received by all persons aged 15 years and over divided by the total population.
Source: Esri forecasts for 2023 and 2028. U.S. Census Bureau 2000 and 2010 decennial Census data converted by Esri into 2020 geography.

Fire Station 4 / Response Zone 4

Fire Station 4 was placed into service in 2019 and is in the northwest portion of the District and houses a heavy rescue engine, an engine, brush truck, and a reserve ambulance. This response zone covers 4.21 square miles and accounts for approximately 1,412 residents.

Typical station assignments include:

- Engine 3454: One Company Officer, one Engineer, and two EMT/Firefighters.
- Engine 3404: Cross-staffed with 3454 and 3434 staffing.
- Brush Truck 3434: Cross-staffed with 3454 and 3404 staffing matrix.
- Reserve Ambulance: No daily staffing.

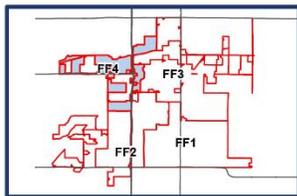
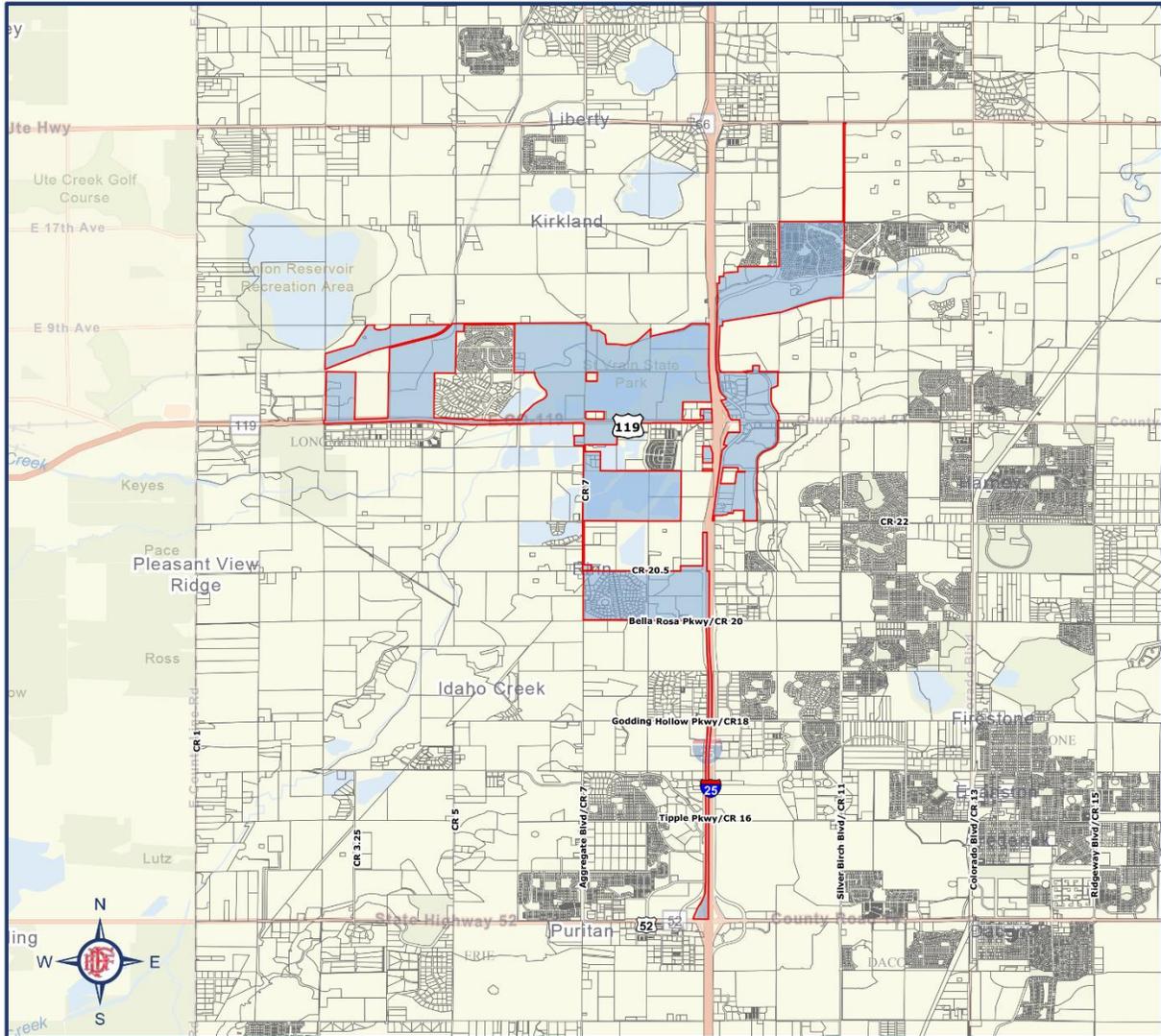


Fire Station 4 protects both residential and commercial areas. Critical infrastructure and areas of note are Barefoot Lakes Reservoir, CDOT Headquarters and Park and Ride, St. Vrain State Park, several big box stores, St. Vrain River, Central Colorado Water Conservancy District Reservoir, and the Cove Recreation Center. Station 4 covers multiple subdivisions in Frederick and Firestone, including Barefoot Lakes, Rinn Valley Ranch, and Gateway Apartments. The location of the station 4 response zone includes Colo. Highway 119 and Interstate 25, which have high traffic patterns. It is being closely watched by the District's Planning and Operation sections as potential build-out projections for the zone will include more apartment complexes and the potential for large and small commercial projects.



Frederick - Firestone Fire Protection District

FF4



Population
Daytime Worker: 1,658
Resident: 1,412

0 0.5 1 Miles

4.21 sqMi

Data Note: Household population includes persons not residing in group quarters. Average Household Size is the household population divided by total households. Persons in families include the householder and persons related to the householder by birth, marriage, or adoption. Per Capita Income represents the income received by all persons aged 15 years and over divided by the total population.
Source: Esri forecasts for 2023 and 2028. U.S. Census Bureau 2000 and 2010 decennial Census data converted by Esri into 2020 geography.

Community Critical Infrastructure

Transportation Systems

Several major state highways and one major interstate run through the District. Interstate 25 (I-25) is a major north/south highway that runs through the state of Colorado. Because of its ability to transport people and supplies from one end of the state to the other, population growth is centered along I-25. The Colorado Department of Transportation (CDOT) has completed an Environmental Impact Statement (EIS) in cooperation with the Federal Transit Administration to evaluate and identify transportation improvements along the I-25 corridor from Fort Collins-Wellington area to Denver. The EIS identifies and discusses the regional and inter-regional movements of people, goods, and services along the I-25 corridor.

Colorado State Highways 119, 52, and 66 run through the FFFD District boundaries and connect the towns of Frederick and Firestone to other larger communities in northern Colorado. These systems experience significant traffic in the morning and evening hours when residents commute for the workday. CDOT and the Towns of Frederick and Firestone are constantly working to improve traffic flow patterns along these major routes.

Water Supply Systems

Three Districts, two municipalities, and one authority provide water supply systems within the District. These water suppliers include Left Hand Water District, Little Thompson Water District, Central Weld Water District, and the Town of Frederick Water. St. Vrain Water Authority is a partnership between the Town of Firestone and Little Thompson Water District, which operates the St. Vrain Water Treatment Plant in Firestone. The District works closely with these service providers on new construction to ensure that water supply systems remain in service, including all hydrants within the District response area.

Natural Gas Service

Black Hills Energy provides most of the natural gas services to the FFFD response area. Service includes both residential and commercial customers.

Electrical Power Service

United Power is the primary electrical service provider within the FFFD response area. It provides services to residential and commercial customers. Spindle Hill Energy Plant, which Invenergy Services owns, is an operating power station that produces electricity and thermal energy with high efficiency. While Spindle Hill Energy Plant is not a direct service for residents and businesses, it is essential to note that it does provide power grid resources as a third-party contractor to local electrical power service companies. This energy plant resides within the District's Station 1 planning zone.

Communications

Weld County Communications Center in Greeley, Colorado, provides communications to FFFD for emergency services and is the sole 9-1-1 operator for the District. The Amateur Radio

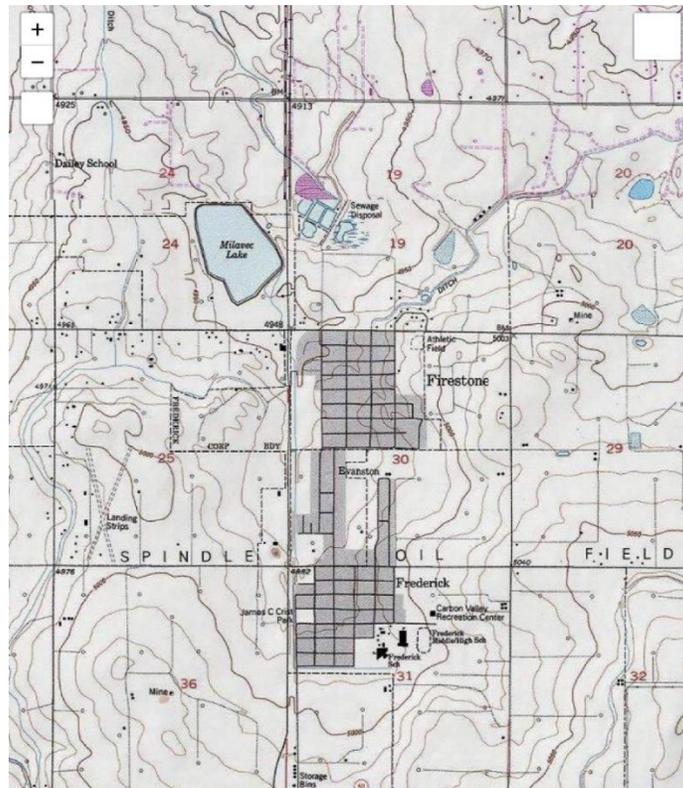
Emergency Services (ARES) is a group of volunteers that may assist in public service and emergency communications if needed. Major internet and phone providers are Xfinity and Century Link in the area, as well as several mobile data service providers.

Unique and Special Hazards

Weld County is the number one producer of oil and gas in Colorado. According to Weld County's website, 79% of all crude oil production and 52% of natural gas production in Colorado comes from Weld County. There are 715 oil and gas production and storage facilities located throughout the FFFD response area. This poses a special and unique hazard to the area and to emergency responders, which they must be prepared for. FFFD works to create beneficial relationships with oil and gas providers within the area and regularly trains on oil and gas emergency response.

Community Topography

The topography within the district is made up of primarily prairies, rolling hills, wetlands, lakes, rivers, and small streams. The average elevation is 4,921 ft. in Firestone and 4,984 ft. in Frederick, with the minimum elevation being 4,774 ft. in Firestone and the maximum elevation reaching 5,184 ft. in Frederick. The district's center is mostly suburban areas with rural areas on the outskirts in all directions except the southern portion of the district.

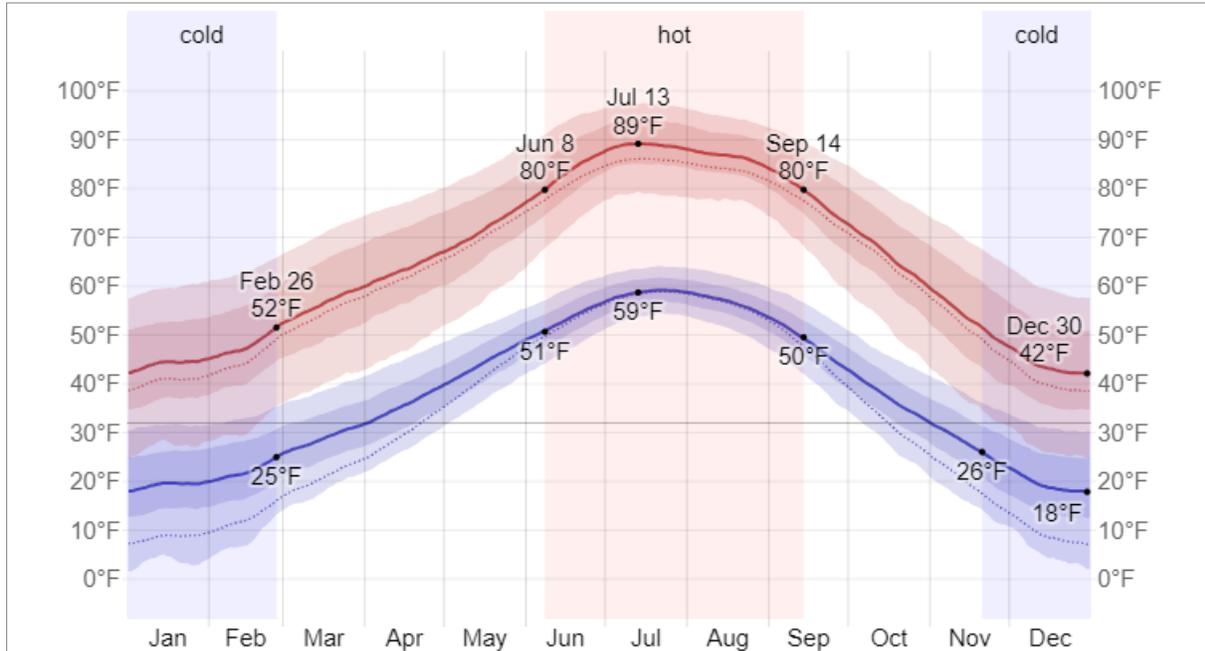


*Topography of Frederick-Firestone Area
(Topozone.com)*

Community Climate

The Frederick and Firestone areas enjoy moderate weather throughout the year. The area has four seasons, with winter weather, such as snow, making up the largest season at 6.6 months. Average temperatures are normally between 89°F and 18°F, with the hottest month being July and the coldest month typically being December. Humidity is low, which makes for a comfortable, dry climate.

Average High and Low Temperatures



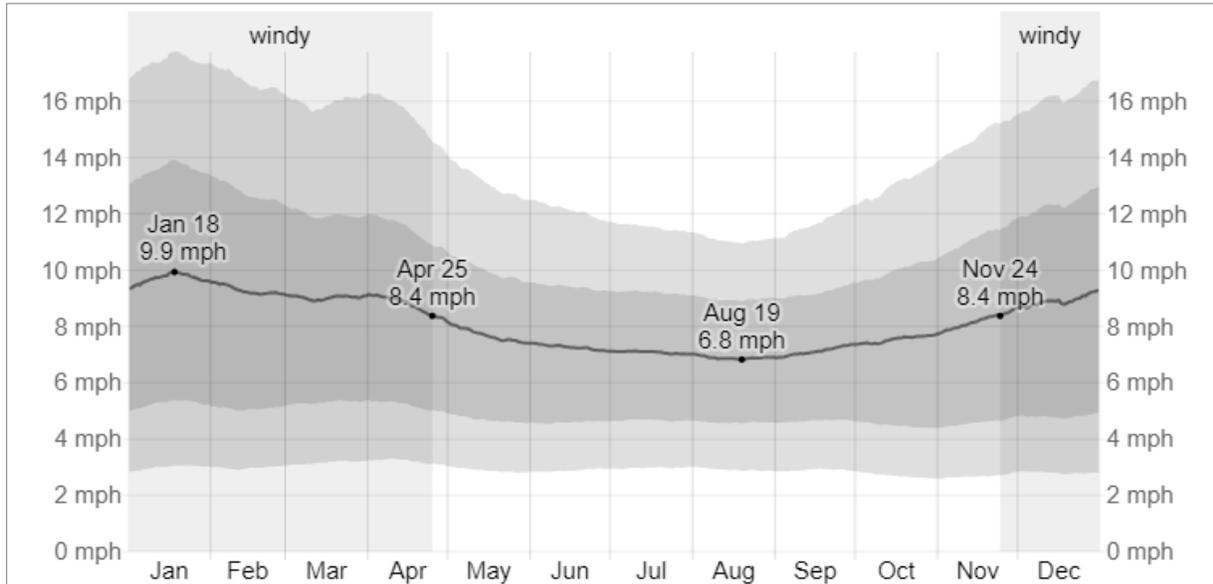
Average Monthly Snowfall



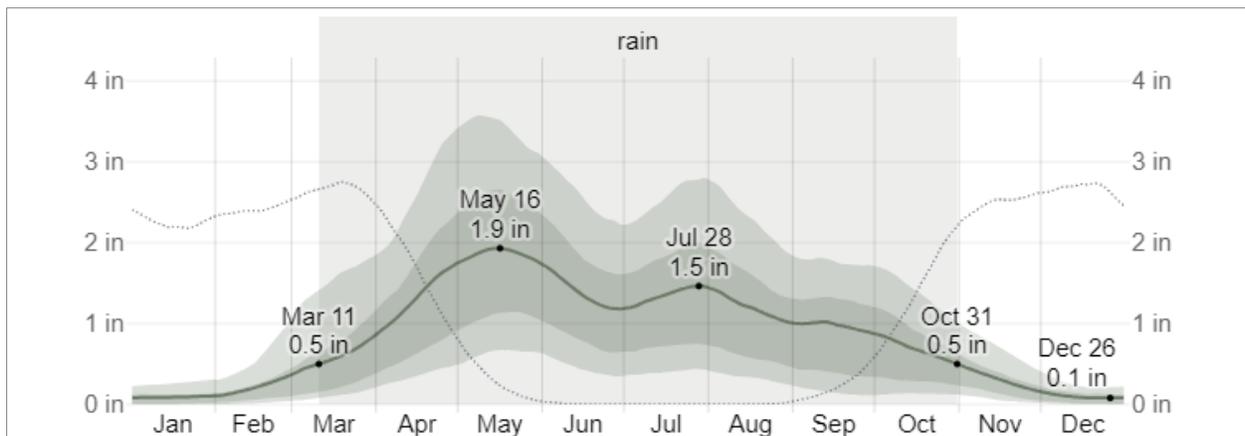
While weather patterns in the area are typical of the seasons, specific weather events are planned for, including winter storms and blizzards, flooding and drought, high winds, and severe

thunderstorms and hail. Winter generally consists of snowstorms that melt off within one or two days due to the sunny climate and high elevation. Preparation is given for snow removal of main roads throughout the area, resulting in low travel restrictions. The winter storm and snowy season typically begins in early October and ends in late April. The month with the most snow in the area is March, which has an average snowfall of 2.8 inches.

Average Wind Speeds

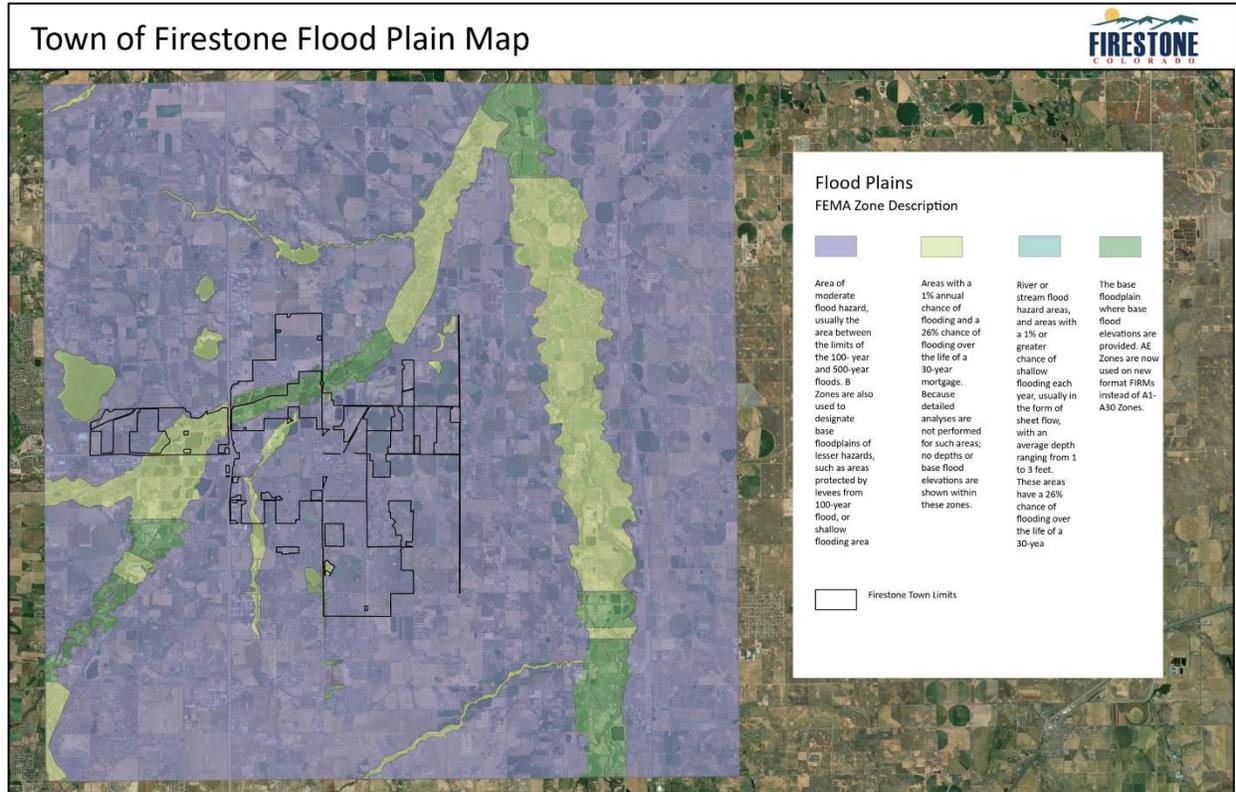


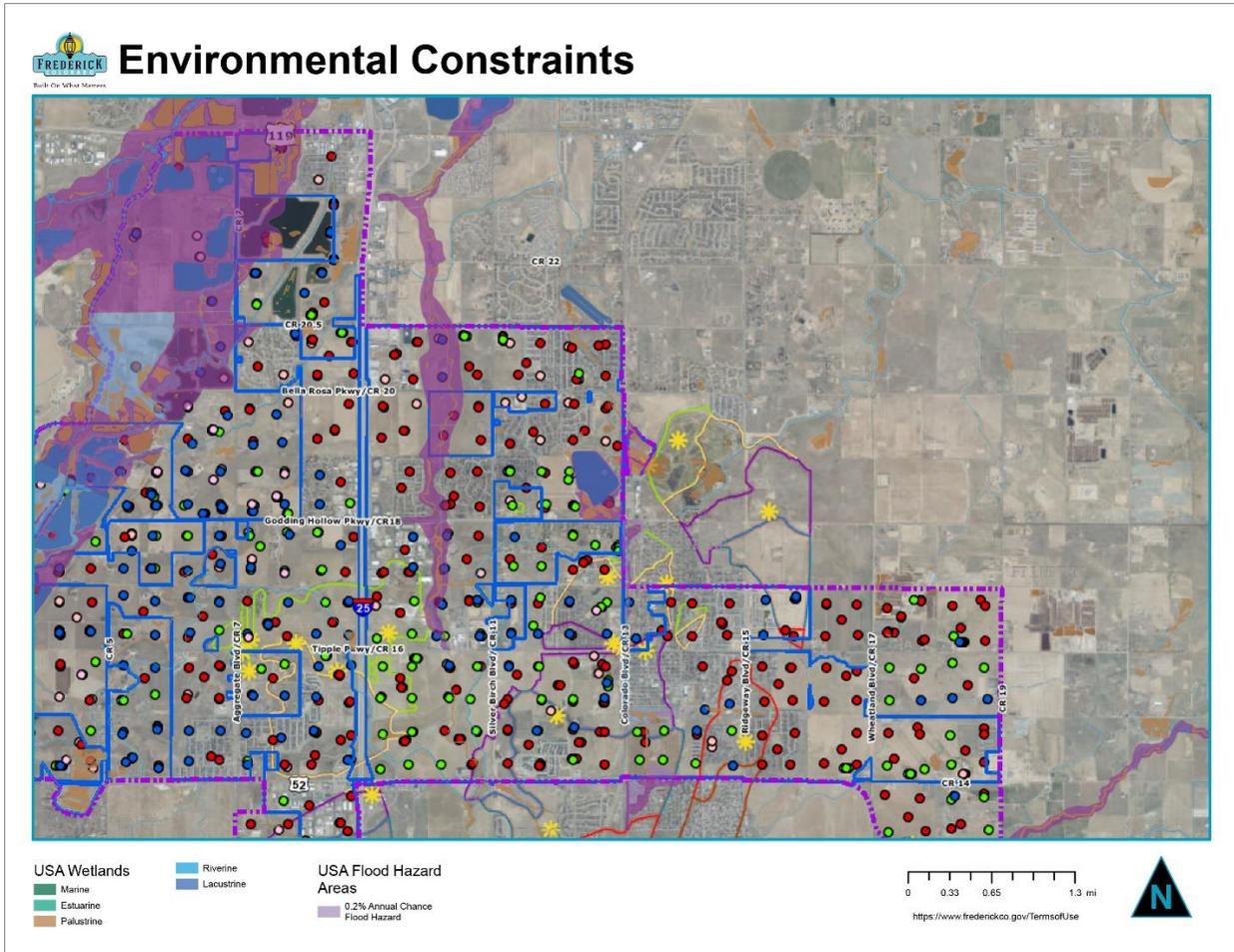
Average Monthly Rainfall



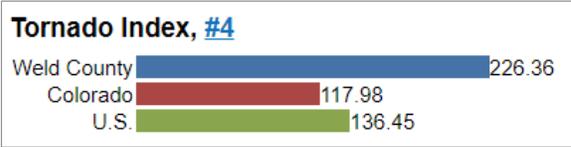
Once winter is over the spring season brings with it lots of rain, high winds, and the potential for severe thunderstorms and hail. Due to its rural and relatively flat topography, the Frederick and Firestone areas experience higher wind speeds for much of the year. The windier part of the year lasts for 5 months, with average wind speeds of more than 9.4 miles per hour. These windy conditions dry out the landscape, sometimes causing drought-like conditions during the drier

months. The high winds also mix with other weather elements, causing severe thunderstorms that can bring heavy rain and large and damaging hail. In September 2013, a regional flood resulted in extensive road closures, catastrophic property damage, and numerous calls for service. Typical rainfall in the area is moderate and can last from early March until late October, with May receiving the most rain. Several areas within the District have flood plains that must be considered when building or working in the area.





Other weather-related events that are susceptible to the area include lightning and tornados. Lightning is one of the most common and frequent weather-related hazards in Colorado. Lightning causes numerous fires in the wildfire-urban interface throughout the year. Colorado ranks fourth in the nation for lightning strike fatalities but 19th for cloud-to-ground strikes. However, Weld County has an extremely high tornado index rating, according to USA.com. Weld County ranks as Colorado's fourth-highest county to have a tornado. The tornado index value is calculated based on historical tornado events. It is an indicator of the tornado level in a region. A high tornado index value means a higher chance of tornado events. On June 7, 2021, a landspout tornado developed in southwest Weld County, 2 miles northeast of Firestone. The tornado reached a peak intensity of EF-2 on the Enhanced Fujita scale, with estimated wind speeds of 122 mph.



Courtesy of USA.com

Section 2 – Current Fire and Emergency Services

Frederick-Firestone Fire District is an all-hazards emergency services department that provides fire suppression, advanced life safety emergency medical transport services, technical rescue, water and ice rescue, hazardous materials mitigation, fire prevention and public education to residents, businesses, and visitors within the towns of Frederick and Firestone, as well as areas of unincorporated Weld County. The District works diligently to ensure that it provides the appropriate services to residents and businesses within its response area. It is guided by its 2021-2026 Strategic Plan, which includes community and stakeholder feedback on service delivery and community expectations.

Organizational Structure

The District is organized into three (3) sections: Operations, Planning, and Administration. There are currently 92 employees, consisting of EMT and Paramedic Firefighters, Sole-Function Paramedics, and support staff.

Administration/Finance

The Administration section consists of the office of the Fire Chief, Human Resources, Finance, and Public Information. This section supports the Planning and Operations section and ensures that the District provides the level of service set forth by the Board of Directors. It is also responsible for overseeing personnel services and internal and external communications.

Planning

The Assistant Chief of Planning/Fire Marshal oversees the Planning section. Divisions within this section include Community Risk Reduction, Logistics, Facilities, Information Technology, and Emergency Management. The Community Risk Reduction Division ensures code compliance through business inspections within the District, fire investigations, and fire prevention and life safety education within the community. Logistics and Information Technology is responsible for internal operations, including hand-held radios, computer software, uniforms, and crews' personal protection equipment (PPE). Emergency Management falls under the Carbon Valley Emergency Management Agency (CVEMA), whose director is cost-shared by FFFD, Frederick Police Department, Firestone Police Department, and Dacono Police Department.

Operations

Overseen by the Assistant Chief of Operations, this section includes fire suppression and response, emergency medical transport, training, and fleet maintenance. All specialties, including wildfire response and deployment, hazardous materials response (HazMat), technical rescue, and

water and ice rescue, also fall within this section. All line personnel are required at a minimum to hold an Emergency Medical Technician (EMT) certification. Emergency response personnel include Chief Officers, Company Officers, EMT/Firefighters, Paramedic/Firefighters, and Sole-Function Paramedics.

Resource Deployment

FFFD’s Operations Section maintains a minimum of 19 on-duty personnel 24 hours per day, 7 days per week, operating out of five staffed fire stations. Each fire station and apparatus are strategically placed so that all emergency calls within each station response zone are no more than a 5-mile drive.

Station 1	Station 2	Station 3	Station 4
Engine Ambulance Brush Truck Reserve Ambulance	Engine (Cross Staffed) Ambulance (Cross Staffed) Battalion Chief	Engine Ambulance Tender Reserve Pumper	Engine Tower (Cross Staffed) Ambulance (Cross Staffed) Reserve Pumper

Figure 10: FFFD’s Apparatus Locations through July 2024.

Station 1	Station 2	Station 3	Station 4	Station 5
Engine (Cross Staffed) Ambulance Tender (Cross Staffed) Safety Captain	Battalion Chief Reserve Engine	Engine (Cross Staffed) Ambulance Brush Truck (Cross Staffed) Reserve Ambulance	Heavy Rescue Engine Brush Truck (All Cross Staffed) Reserve Ambulance	Tower (Cross Staffed) Ambulance Brush Truck (Cross Staffed) Reserve Tower

Figure 11: FFFD’s Apparatus Locations beginning August 2024.

Response Matrix

Frederick-Firestone Fire District has established the following response matrix that is used by the Weld County Regional Communications Center (WCRCC) to assign the correct type and number of resources to each incident type. In November 2022, WCRCC completed an upgrade to a new Computer Aided Dispatch (CAD) system, switching from Spillman to Central Square. The new matrix included more alarm types and second and third alarm capabilities, which allowed FFFD to specify resource needs more efficiently. This upgrade and the proper triaging of requests via WCRCC allow for the correct resources to be sent to provide a safe and effective response to the reported incident. Each officer, firefighter, and medical responder must know and follow the outlined response matrix. The on-duty Battalion Chief or ranking FFFD officer is authorized to change the response to meet specific incident needs as deemed appropriate.

FFFD Response Matrix

Problem Nature	details	1ST ALARM (Entire District)	2ND ALARM (Entire District)	3RD ALARM (Entire District)
Active (Active Assailant)		2 - FFENG/FFTRK, 2 - FFAMB/FFMED, 1 - FFBAT, 1 - FFCOM, 2 - OEM	1 - ENG/TRK, 4 - AMB/MED, 1 - BAT, 1 - HELI	1 - ENG/TRK, 4 - AMB/MED, 1 - BAT, 1 - HELI
AIRCRAFT Emergency		1 - FFRSQ, 2 - FFENG/FFTRK, 2 - FFAMB/FFMED, 1 - FFBAT, 1 - FFCOM, 2 - OEM	2 - RSQ, 1 - ENG/TRK, 2 - AMB/MED, 1 - BAT	2 - RSQ, 1 - ENG/TRK, 2 - AMB/MED, 1 - BAT
Commercial Fire Alarm		1 - FFTRK, 1 - FFENG, 1 - FFBAT	Upgrade to Commercial Structure Fire	
Residential Fire Alarm	not including Multi-Family	1 - FFENG/FFTRK	Upgrade to Residential Structure Fire	
Single Unit Responses	Includes - animal rescues, CO alarms, Fire Investigations, Trash Fires, Fuel Spills, Gas Line Breaks, Odor Investigations, Vehicle Lockouts, Wires Down	1 - FFENG/FFTRK		
Technical Rescue	Includes - Building Collapses, Water Rescues, Trench Collapses, Hi/Low Angle Rescues	1 - FFRSQ, 2 - FFENG/FFTRK, 2 - FFAMB/FFMED, 1 - FFBAT, 1 - FFCOM, 2 - OEM	2 - RSQ, 1 - ENG/TRK, 2 - AMB/MED, 1 - BAT	2 - RSQ, 1 - ENG/TRK, 2 - AMB/MED, 1 - BAT
Fires	Includes - Multi-Family Structures, Single-Family Residential, Commercial Buildings, and Explosions	1 - FFTRK, 3 - FFENG, 1 - PGENG, 2 - FFAMB/FFMED, 1 - FFBAT, 1 - PGBAT, 1 - FFCOM, 2 - OEM	1 - TRK, 3 - ENG, 2 - AMB/MED, 1 - BAT	1 - TRK, 3 - ENG, 2 - AMB/MED, 1 - BAT
Oil and Gas Fire	Oil/Natural Gas Production Site	2 - FFENG/FFTRK, 1 - FFAMB/FFMED, 1 - FFBAT, 1 - FFCOM, 2 - OEM	2 - ENG, 1 - AMB/MED, 1 - BAT, 1 - FOAM	2 - ENG, 1 - AMB/MED, 1 - BAT, 1 - FOAM
VEHICLE FIRES		2 - FFTRK/FFENG, 1 - FFBAT		
Hazmat		2 - FFENG/FFTRK, 1 - FFAMB/FFMED, 1 - FFBAT, 2 - OEM	2 - ENG/TRK, 1 - AMB/MED, 1 - BAT, 1 - HAZMAT	2 - ENG/TRK, 1 - AMB/MED, 1 - BAT, 1 - HAZMAT
EMS Calls	"Alpha, Bravo, Charlie, Delta"	1 - FFENG/FFTRK, 1 - FFAMB/FFMED		
"ECHO" MEDICAL	Including Shootings and Stabbings	1 - FFENG/FFTRK, 1 - FFAMB/FFMED, 1 - FFBAT		
"OMEGA" MEDICAL	(i.e. lift assists, etc) no amb req'd	1 - FFENG/FFTRK		
Small Vegetation Fire		1 - FFBRSH, 1 - FFENG/FFTRK	upgrade to large vegetation fire	
Large Vegetation Fire		1 - FFTEN, 1 - FFBRSH, 2 - FFENG/TRK, 1 - FFBAT	2 - ENG/TRK, 2 - BRSH, 1 - BAT, 2 - TEN	2 - ENG/TRK, 2 - BRSH, 1 - BAT, 2 - TEN
Traffic Accident with or w/o Injuries		1 - FFTRK/FFENG, 1 - FFAMB/FFMED, 1 - FFBAT	Upgrade to Technical Rescue	
Traffic Accident w/ Extrication		1 - FFRSQ, 1 - FFTRK/FFENG, 1 - FFAMB/FFMED, 1 - FFBAT	Upgrade to Technical Rescue	

Apparatus Abbreviations

FFENG - FFFD 1500gpm Pumper w/ 3 personnel
 FFTRK - FFFD 2000gpm Aerial w/ 3 personnel
 FFRSQ - FFFD Heavy Rescue w/ 3 personnel
 FFAMB - FFFD ALS Transport Ambulance w/ 2 personnel
 FFMED - FFFD ALS Transport Ambulance w/ 2 Fire Trained Personnel
 FFBRSH - FFFD Wildland Type III Engine w/ 2 personnel
 FFTEN - FFFD Tactical Water Tender w/ 1500 gallons and 2 personnel
 FFBAT - FFFD On-duty Battalion Chief
 FFCOM - FFFD Off-duty Command Officer
 OEM - Carbon Valley and County Emergency Management
 FOAM - County Resourced Foam Trailer
 HAZMAT - County Designated Hazmat Specific Unit
 ENG - 1500gpm Pumper w/ 3 personnel
 TRK - 2000gpm Aerial w/ 3 personnel
 RSQ - Heavy Rescue w/ 3 personnel
 AMB - ALS Transport Ambulance w/ 2 personnel
 MED - ALS Transport Ambulance w/ 2 Fire Trained Personnel
 BRSH - Wildland Type III Engine w/ 2 personnel
 TEN - Water Tender w/ 1500 gallons and 2 personnel
 BAT - On-duty Battalion Chief

All FFFD calls are dispatched by WCRCC and continue to increase annually. In 2024, FFFD resources were dispatched to 3,079 calls. Of those calls, 1,877 were medical, and 80 were fire.

Fire	80
EMS/Medical	1,877
Alarm Activation	251
Public Assist/Other	369
Good Intent Calls	411
Hazardous Material	88
Special Operations	0
Severe Weather/Natural Disaster	3

Figure 12: 2024 Calls for Service

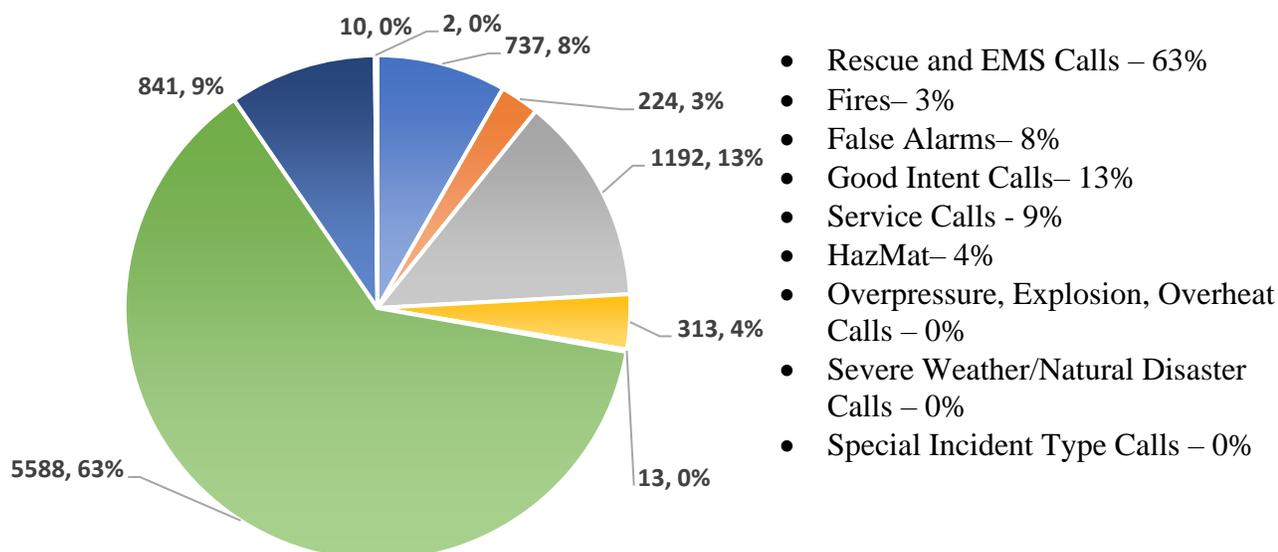
Section 3 - Area Risk Assessment

All FFFD response data was obtained from ImageTrend, the District’s computer-based records management system (RMS). Statistical data was obtained from the following sources: U.S. Census Bureau, Colorado Demographics, National Weather Service, Colorado State Patrol, Weld County Department of Public Health and Environment, Colorado Division of Fire Prevention and Control, Colorado Fire Incident Reporting System (CFIRS), Colorado Department of Transportation, Vision 20/20, Towns of Frederick and Firestone GIS Departments, Carbon Valley Emergency Management, and many others.

Risk Assessment and Methodology

FFFD’s risk assessment is guided by the District’s 2021-2026 Strategic Plan to ensure all objectives are considered and met. The District utilizes several methods to determine the community's potential risks. These include GIS-based analysis, target hazard data, demographic data, RMS data, and data from external sources including the Environmental Research Systems Institute (ESRI). Utilizing this information allows FFFD to identify and analyze potential risks within the community. The District reviewed call data from January 1, 2022, through December 31, 2024, to determine the different types of incidents and their frequency of occurrence. All analyses were performed using a variety of reports from ImageTrend and cross-referenced with data obtained from CFIRS.

Calls for Service by Incident All Years 2022-2024



To assess risk within all categories, FFFD utilizes the two-axis methodology found in the 6th edition of the CPSE CRA-SOC manual. Based on this approach, threat probability and consequence outcome are considered simultaneously, as prescribed by the level determination approach. This allows for a relationship between all risks to be established and a natural comparison to be created.

Two-Axis Risk Categorization

PROBABILITY	HIGH PROBABILITY	HIGH PROBABILITY
	LOW CONSEQUENCES	HIGH CONSEQUENCES
	Moderate Risk	Maximum Risk
	Low Risk	High Risk
	LOW PROBABILITY	LOW PROBABILITY
	LOW CONSEQUENCES	HIGH CONSEQUENCES
	CONSEQUENCES	

When developing the risk categorization for incidents, the District looks at all call types to help assess the distribution and concentration of resources and to match system resources with risks. The distribution of resources, including apparatus and staff are placed in stations to respond to low and moderate risks. Additional resources, such as aerial ladder trucks, heavy rescue engines, HazMat trailers, water tenders, and wildfire Type 6 engines, are placed in the areas where the risk is much higher.

Each incident type was evaluated for Hazard, Consequence, Impact, and Risk (H.C.I.R.):

1. Life safety risk: Determine the number of personnel and equipment required to protect the public and responding firefighters from life-threatening situations.
2. Economic impact from the loss of property, high-value occupancies, and loss of income to the community’s workforce.
3. Significant community impact and consequence from losing critical infrastructure or historical buildings.

When combined with the probability of the incident and the degree of the risk, this analysis of H.C.I.R. was used to develop the District’s incident classification for risk and frequency [Figure 13].

	Low Risk	Moderate Risk	High Risk
High Frequency	<ul style="list-style-type: none"> - EMS (Basic Life Support) - Smoke/Fire/CO Alarm - Public Assist/Lift Assist - Odor Investigation - Outside Smoke Report 	<ul style="list-style-type: none"> - EMS (Advanced Life Support) - Motor Vehicle Accident (No Extrication) - Mental Health/Suicide - Gas Leak (Outside/Inside) 	<ul style="list-style-type: none"> - Motor Vehicle Accident (Extrication) - Fire: Residence - Gas Leak: Industrial
Low Frequency	<ul style="list-style-type: none"> - Fire: Trash/Dumpster - Fire: Landscape - Small Vegetation Fire > 1.5 acres - HazMat: Small Fuel Spill 	<ul style="list-style-type: none"> - Fire: Vehicle - Fire: Detached Building - Large Vegetation Fire < 1.5 acres - Severe Weather Event - HazMat: Large Fuel Spill 	<ul style="list-style-type: none"> - Wildfire: Structures threatened - Fire: Commercial - Fire: Multi-Family - Structural Collapse - Trench Rescue - Confined Space Rescue - Rope Rescue - Water/Ice Rescue - Chemical Spill/Leak

Figure 13: Incident Classification for Risk

Geographic Planning Zones

The District is split into four geographical planning zones or station zones. Each zone is served by a single fire station that is identified as first due to emergency incidents. Stations are located to ensure the effective distribution of resources and limit risk from extended responses. Station locations are determined so that all emergency calls are no less than a 5-mile drive with the first due resources. It also allows for response times to meet the outlined performance outlined in the intergovernmental agreements (IGAs) the District has with the towns it provides services to. FFFD uses these station zones to help assess and analyze risks by considering service level demands, resource deployment, area development and growth, population density, occupancy risk, fire and non-fire risk, and special hazards. These station zones are reviewed annually to ensure that resource distribution is correct.

Occupancy Risk Assessment

The FFFD Community Risk Reduction Division records and maintains data for all businesses and occupancies within the district in the ImageTrend Inspection module and tracks development and construction, pre-incident plans, fire permits, fire code inspections, business contacts, owner information, and special hazards. Occupancies are classified as High, Moderate, or Low for risk identification according to inspection scheduling.

The CRR Division inspects all High or Target Hazards. High Hazards are occupancies that have high hazards, fire detection or fire suppression systems, heavy manufacturing, and storage or use of hazardous materials over the allowable storage limits in the current adopted fire code.

Moderate and Low risks are all inspected by the station crew in that response area and data maintenance completed by the Station Officers. The Assistant Chief of Planning manages the Division of Community Risk Reduction Annual Business Fire Safety Inspection Program, which maintains a Safety Inspection Master List that establishes where each business or occupancy resides. The Master Safety Inspection Lists are developed and maintained for each fire station’s first-due area [Figure 14].

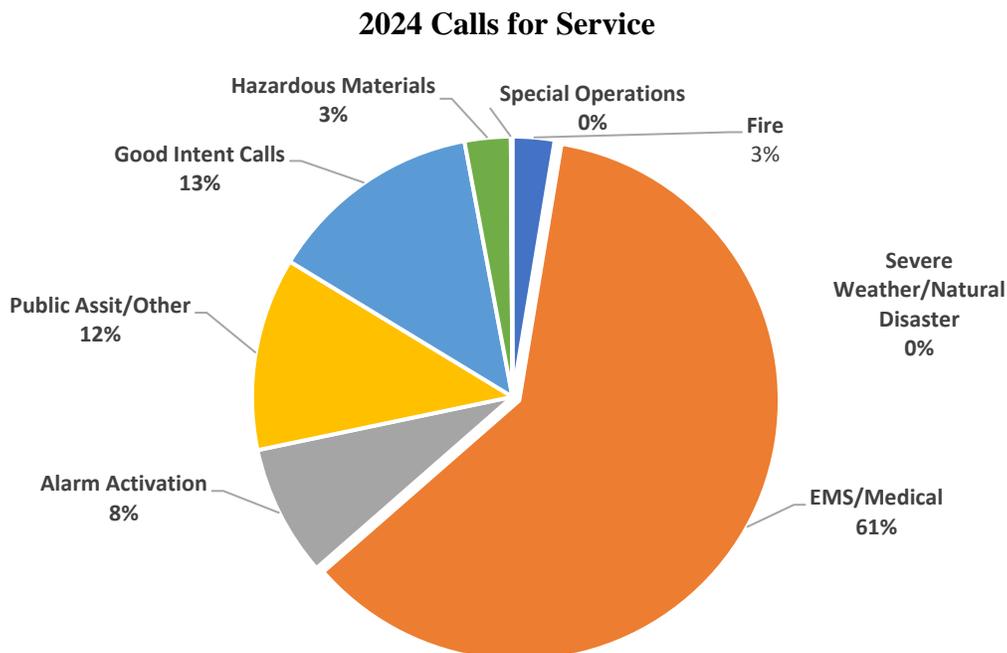
At the end of 2024, Frederick-Firestone Fire District was tracking 452 commercial and industrial buildings, 821 businesses, and 585 fire protection systems.

	Station 1	Station 2	Station 3	Station 4
Low	36	4	18	29
Moderate	156	242	56	124
High	31	4	25	9

Figure 14: 2024 FFFD Safety Inspections by First-Due Planning Zone

Risks by Response Category

In 2024, FFFD responded to 3,079 calls for emergency services. The District utilizes NFIRS for description when assigning call data in reports in the District RMS. The chart below identifies what type of calls FFFD resources responded to in 2024 and how often.



Fire-Related Risks

FFFD provides for the communities of Frederick and Firestone through full-service fire suppression response to mitigate the impact on property and lives. Fire-related risks within FFFD’s response area include structural and non-structural fires, including structure fires, vehicle fires, vegetation fires, and other types of fires. Overall, the fire outlook in the District accounts for 3 percent of incidents FFFD responded to.

Top Five Fire Types (2022-2024)

Total	NFIRS Code	Incident Type
40	111	Building Fires
40	143	Grass Fires
27	131	Passenger Vehicle Fire
18	142	Brush, or brush and grass mixture fire
17	151	Outside rubbish, trash, or waste fire

Fire Outlook 2022-2024

In District Fire Activity	2022	2023	2024
Structure Fires (NFIRS 111-124)	23	21	22
Other Fires (NFIRS 100, 130-173, 561)	65	51	71
Total Dollar Loss (Fires investigated)	\$1,057,177.00	\$1,325,592.00	\$620,077.00
Total Property Saved (Fires investigated)	\$14,737,227.00	\$5,747,486.00	12,434,411.00

The District has examined past fire-related incidents and evaluated them against the anticipated probability of recurrence and the expected risk to firefighters and the public. Below, the district explains the risks and likelihood of occurrence of fire-related incidents.

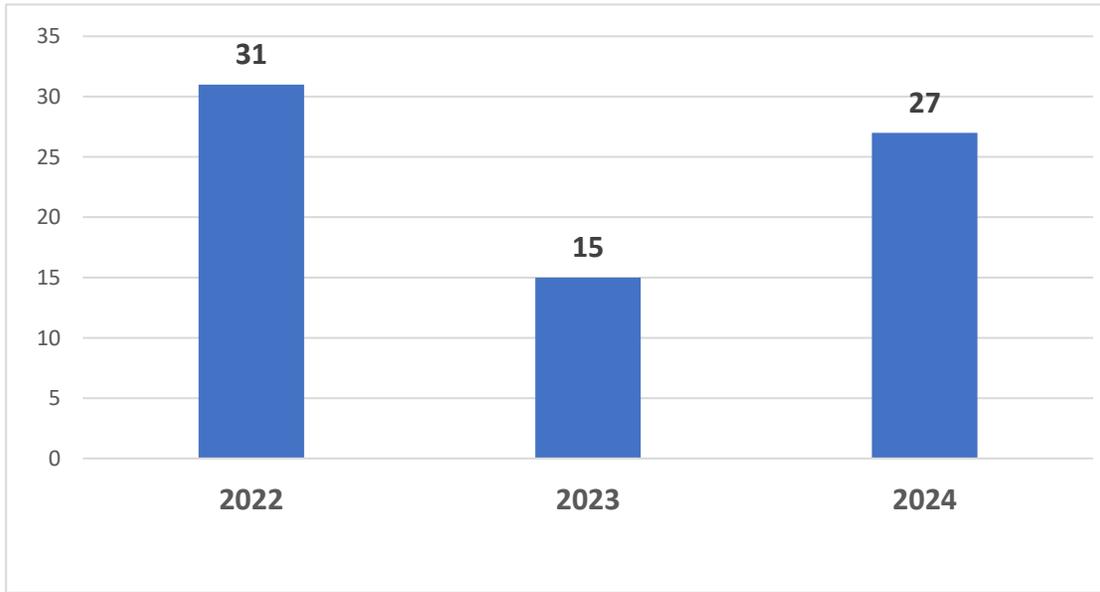
Risk vs Probability of Fire Incidents

	Low Risk	Moderate Risk	High Risk
High Probability	- Unauthorized burning - Outside rubbish, trash, or waste fire	-Vegetation/grass/brush fires - Passenger vehicle fires	Building structure fire (residential)
Low Probability	- Outside Building - Other types of fires	- Cooking fires - Other type of transport vehicle fires	Commercial structure fire Oil and gas fire

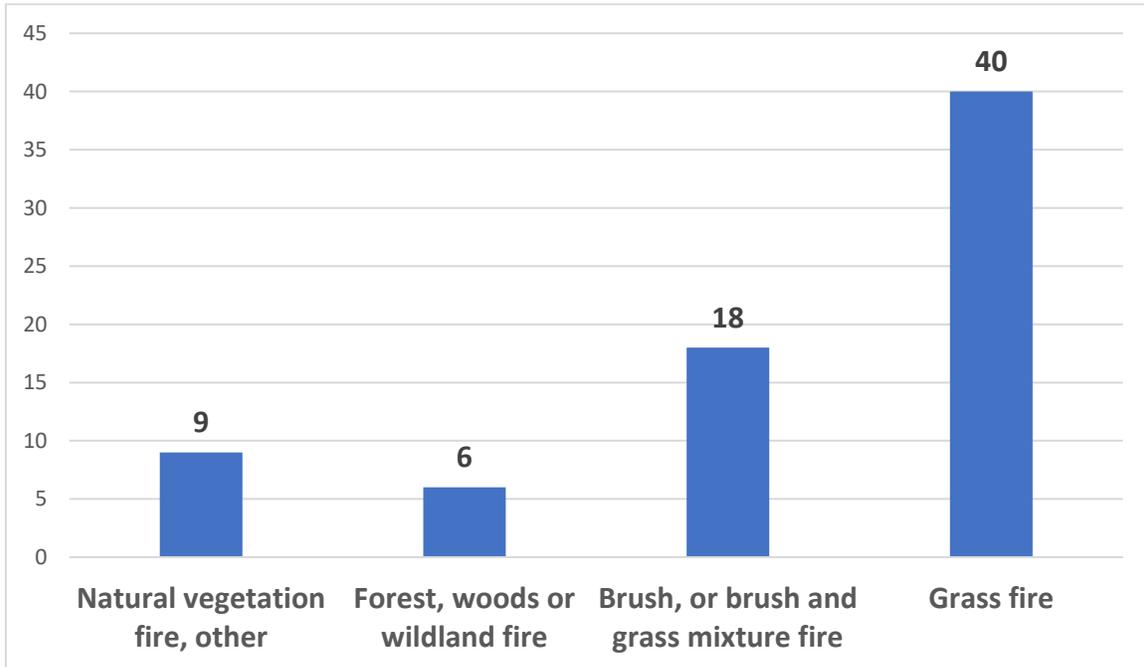
Wildland Fire

While wildland fires were discussed above as a fire-related risk, it is worth looking at the data related to wildland-type fires since they account for three of the top five fire-related incidents in the District. FFFD has a wildland program and resources to support it. Overall, FFFD personnel responded to 73 wildland fires, with grass fires accounting for 40 of those incidents.

Wildland Fire Outlook 2022-2024



Wildland Fires by Category 2022-2024



Risk vs Probability of Wildland Fire Incidents

	Low Risk	Moderate Risk	High Risk
High Probability		<ul style="list-style-type: none"> - Grass fires - Brush, or brush and grass mixture fire 	
Low Probability		<ul style="list-style-type: none"> - Natural Vegetation Fire, other - Forest, woods, or wildland fire 	

Non-Fire Risks

Non-fire risks include emergency medical services, hazardous materials, special operations, and motor vehicle accidents.

Emergency Medical Services

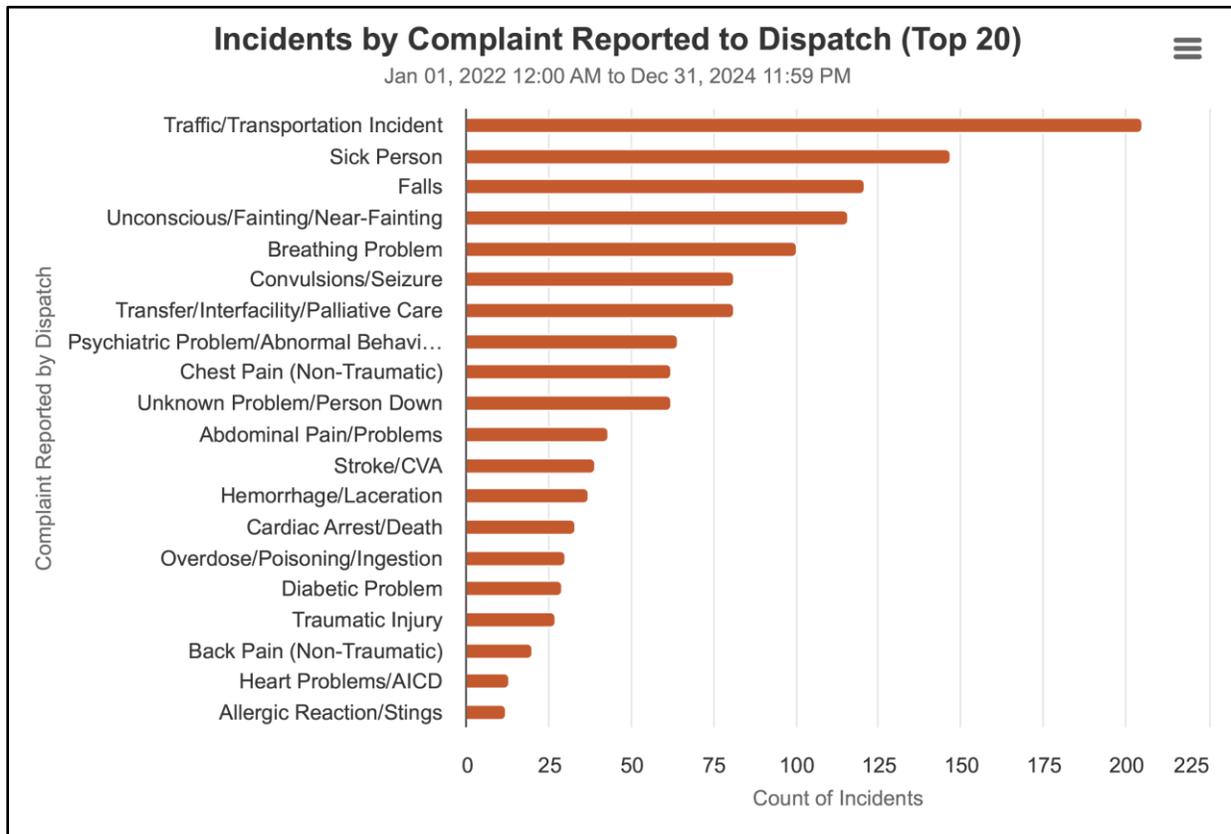
Emergency medical services have the largest impact on FFFD resources. Of the three years of data analyzed, emergency medical incidents accounted for 63 percent of incidents within the District. FFFD provides an integrated fire and emergency medical response to all medical calls with cross-trained firefighters and emergency medical technicians and paramedics. In 2023, the District added sole-function paramedics resulting in a paramedic-only ambulance that responds out of Station 3. This ambulance responds with an engine that has cross-trained fire and medical personnel. All engine companies have EMS inventories that support full Advanced Life Support (ALS) capability. For patient transport, the District deploys 3, 24-hour ALS medical units.

Top Five EMS Call Types (2022-2024)

Total	NFIRS Code	Incident Type
4,584	321	EMS call, excluding vehicle accident with injury
633	322	Vehicle accident with injuries
261	324	Motor vehicle accident with no injuries
47	381	Rescue or EMS standby
24	311	Medical assist, assist EMS crew

Risk vs Probability of EMS Incidents

	Low Risk	Moderate Risk	High Risk
High Probability	- Emergency Medical Incident (BLS) - Rescue or EMS standby	- Emergency Medical Incident (ALS) - Vehicle accident with no injuries	- Vehicle Accident with injuries
Low Probability	- Medical Assist	- Motor vehicle/pedestrian accident (MV Ped)	- Shootings and Stabbings



Hazardous Materials

Frederick-Firestone Fire District’s Community Risk Reduction Division takes a proactive approach towards enforcement of hazardous materials storage and handling. Chemicals and quantities are verified and approved during annual inspections. All target hazards or high-risk occupancies are tracked and inspected by fire prevention specialists in the Planning Division. All information for target hazards is stored in the Target Solutions Inspection Module database, and the Master Safety Inspection List, which determines which station zone the high-risk occupancy resides in. In NFIRS, the 400 series includes all hazardous calls that can include hazardous conditions but not always hazardous materials calls. The chart below signifies hazardous material calls, not hazardous conditions, within the NFIRS 400 series because these are the calls that signify hazardous materials (HazMat) calls.

Top Five HazMat Incident Types (2022-2024)

Total	NFIRS Code	Incident Type
175	412	Gas Leak (natural gas or LPG)
54	424	Carbon Monoxide Incident
14	413	Oil or other combustible liquid spill
12	411	Gasoline or other flammable liquid spill
4	421	Chemical hazard (no spill or leak)

Risk vs Probability of HazMat Incidents

	Low Risk	Moderate Risk	High Risk
High Probability	- Carbon Monoxide Incident -Chemical Hazard, no spill or leak (Odor Investigation)	- Gas Leak (Outside/Inside)	- Gas Leak (Industrial)
Low Probability	- Small oil or combustible liquid spill - Small gasoline or other flammable liquid spill	- Large oil or combustible liquid spill - Large gasoline or other flammable liquid spill	- Chemical spill or leak

Special Operations

Special operations encompass a broad range of rescue situations. Each requires personnel who are highly trained in the specialized skills and equipment involved in that rescue. FFFD breaks special operations into technical rescue, including low—and high-angle rope rescue, trench rescue, structural collapse, confined space, technical extrication, and large-area search and rescue. Special operations also include swift water, topwater, and ice rescue incidents.

While FFFD personnel train and prepare for technical rescue situations that could occur in the District, these types of technical rescue incidents have a low probability of occurrence and a high risk due to life safety and the challenges each presents to personnel.

Top Five Special Operations Incidents (2022-2024)

Total	NFIRS Code	Incident Type
5	353	Removal of victim(s) from stalled elevator
3	360/362	Water & ice rescue/Ice rescue
3	352	Extrication of victim(s) from vehicle
2	354	Trench/below grade rescue
2	461	Building or structure weakened or collapsed

Risk vs Probability of Special Operations Incidents

	Low Risk	Moderate Risk	High Risk
High Probability	- Elevator Rescue	- Vehicle Extrication	- Water and Ice Rescue - Large Vehicle / Equipment / Building Extrication
Low Probability			- Structural Collapse - Trench Rescue - Confined Space Rescue - Rope Rescue

Section 4 – Program Goals and Objectives

Community Priorities

Frederick-Firestone Fire District is an all-hazards fire department providing fire suppression, emergency medical response, technical rescue, hazardous materials response, wildland fire services, water and swift water rescue, fire investigations, community relations, and community risk reduction activities, including fire business inspections, fire plan reviews, and public education. The goal of any emergency service delivery system is to provide the best services by allocating the right amount of time, energy, and resources to services that are high in demand. To do this customer priorities must be considered, along with historical incident data, to accurately prepare an agency to respond to incidents and meet service expectations.

To better understand service expectations and community priorities, FFFD facilitated an external stakeholder workshop during the development of its 2021-2026 Strategic Plan. During the workshop, community stakeholders were asked to prioritize the programs offered by the District through a process of direct comparison [Figure 15].

Programs	Ranking
Emergency Medical Services	1
Fire Suppression	2
Technical Rescue	3
Hazardous Materials Response	4
Fire Investigation	5
Emergency Management	6
Community Risk Reduction	7
Wildfire Services	8
Public Fire and Life Safety Education	9

Figure 15: Community Priorities from FFFD 2021-2026 Strategic Plan

Performance Goals and Strategic Initiatives

While the external stakeholder work session identified community priorities for the District, internally, FFFD had to determine how those priorities could be successfully implemented and what the goals and objectives would be. Those initiatives outlined for the 2021-2026 Strategic Plan were external relationships, community engagement, career development, capital assets, health and wellness, and staffing.

FFPD establishes realistic performance measures to help the agency evaluate the services provided. This is done by utilizing fire service-specific tools to assess the quantity and quality of District services. Performance measurement and standard comparisons are used to evaluate services. Information is collected internally from district sections and divisions, as well as from outside organizations such as the Insurance Services Office (ISO) and the National Fire

Protection Association (NFPA). The data collected from such organizations provide information and data used to measure fire service efficiency and effectiveness.

Programs and Services

Emergency Medical Services (EMS)

Frederick-Firestone Fire District deploys two ALS ambulances; one covers all first-due medical responses in the south portion of the District, while the other covers medical calls in the north portion of the District. These ambulances run out of Station 1 and Station 3. Station 1 covers the south portion of the District, while Station 3 covers the north portion. Station 2 and Station 4 offer cross-staffed ambulances for incidents depending on the location and type of call dispatched. All emergency calls receive the standard engine/medical response according to the District's response matrix. FFFD employs an EMS Training Lieutenant who responds, Monday through Thursday, from 0700 to 1700 hours to high acuity calls along with the normal dispatched response.

EMS operations function under the license of the medical director on staff. Under this direction, FFFD adopted the Denver Metropolitan Medical Protocols, which provide a consistent standard of care. These protocols are aligned with the American Heart Association's Advanced Cardiac Life Support (ACLS) and Pediatric Advanced Life Support (PALS) recommendations.

Overall, FFFD's emergency medical response and care are high-level. The EMS Training Lieutenant reviews all medical calls to ensure that all protocols are followed and that the best medical care is always provided. This helps ensure that all calls provide a high level of advanced medical care.

Fire Suppression

Fire Suppression services are delivered out of five stations with four engines (Pumpers), two aerials, two brush trucks, and one water tender. One Battalion Chief and one Chief Officer are on duty each day for command and supervision and to maintain responder and citizen safety. FFFD utilizes a minimum of 19-line personnel daily to fill the positions necessary to maintain line operations, apparatus, equipment, and pumping capacity. All Chief Officers, Company Officers, and Acting Officers are Blue Card certified to standardize crew operations and terminology at emergency operations.

Frederick-Firestone Fire District utilizes the National Information Management Systems (NIMS) as the incident management system. Through the District's Training Division, every effort is made to educate the chiefs, officers, and crews on effective structure fire management and suppression.

Technical Rescue

Frederick-Firestone Fire District provides a technical-level response to structural collapse rescues, trench rescues, confined space rescues, rope rescue incidents (High and Low Angle), vehicle accidents requiring extrication, and large-area search and rescue. All line personnel are trained to perform basic vehicle extrication operations and low-angle rope rigging operations.

Technical rescue team personnel attain higher certification levels in all Technical Rescuer disciplines. FFFD's Technical Rescue Team was part of the North Area Technical Rescue Team (NATRT) until the last quarter of 2024. In January 2025, the District became a founding member of the Northern Colorado Special Operations Team (NoCoSOT), along with Windsor-Severance Fire District and Greeley Fire Department and entered into a Response and Resource Sharing agreement. The need for NoCoSOT occurred as Northern Colorado grew, and the focus shifted to more of a county collaboration. The District currently has 12 personnel consisting of 1 Battalion Chief, 1 Captain, 4 Lieutenants, 4 Engineers, 1 EMT/Firefighter, and 1 Paramedic/Firefighter. All technical rescue and extrication policies and procedures are consistent with national standards and are adequate for each discipline of technical rescue provided by the team.

All District engines are equipped with standard technical rescue equipment, and specific engine companies throughout the District are equipped with standard extrication and stabilization equipment.

Hazardous Materials Mitigation

The District responds to a variety of hazardous material incidents and all FFFD personnel are trained to the operational level as part of minimum training and operations standards. FFFD HazMat Team members are trained at the Technician and Specialist level. FFFD's HazMat Team consists of 14 members, with two air-monitor technicians and three Highway Specialists within its ranks. In the last quarter of 2024, FFFD's Hazmat Team entered into a Weld County Hazmat Response and Resource Sharing agreement comprising 12 fire departments.

Emergency response and mitigation objectives on incidents establish hazard classification/identification, ensure personnel/civilian safety, environmental protection, incident stabilization, and mitigation. FFFD coordinates with outside hazmat agencies for clean-up procedures.

Fire Investigation

Fire investigations are managed under the Planning Section and are part of the District's Community Risk Reduction Division. FFFD works closely with other local fire and law enforcement agencies to provide additional investigative resources and state and federal agencies. FFFD currently has four (4) Fire Investigators and nine (9) Fire Technicians. Fire investigation personnel are members of several professional fire investigation associations, including the International Association of Arson Investigators (IAAI), the Colorado Chapter of IAAI (CIAAI), and the National Association of Fire and Explosion Investigators (NAFI). These organizations assist FFFD personnel to obtain and retain fire investigation certifications and ensure appropriate and consistent scene processing, evidence collection, and information sharing. In 2024, FFFD fire investigators responded to 19 fires in the District.

Emergency Management

Emergency management consists of domestic preparedness, planning, and response. FFFD has a full-time emergency manager through the Carbon Valley Emergency Management Agency (CVEMA). The CVEMA emergency manager position is cost-shared with the FFFD, Frederick Police Department, Firestone Police Department, and Dacono Police Department but works out of FFFD's Administration Building. The emergency manager's primary duty is to operate an all-hazards management program, allowing the agency to effectively address all four phases of emergency management: mitigation, preparedness, response, and recovery. CVEMA works closely with the different agencies and serves as a liaison between the municipalities and the county. CVEMA operates the emergency operations center (EOC) out of FFFD's Administration Building in Frederick for large-scale training exercises and emergency incidents.

Community Risk Reduction/Public Education

The Community Risk Reduction (CRR) Division operates under FFFD's Planning and Public Relations Sections. It provides programs based on target populations vulnerable to risk and hazards recognized in the community risk assessment. Fire Prevention Specialists and the Community Risk Reduction Specialist combine education, engineering, enforcement, economic incentive, and empowerment strategies to reduce vulnerability to fires, injuries, illnesses, and disasters. Fire prevention specialists are responsible for community development by evaluating construction and fire protection plans, conducting construction inspections, and conducting annual business safety inspections on all target/high-hazard occupancies in the District. The CRR Specialist works strictly on prevention and education and works on connecting and delivering programs to the community through the District's Community Marketing and Outreach Plan (CMOP). By working closely with residents and businesses within the community, these specialists work to identify and analyze risks, then adapt and develop appropriate programming.

Wildland Fire Services

Frederick-Firestone Fire District operates and maintains a comprehensive wildland firefighting program. All line personnel receive operation-level wildland fire training and annual wildland firefighter refresher training. All firefighters are trained and equipped to stabilize wildland and wildland-urban interface (WUI) incidents. The Operations Section manages the FFFD wildland firefighting team and receives advanced certifications and qualifications. When needed, members of the wildland firefighting team are used to fill key roles for staffing wildland-specific apparatus on days that have increased wildland hazards. FFFD responds to wildland events occurring within district boundaries but also deploys to larger-extended events outside the district and state when needed or requested. Wildland apparatus are housed at Station 3 and Station 4, with a tender at Station 1, and are typically cross-staffed by an engine or tower company.

Section 5 – Deployment and Performance

Frederick-Firestone Fire District gathers response data and reviews it to establish realistic performance measures and evaluate current response performance and deployment. The district utilizes its RMS system to pull the data and fire-specific tools to assess performance measurement and compare standards for evaluation. Information collected by the Insurance Services Office (ISO), the National Fire Protection Association (NFPA), and the Center for Public Safety Excellence (CPSE) are the primary sources of information and data used to measure fire service efficiency and effectiveness. These tools allow for self-monitoring of response times and associated risk mitigation.

Response data is expressed as benchmarks and baselines. Benchmarks are a set of high standards or expectations that help guide emergency response and plan future efforts. Baselines are the actual performance that identifies where response capabilities currently reside and show where improvements can be made.

Community Response History

To better understand FFFD’s historical responses, incident responses were analyzed from January 1, 2022, through December 31, 2024. In-depth analysis assists FFFD in understanding when personnel are responding to calls and if there are busier times and days of the week. The graphs below [Figures 16 and 17] show calls by day and hour, which show most calls fall between 6:00 a.m. and 10:00 p.m., with the call volume remaining relatively the same except for a slight decrease in calls on Saturday and Sunday.

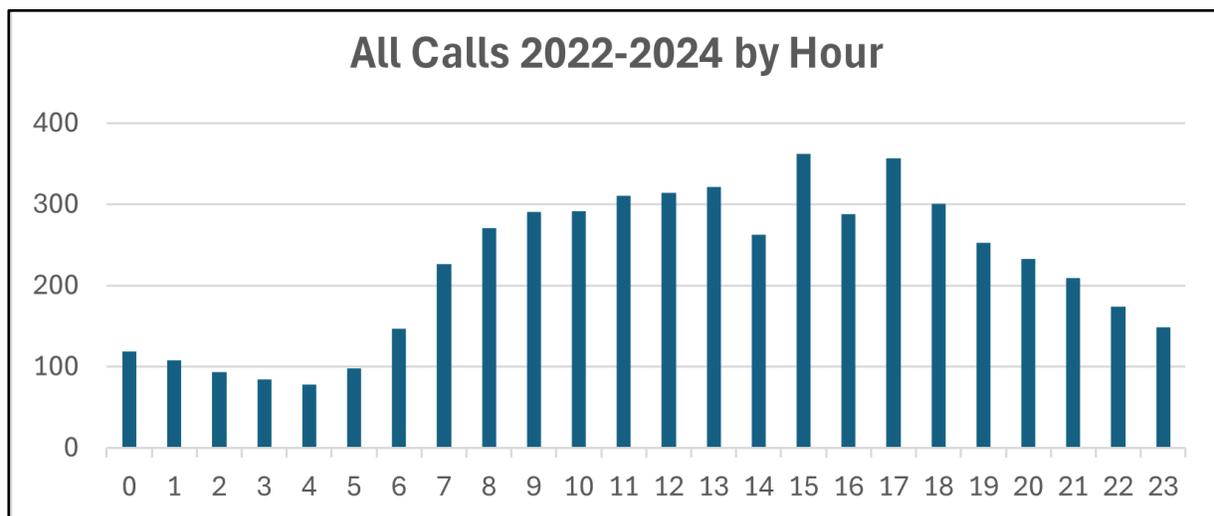


Figure 16: Call volume by hour from 2022-2024

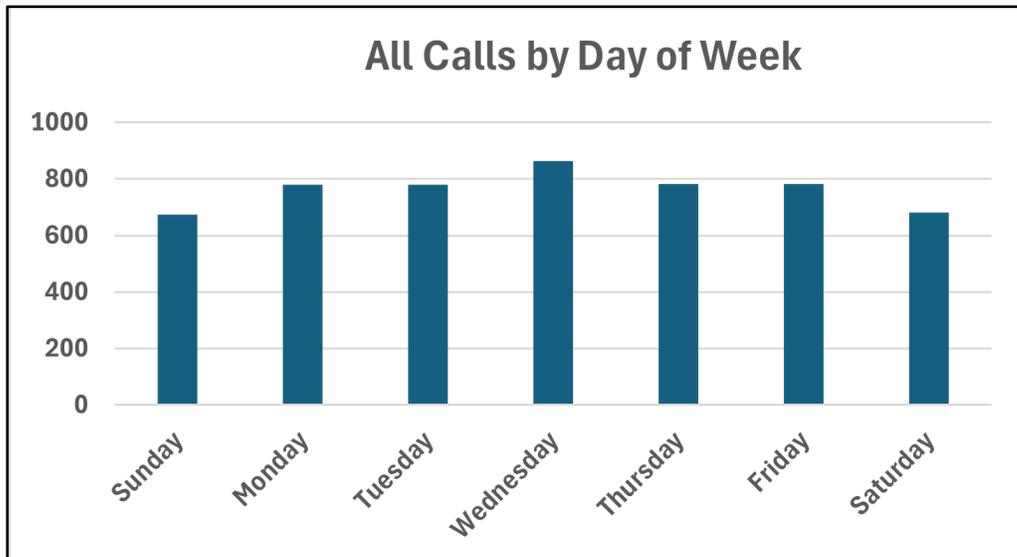


Figure 17: 2022-2024 Calls by Day of Week

Performance Standards

FFFD has set its current response benchmarks at the following for the first arriving unit:

- PSAP to Dispatch Time: 01:30
- Turnout Time: 01:30
- Travel Time: 04:30
- Total Response Time: 07:30

Response time compliance for in-district emergency response for 2022-2024 shows the average total response time was 08:01, 87% of the time. The table below [Figure 18] breaks down the response standards analyzed to the 90th percentile from January 1, 2022, to December 31, 2024.

First Unit on Scene	2022 90 th PCTL / % Met Goal	2023 90 th PCTL / % Met Goal	2024 90 th PCTL / % Met Goal
Turnout Time (1:30 @ 90%)	01:52 / 80%	01:44 / 83%	01:50 / 71%
Travel Time (04:30 @ 90%)	07:37 / 59%	06:35 / 79%	6:27 / 76%
Total Response Time (07:30 @ 90%)	08:26 / 83%	07:28 / 90%	7:30 / 89%

Figure 18: In-District Emergency Response for 2022-2024.

Time Measurement Methodology

For FFFD, time begins when Weld County Regional Communications Center or Dispatch alerts of a call for service. This time is transferred to the Computer-Aided Dispatch (CAD) software and is recorded (time-stamped). For response benchmarks, FFFD does not consider the Public Safety Answering Point (PSAP) to dispatch time since this is out of the District's control but does monitor it to see if there are places where FFFD could work with dispatch to ensure better communications and time. Therefore, time begins when FFFD is alerted by dispatch of an emergency call.

Turnout time begins when the assigned units are alerted of the call for service by one of four methods:

1. Station Alerting
2. Mobile Data Terminals (MDT)
3. Incident information is aired on the primary dispatch channel
4. Hiplink Software

Turnout time ends when the assigned units indicate their response and are en route to the emergency call.

Travel time begins when the assigned units indicate they are responding. On-scene is recorded by the use of the MDT or radio broadcast. Total response time is the total time of when FFFD is alerted of the call to when the unit(s) arrives on the scene. The general times monitored for total response time performance are:

- PSAP to Dispatch (Call received to units assigned): 90 seconds, 90% of the time.
- Turnout Time (Unit assigned to en-route): 90 seconds, 90% of the time.
- Travel Time (En-route to first unit on scene): 4 minutes, 30 seconds, 90% of the time
- Total Response Time (Unit assigned to first unit on scene): 7 minutes, 30 seconds, 90% of the time.

With the expectation of 07:30 for total response time, officers must justify for any emergency call within the FFFD call log of why the benchmark was not achieved. Valid justification includes road conditions (weather or construction), response and access to Interstate 25, multiple calls for service, primary unit at training or meeting, dispatch alert or address issue, mechanical issue, distance only with no outside factors, speed control devices or school zone, scene access issues or rural address. The on-duty Battalion Chief reviews all outliers to ensure all efforts were made to meet the response standard.

FFFD continually monitors and analyzes response performance on all response types and evaluates it through daily, quarterly, and annual reports. These processes allow leadership and operations to identify areas for improvement so that the District is constantly adapting to risks and service demands.

ISO Rating

The Insurance Service Organization (ISO) is a national insurance industry that evaluates fire protection for communities across the country. A District's ISO rating is an important factor when considering fire station and apparatus distribution, as ISO's Public Protection Classification Program (PPC) plays an essential role in the underwriting process at insurance companies and can directly affect how much District residents and businesses pay for fire insurance coverage. The ISO rating for fire districts is evaluated every five years. FFFD achieved an ISO Class-2/2x designation in 2023 [Figure 18]. The ISO-Class 2 rating is for any residence or business within 5 miles of a fire station. Any residence or business outside of the 5 miles may have a score of 2X. This often has to do with the availability of community water, such as fire hydrants.

FSRS Feature	Earned Credit	Credit Available
Emergency Communications		
414. Credit for Emergency Reporting	3.00	3
422. Credit for Telecommunicators	4.00	4
432. Credit for Dispatch Circuits	2.70	3
440. Credit for Emergency Communications	9.70	10
Fire Department		
513. Credit for Engine Companies	6.00	6
523. Credit for Reserve Pumpers	0.50	0.50
532. Credit for Pump Capacity	3.00	3
549. Credit for Ladder Service	0.54	4
553. Credit for Reserve Ladder and Service Trucks	0.18	0.50
561. Credit for Deployment Analysis	3.12	10
571. Credit for Company Personnel	11.78	15
581. Credit for Training	8.59	9
730. Credit for Operational Considerations	2.00	2
590. Credit for Fire Department	35.71	50
Water Supply		
616. Credit for Supply System	30.00	30
621. Credit for Hydrants	3.00	3
631. Credit for Inspection and Flow Testing	5.93	7
640. Credit for Water Supply	38.93	40
Divergence	-5.18	--
1050. Community Risk Reduction	5.10	5.50
Total Credit	84.26	105.50

Figure 18: Frederick-Firestone Fire District's 2023 PPC Review

Section 6 – Standards of Cover

Resource Distribution & Concentration

Frederick-Firestone Fire District regularly evaluates the distribution, concentration, and reliability of all units and apparatus. Distribution refers to the number of resources located throughout the response area but is primarily measured by the response time of the first apparatus that arrives on the scene. Fire station locations are crucial in the time measurement of resource distribution because they ensure that the initial response to an emergency is within the response standards set by the district. When identifying station locations, FFFD chooses locations so that the expected call volume is within a five-minute drive time of that station. Equally important is that ISO recommends that a structure should be within five miles of a fire station.

The geographic area surrounding each fire station is called a response zone or planning area. FFFD currently has four fire station planning areas that are utilized to ensure that resources are strategically located throughout the district to serve the greatest amount of service demand efficiently and effectively.

Resource concentration refers to the sufficient number of resources, apparatus, and personnel strategically placed throughout the response area to effectively deal with an emergency based on its level of risk within a specified amount of time. This is referred to as the Effective Response Force (ERF), and it ensures that enough people and equipment arrive soon enough to safely control a fire or mitigate any emergency before there is substantial damage or injury. Concentration is measured primarily by the second-due units' response to an emergency for response time.

Response Reliability Factors

The workload of emergency response units can be a factor in response time performance. Multiple or concurrent calls for service can affect the District's ability to ensure it has sufficient resources to respond to additional emergencies. FFFD regularly analyzes the reliability of fire suppression and medic units to ensure they are not being overutilized, not only in-district but also out-of-district, for mutual or auto-aid incidents.

Unit hour utilization (UHU) describes the amount of time a unit is unavailable for response because it is already committed to another incident. UHU rates are expressed as a percentage of the total hours in a year. The larger the number, the greater the utilization and the less available for subsequent calls for service. FFFD Chief Staff assesses these numbers to ensure that units and crews never reach a high number, which can lead to burnout.

2024 Unit Hour Utilization (UHU) for In-District, Emergent Calls

Unit	Total Time on Task (DD:HH:MM)	Unit Hour Utilization (UHU)
3423	27:22:58	7.64%
3421	24:05:29	6.62%
3401	19:02:24	5.22%
3403	16:23:44	4.64%
3422	10:13:22	2.88%
3460	07:15:10	2.09%
3454	07:05:19	1.97%
3425	04:22:53	1.35%
3417	03:16:12	1.00%
3434	03:12:30	0.96%
3415	2:19:21	0.77%

Medic Unit 3423 displays the highest utilization rate, with Medic Unit 3421 not far behind. Due to the high use of our medical units and to ensure they are not overutilized, it was identified that another medical unit was needed. In 2022, FFFD operations added a medic unit (3422) to its response matrix, which is cross-staffed at Station 2, based on the increased requests for mutual aid and to cover concurrent calls. The above chart shows that the added medic unit (3422) has been consistently utilized. In August 2024, Station 5 opened, and Unit 3422 changed its name to 3425. The above chart shows that 3425 continued to be used regularly.

Benchmarks and Baselines

Frederick-Firestone Fire District has set its benchmarks and travel time standards based on the NFPA Standard 1710 and past response capabilities. Benchmarks are identified as urban. The District identifies urban areas as defined by CFAI, the population density of the planning zone*, and the threat of target hazards. The travel time standards (benchmarks) for urban incidents are then applied to first-on-scene and for the expected response force to determine the current baseline. The District evaluated response data from January 1, 2022, through December 31, 2024, for all baseline numbers. Other data methodology points to consider:

- All data is analyzed to the 90th percentile.
- Mutual aid and automatic aid apparatus in the district are only included when they are part of the ERF.
- Outliers are used in the data analysis for the total response time. All outliers are based on the District’s current outlier policy, which states that any response over 17 minutes for the initial response and 20 minutes for ERF will be excluded and will exclude all zero times unless the outliers account for more than 2.5 percent of the total data set. In this case, all outliers will be individually analyzed for validity.
- Incomplete call data, such as missing date and/or time values, will be excluded.
- Data analysis will occur using the Records Management System, ImageTrend / Continuum, and State NFIRS data.

- In areas with 10 or fewer incidents, the District will individually analyze the data to identify deficiencies, errors, or issues. According to CFAI, if there is a statistically insignificant number of responses (initial or ERF), baseline statements cannot be developed, but there will still be benchmark (goal) statements. This has been determined to be 10 or fewer responses during the study period.

* CFAI states that a population density under 2,500 should be considered rural. For planning purposes, the FFFD Station 4 planning zone is under this threshold, but due to station placement, response capabilities, and busy urban areas within the zone, FFFD has determined that the Station 4 planning zone should also be considered urban.

Suppression

Low-Risk Fire Suppression

Benchmark Performance: For 90 percent of all low-risk fire incidents, the total response time for the first-due unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds in urban response areas.

For 90 percent of all low-risk fire incidents, the total response time for the arrival of the effective response force (ERF), staffed with three (3) personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all low-risk fire incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, is 12 minutes, 23 seconds in urban response areas.

For 90 percent of all priority low-risk structure fire incidents, the total response time for the effective response force, staffed with a minimum of three (3) personnel, is 12 minutes and 58 seconds in urban response areas.

Low-Risk Fire Suppression - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:42	5:16	4:24	4:21	1:30	3:12
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:18	2:16	2:09	1:44	1:30	0:48
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	8:30	8:14	6:23	9:33	4:30	4:00
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	8:41	8:14	6:23	9:33	7:30	1:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:23 n=32	12:21 n=13	10:59 n=9	14:38 n=10	7:30	4:53
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:58 n=32	12:21 n=13	10:59 n=9	14:38 n=10	10:30	2:28
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Fire Suppression

Benchmark Performance: For 90 percent of all moderate-risk structure fire incidents, the total response time for the first-due unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds in urban response areas.

For 90 percent of all moderate-risk fire incidents, the total response time for the arrival of the effective response force (ERF), staffed with six (6) firefighters and one (1) battalion chief, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all moderate-risk structure fire incidents, the total response time for the first-due unit, staffed with a minimum of three (3) personnel, is 9 minutes and 16 seconds in urban response areas.

For 90 percent of all moderate-risk fire incidents the total response time for the arrival of the effective response force (ERF), staffed with six (6) firefighters and one (1) battalion chief, is 12 minutes and 56 seconds in urban response areas.

Moderate-Risk Fire Suppression - 90th Percentile Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:13	2:55	3:36	4:56	1:30	1:43
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:13	2:33	2:02	1:44	1:30	0:43
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:10	5:05	6:52	8:36	4:30	1:39
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	11:17	12:22	9:12	9:20	7:30	3:46
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	9:16 n=43	8:15 n=20	10:31 n=15	8:53 n=8	7:30	1:45
		Rural	N/A	N/A	N/A	N/A		
	Total Response Time ERF Concentration	Urban	12:56 n=22	14:55 n=13	12:33 n=7	12:10 n=2	10:30	2:26
		Rural	N/A	N/A	N/A	N/A		

High-Risk Structure Fire Suppression:

Benchmark Performance: For 90 percent of all high-risk structure fire incidents, the total response time for the first-due unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds in urban response areas.

For 90 percent of all high-risk structure fire incidents, the total response time for the arrival of the effective response force (ERF), staffed with 15 firefighters, two (2) medic/firefighters, two

(2) medics, two (2) battalion chiefs, one (1) command officer, and two (2) emergency managers, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all priority high-risk structure fire incidents, the total response time for the first-due unit, staffed with a minimum of three (3) personnel, is 9 minutes and 54 seconds in response urban areas.

For 90 percent of all high-risk structure fire incidents, the total response time for the arrival of the effective response force (ERF), staffed with 12 firefighters, two (2) medic/firefighters, two (2) medics, one (1) battalion chiefs, one (1) command officer, is 13 minutes and 24 seconds in urban response areas.

High-Risk Fire Suppression (Structural) - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:40	4:58	3:43	3:57	1:30	3:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:04	1:33	1:56	1:30	0:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	5:48	1:50	5:24	6:07	4:30	1:18
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	9:46	8:41	11:52	9:42	7:30	2:16
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	9:54 n=15	7:17 n=2	10:35 n=6	9:52 n=7	7:30	2:23
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	13:24 n=14	13:11 n=2	16:03 n=6	12:55 n=7	10:30	2:53
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Emergency Medical Services (EMS)

Low-Risk EMS (Omega Levels):

Benchmark Performance: For 90 percent of all low-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all low-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with three (3) personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all low-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of three (3) personnel, is 11 minutes and 45 seconds in urban response areas.

For 90 percent of all low-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with three (3) personnel, is 11 minutes and 45 seconds in urban response areas.

Low Risk Emergency Medical Services (Omega) - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:21	2:58	3:47	3:04	1:30	1:50
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:04	2:09	1:41	1:20	1:30	0:33
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	8:41	8:02	8:02	9:15	4:30	4:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	8:41	8:02	8:02	9:15	7:30	1:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:45 n=183	11:11 n=84	11:45 n=64	11:59 n=35	7:30	4:14
		Rural	N/A	N/A	N/A	N/A		
	Total Response Time ERF Concentration	Urban	11:45 n=183	11:11 n=84	11:45 n=64	11:59 n=35	10:30	1:27
		Rural	N/A	N/A	N/A	N/A		

Low-Risk EMS (Alpha and Bravo Levels):

Benchmark Performance: For 90 percent of all low-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of two (2) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all low-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with five (5) personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all low-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of two (2) personnel, is 11 minutes and 6 seconds in urban response areas.

For 90 percent of all low-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with five (5) personnel, is 12 minutes and 46 seconds in urban response areas.

Low Risk Emergency Medical Services (Alpha, Bravo) - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:47	3:02	3:35	4:56	1:30	2:17
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:51	1:56	1:44	1:49	1:30	0:21
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:39	7:37	7:14	8:03	4:30	3:08
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	10:07	9:59	10:15	10:03	7:30	2:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:06 n=4,312	10:56 n=1,471	11:01 n=1,499	11:28 n=1,342	7:30	3:36
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:46 n=3,057	12:16 n=1,067	13:04 n=1,114	13:06 n=876	10:30	2:16
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk EMS (Charlie and Delta Levels):

Benchmark Performance: For 90 percent of all moderate-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of two (2) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all moderate-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with five (5) personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all moderate-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of two (2) personnel, is 11 minutes and 25 seconds in urban response areas.

For 90 percent of all moderate-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with five (5) personnel, is 13 minutes and 9 seconds in urban response areas.

Moderate Risk Emergency Medical Services (Charlie, Delta) - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:41	2:59	3:35	4:43	1:30	2:11
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:50	1:56	1:43	1:47	1:30	0:20
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:22	7:17	7:10	7:38	4:30	2:52
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	10:22	10:14	10:26	10:28	7:30	2:52
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:25 n=4,357	10:55 n=1,450	11:06 n=1,503	12:52 n=1,404	7:30	3:55
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	13:09 n=3,662	12:35 n=1,347	13:21 n=1,311	13:25 n=1,004	10:30	2:38
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk EMS (Motor Vehicle Accidents (MVA) and MV/PED with or without injury):

Benchmark Performance: For 90 percent of all moderate-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all moderate-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with six (6) personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all moderate-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of three (3) personnel, is 10 minutes and 52 seconds in urban response areas.

For 90 percent of all moderate-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with six (6) personnel, is 11 minutes and 4 seconds in urban response areas.

Moderate Risk Emergency Medical Services - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:19	3:04	3:35	9:20	1:30	2:49
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:56	2:10	1:40	1:45	1:30	0:25
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:49	7:29	6:29	6:11	4:30	2:19
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	6:58	7:29	6:46	6:11	7:30	0:32
		Rural	N/A	N/A	N/A	N/A	7:30	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:52 n=642	11:08 n=237	10:17 n=218	11:07 n=187	7:30	3:21
		Rural	N/A	N/A	N/A	N/A		
	Total Response Time ERF Concentration	Urban	11:04 n=648	11:09 n=238	10:26 n=219	11:40 n=191	10:30	0:34
		Rural	N/A	N/A	N/A	N/A		

High-Risk EMS (Echo Levels and Motor Vehicle Accidents with extrication or Commercial Vehicle Accidents with injury):

Benchmark Performance: For 90 percent of all high-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all high-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with nine (69 personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all high-risk emergency medical incidents, the total response time for the first due ALS unit, staffed with a minimum of three (3) personnel, is 10 minutes and 39 seconds in urban response areas.

For 90 percent of all moderate-risk emergency medical incidents, the total response time for the effective response force (ERF), staffed with nine (9) personnel, is 13 minutes and 30 seconds in urban response areas.

High-Risk Emergency Medical Services - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:46	2:59	3:35	5:03	1:30	2:16
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:50	1:56	1:42	1:47	1:30	0:20
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:58	6:54	6:47	7:24	4:30	2:28
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	11:49	10:42	12:35	11:41	7:30	4:19
		Rural	N/A	N/A	N/A	N/A	N/S	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:39 n=4,735	10:24 n=1,613	10:37 n=1,657	11:04 n=1,465	7:30	3:08
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	13:30 n=1,509	12:50 n=578	13:49 n=602	13:54 n=329	10:30	3:00
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Wildland

Benchmark Performance: For 90 percent of all wildland incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds in urban and rural response areas.

For 90 percent of low-risk wildland incidents, the total response time for the effective response force (ERF), staffed with five (5) personnel, shall be 10 minutes and 30 seconds in urban response areas.

For 90 percent of moderate-risk wildland incidents, the total response time for the effective response force (ERF), staffed with ten (10) firefighters and one (1) battalion chief, shall be 10 minutes and 30 seconds in urban response areas.

For 90 percent of all high-risk wildland incidents, the total response time for the effective response force (ERF), staffed with 26 personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all low-risk wildland incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, is 10 minutes and 53 seconds in urban response areas.

For 90 percent of all moderate-risk wildland incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, is 12 minutes and 11 seconds in urban response areas.

For 90 percent of all high-risk wildland incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, is 8 minutes and 33 seconds in urban response areas.

*Due to an insignificant amount of incidents baseline performance statements for wildland effective response force (ERF) responses could not be established.

Low-Risk Wildland - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:07	2:46	3:51	2:58	1:30	1:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	3:07	2:46	3:01	4:05	1:30	1:36
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:24	5:33	6:19	5:49	4:30	1:54
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	7:59	7:59	7:07	N/A	7:30	0:28
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:53 n=28	10:29 n=11	10:50 n=10	9:54 n=7	7:30	3:23
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	11:26 n=8	11:13 n=5	10:59 n=3	N/A	10:30	0:55
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Wildland - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:07	2:46	3:51	2:58	1:30	1:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	3:16	2:23	1:36	4:53	1:30	1:45
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	9:24	9:47	6:19	11:33	4:30	4:54
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	8:37	N/A	8:37	N/A	7:30	1:07
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:11 n=33	9:01 n=11	10:34 n=10	13:53 n=12	7:30	4:40
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	11:14	N/A	11:14	N/A	10:30	0:44
		Rural	n=1	N/A	n=1	N/A	N/A	N/A

High-Risk Wildland - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	2:48	1:53	3:09	1:43	1:30	1:18
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:12	1:09	0:03	1:00	1:30	0:19
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	5:29	3:16	5:40	5:05	4:30	0:59
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	7:30	7:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	8:33 n=4	7:27 n=2	8:52 n=1	7:48 n=1	7:30	1:02
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	10:30	10:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Hazmat

Low-Risk Hazmat:

Benchmark Performance: For 90 percent of all low-risk hazmat incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all low-risk hazmat incidents, the total response time for the effective response force, staffed with a minimum of three (3) personnel, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all low-risk hazmat incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, is 12 minutes and 34 seconds in urban response areas.

For 90 percent of all low-risk hazmat incidents, the total response time for the effective response force, staffed with a minimum of three (3) personnel, is 12 minutes and 34 seconds in urban response areas.

Low-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:05	4:12	3:50	3:28	1:30	2:35
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:07	2:26	1:58	1:58	1:30	0:36
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	9:07	12:56	7:38	8:58	4:30	4:36
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	9:12	12:56	7:48	9:03	7:30	1:41
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:34 n=70	13:04 n=20	11:32 n=27	11:43 n=23	7:30	5:04
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:34 n=69	13:04 n=20	11:32 n=27	11:45 n=22	10:30	2:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Hazmat

Benchmark Performance: For 90 percent of all moderate-risk hazmat incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all moderate-risk hazmat incidents, the total response time for the effective response force, staffed with a minimum of three (3) firefighters and one (1) battalion chief, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all moderate-risk hazmat incidents, the total response time for the first due unit, staffed with a minimum of three (3) people, is 12 minutes and 4 seconds in urban response areas.

For 90 percent of all moderate-risk hazmat incidents, the total response time for the effective response force, staffed with a minimum of three (3) firefighters and one(1) battalion chief, is 13 minutes and 12 seconds in urban response areas.

Moderate-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:01	4:31	4:32	3:56	1:30	2:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:01	1:56	2:00	1:59	1:30	0:31
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	8:49	7:22	7:23	10:49	4:30	4:19
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	10:24	27:06	9:29	9:55	7:30	2:53
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:04 n=156	11:50 n=59	11:51 n=59	12:01 n=52	7:30	4:34
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	13:12 n=41	12:57 n=15	12:57 n=15	13:02 n=17	10:30	2:42
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

High-Risk Hazmat:

Benchmark Performance: For 90 percent of all high-risk hazmat incidents, the total response time for the first due unit, staffed with a minimum of three (3) personnel, shall be 7 minutes and 30 seconds for urban response areas.

For 90 percent of all high-risk hazmat incidents, the total response time for the effective response force, staffed with a minimum of six (6) firefighters, two (2) medics, one (1) battalion chief, and two (2) emergency managers, is 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all high-risk hazmat incidents, the total response time for the first due unit, staffed with a minimum of three (3) people, is 12 minutes and 2 seconds in urban response areas.

*Due to an insignificant amount of data during the target period analyzed there is no baseline for the effective response force (ERF).

High-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:01	2:46	4:35	3:58	1:30	2:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:56	1:59	1:51	1:57	1:30	0:25
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:53	6:58	7:16	10:00	4:30	3:23
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	7:30	7:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:02 n=142	11:15 n=41	12:53 n=55	11:39 n=46	7:30	4:31
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	10:30	10:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Special Operations

Benchmark Performance: For 90 percent of all special operations incidents, the total response time for the first due unit, staffed with a minimum of three (3) people, shall be 7 minutes and 30 seconds in urban response areas.

For 90 percent of low-risk special operations incidents, the total response time for the effective response force (ERF), staffed with three (3) personnel, shall be 10 minutes and 30 seconds in urban response areas.

For 90 percent of all moderate-risk special operations, the total response time for the effective response force (ERF), staffed with six (6) firefighters, two (2) medics, and one (1) battalion chief, shall be 10 minutes and 30 seconds in urban response areas.

For 90 percent of all high-risk special operations, the total response time for the effective response force (ERF), staffed with nine (9) firefighters, four (4) medics, one (1) battalion chief, one (1) safety officer, and two (2) emergency managers, shall be 10 minutes and 30 seconds in urban response areas.

Baseline Performance: For 90 percent of all special operations incidents, the total response for the first due unit, staffed with a minimum of three (3) personnel, is 10 minutes and 40 seconds in urban response areas.

*For special operations response the data analysis provided eleven (11) incidents over the target period analyzed. To give FFFD an idea of response times for special operations incidents within the District, data was analyzed at the low-risk effective response force (ERF) due to a lack of moderate and high-risk special operations responses within District boundaries. This chart can be seen below.

Special Operations Response (2022-2024) - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:18	1:55	3:02	3:38	1:30	1:48
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:37	1:57	1:19	1:13	1:30	0:06
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:36	6:39	2:29	6:13	4:30	2:06
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	6:36	6:39	2:30	6:13	7:30	0:54
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:40 n=7	10:33 n=1	5:51 n=2	10:27 n=4	7:30	3:09
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	10:40 n=7	10:33 n=1	5:51 n=2	10:27 n=4	10:30	3:09
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Section 7 – Critical Task Analysis

Critical tasks relate directly to the effective response force (ERF), which is the set of units and personnel required to handle an incident, typically based on incident type, risk level, and geography. Critical task analysis is identifying the critical tasks that must be accomplished to successfully mitigate an emergency incident safely and efficiently. Critical tasks are based on community risk assessments, summaries, agency policies and procedures, accepted agency standards, National Fire Protection Agency guidelines, and other expert analyses. Critical tasking changes based on the level of risk and the complexity and specifics of the emergency. FFFD reviewed the risks for each incident type, Fire, EMS, Wildland, HazMat, and Special Operations, and then identified the resources necessary to accomplish the critical tasks, fulfill the ERF, and safely mitigate the incident. The incident types were derived from the use of the Records Management System, and the number following the incident represents the NFIRS code as

submitted to the US Fire Administration. All responses are based on a first-alarm response for the entire district.

Suppression

Low-Risk Fire Event:

- Outside rubbish, trash, or waste fire – 151
- Dumpster fire – 154
- Unauthorized burning – 561
- Other outside fires – 150, 155

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Total ERF			3

Moderate-Risk Fire Event:

- Cooking fire - 113
- Passenger vehicle fire (including EV) – 131
- Other type of transport vehicle fire – 121, 136, 137, 138
- Outside equipment fire – 163

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Engine	Company Officer / Engineer / Firefighter	Safety / Water Supply / 2 nd Attack Line	3
BC	Battalion Chief	Upgrade Incident Command	1
Total ERF			7

High-Risk Fire Event:

- Oil and gas fire (Oil/Natural Gas Production Site) – 163

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Locate fire, 1 st Attack Line	3
Engine	Company Officer / Engineer / Firefighter	Water Supply, Secure Utilities, 2 nd Attack Line	3
Medic	Firefighter / Firefighter	Medical Standby and Rehab	2
BC	Battalion Chief	Upgrade Incident Command and Resource Management	1
Command Officer	Safety Officer	Incident Safety	1
OEM	Emergency Manager	Incident Support, Resource Ordering, Stakeholders Liaison, EOC Manager	2*
Total ERF			12/10*

**OEM is dispatching notifications only and not considerations part of the ERF. However, it is noted on the District's response matrix.*

High-Risk Fire Event:

- Single-family residential*
 - Multi-family structure *
 - Commercial buildings *
- *All NFIRS - 111

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Engine	Company Officer / Engineer / Firefighter	Position Apparatus, Search and Rescue, Fire Suppression / Tools, Control Utilities, 2 nd Attack Line, Overhaul	3
Truck	Company Officer / Engineer / Firefighter	Position Apparatus, Search and Rescue, Fire Suppression / Tools,	3

		Ventilation, Roof Assignments, Overhaul	
Engine	Company Officer / Engineer / Firefighter	On deck crew – 2 nd Water Supply	3
Engine	Automatic Aid Crew	District Coverage	3*
Medic	Firefighter / Fighter	Deliver Medical Interventions, Transport	2
Medic	Paramedic / Firefighter	Medical Standby and Rehab	2
BC	Battalion Chief	Upgrade Incident Command	1
BC	Automatic Aid BC	Chief Aid/Scribe/District Coverage	1*
Command Officer	Safety Officer	Incident Safety	1
OEM	Emergency Manager	Incident Support, Resource Ordering, Stakeholders Liaison, EOC Manager	2*
Total ERF			18/24*

* A high-risk fire event would include automatic aid and dispatch notifications only.

Emergency Medical Services

Low-Risk EMS Event:

- Medical Lift Assist (no ambulance required) – Omega Medical Levels – 311
- Fire Assist (Assist Invalid) - 554

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Safety, Initial Action Plan, Mitigate Problem	3
Total ERF			3

Low-Risk EMS Event:

- Emergency Medical Incident (BLS) – Alpha, Bravo Levels – 311, 321

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Safety, Assist Medical Crew	3
Medic	EMT / Paramedic	Deliver Medical Interventions, Transport	2
Total ERF			5

Moderate-Risk EMS Event:

- Emergency Medical Incident (ALS) – Charlie, Delta Levels – 311, 321

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Medic	EMT / Paramedic	Deliver Medical Interventions, Transport	2
Total ERF			5

Moderate-Risk EMS Event:

- Vehicle accident with no injuries – 324
- Vehicle accident with injury - 322
- Motor vehicle/pedestrian accident (MV PED) – 323

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Medic	EMT / Paramedic	Deliver Medical Interventions, Transport	2
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
Total ERF			6

High-Risk EMS Event:

- Commercial vehicle accident with injury – 322
- Traffic accident with extrication – 352
- Emergency Medical Incident (ALS) – Echo Levels – 311, 321

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Medic	EMT / Paramedic	Deliver Medical Interventions, Transport	2
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Engine	Company Officer / Engineer / Firefighter	Control and stabilize hazards / Extricate Victims	3
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
Total ERF			9

Wildland

Low-Risk Wildland Event:

- Small vegetation fire – 141, 142, 143

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Brush	Firefighter / Firefighter	Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	2
Total ERF			5

Moderate-Risk Wildland Event:

- Large vegetation fire – 141, 142, 143

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Brush	Firefighter / Firefighter	Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	2
Tender	Firefighter / Firefighter	Establish Water Supply	2
Engine	Company Officer / Engineer / Firefighter	On deck crew	3
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
Total ERF			11

High-Risk Wildland Event:

- Fast-moving vegetation fire threatening structures – 141, 142, 143

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up, Initial Action Plan, Safety / Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	3
Brush	Firefighter / Firefighter	Position Apparatus, Fire Suppression / Tools, Attack Line, Overhaul	2
Tender	Firefighter / Firefighter	Establish Water Supply	2
Engine	Company Officer / Engineer / Firefighter	On deck crew	3
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
Engine*	Company Officer / Engineer / Firefighter	On deck crew – Fire Suppression, Overhaul	3
Engine*	Company Officer / Engineer / Firefighter	On deck crew	3

Brush*	Firefighter / Firefighter	On deck crew – Fire Suppression Overhaul	2
Brush*	Firefighter / Firefighter	On deck crew	2
Tender*	Firefighter / Firefighter	On deck crew – Establish water supply	2
Tender*	Firefighter / Firefighter	2 nd On deck crew – Establish water supply	2
BC*	Battalion Chief	Chief Aid/Scribe	1
Total ERF			26

* In-District, high-risk fires would be considered a second alarm or level 2 event which would initiate mutual aid response. Initial ERF response would duplicate a moderate-risk wildland event with 11 personnel.

Hazardous Materials

Low-Risk HazMat Event: Level 1

- Small gasoline or other flammable liquid spill - 411
- Small oil or other combustible liquid spill – 413
- Chemical hazard, no spill or leak (Odor Investigation) - 421
- Carbon Monoxide Incident - 424

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Tools, Mitigate Hazard	3
Total ERF			3

Moderate-Risk HazMat Event: Level 2

- Large gasoline or other flammable liquid spill - 411
- Gas Leak (Outside/Inside) – 412
- Large oil or combustible liquid spill – 413

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Tools, Mitigate Hazard	3
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
Total ERF			4

High-Risk HazMat Event: Level 3

- Gas Leak (Industrial) – 412
- Chemical spill or leak – 422

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Tools, Mitigate Hazard	3
Engine	Company Officer / Engineer / Firefighter	On Deck Crew – Mitigate Hazard	3
Medic	EMT / Paramedic	Medical and Rehab	2
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
OEM	Emergency Manager	Incident Support, Resource Ordering, Stakeholders Liaison, EOC Manager	2
Total ERF			11

Special Operations

Low-Risk Special Operations Event:

- Elevator Rescue – 353

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up, Initial Action Plan, Safety, Tools, Extrication	3
Total ERF			3

Moderate-Risk Special Operations Event:

- Vehicle Extrication - 352

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Tools, Mitigate Hazards	3
Heavy Rescue	Company / Officer / Firefighter	Tools, Patient Extrication	3
Medic	EMT / Paramedic	Deliver Medical Interventions, Transport	2
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
Total ERF			9

High-Risk Special Operations Event:

- Large Vehicle/Equipment/Building Extrication – 351, 357
- Water and Ice Rescue – 360, 361, 362, 363
- Structural Collapse – 461
- Trench Rescue – 354
- Confined Space Rescue – 355
- Rope Rescue – 356

Unit Assignment	Task Assignment	Critical Task	Minimum Required Personnel
Engine	Company Officer / Engineer / Firefighter	Initial Incident Command, Scene Size Up/360, Initial Action Plan, Safety / Position Apparatus, Tools, Mitigate Hazards	3
Heavy Rescue	Company Officer / Engineer / Firefighter	Tools, Patient Extrication	3
Engine	Company Officer / Engineer / Firefighter	On Deck Crew	3
Medic	EMT / Paramedic	Deliver Medical Interventions, Transport	2
Medic	EMT / Paramedic	Medical Standby and Rehab	2
BC	Battalion Chief	Upgrade Incident Command, Resource Management	1
Command Officer	Safety Officer	Incident Safety	1
OEM	Emergency Manager	Incident Support, Resource Ordering, Stakeholders Liaison, EOC Manager	2
Total ERF			17

Section 8 – Evaluation, Conclusions, Recommendations

As Frederick-Firestone Fire District continues to grow, it will be important to continue to evaluate how the district is doing in response areas and service delivery to the community it serves. With the current community-driven strategic plan in place and with an in-depth look at the community through the risk assessment, it has been identified that there are many areas that the District can improve regarding its data collection and response services.

While data collection works well through the District records management system, it has been identified through the analysis process that the fire data reports could be more consistent when entered and categorized. FFFD currently documents its reports as final call type as determined by the commanding officer on scene. This sets a standard for data documentation, but call types are subject to interpretation due to its decisive nature. Therefore, the data pulled would be more consistent if the District had a single fire report reviewer, like the QA/QI process all medical incident reports go through.

While reviewing response times, it was discovered that the PSAP time to dispatch is, on average, taking more than the target benchmark (1 minute, 30 seconds) set by the District and based on Weld County Regional Communications Center (WCRCC) accreditation benchmarks. Due to the longer PSAP to Dispatch times, the District's benchmarks are not being met as often when data looks at emergent and non-emergent response times. Therefore, FFFD continues to work and advocate with WCRCC through our external relationships to improve the District's needs regarding meeting benchmark response times. The District will continue to work with WCRCC on the automated dispatch system implementation that began in Q4 of 2022 with the transition to Central Square and the addition of the First In dispatch system, which is scheduled to be fully implemented in Q3 2025. Once in place and working, these new systems should assist in dispatching as they become automatic and will no longer require manual dispatching to incidents.

The District currently assesses the community by planning zones and population density to develop final response times. While the four planning zones are sufficient, due to the population density, FFFD Station 4 planning zone was determined to be rural based on the CFAI definition. However, due to the square mileage of the District and the location of station 4, FFFD pulled data and set benchmarks as if station 4 is urban. Further defining the planning zones into smaller quadrants would help the District further narrow response times in outlying areas. The District will also need to assess the planning zones now that Station 5 has been built and is operational.

It will also be important for FFFD to continue promoting a continuous improvement culture throughout the organization as it works toward accreditation status. To do this and continue to work toward excellence, the following recommendations have been established:

- The agency should continue to improve incident response data for better reporting and future data analysis.
- The agency should continue to meet objectives and goals by setting response standards based on population density, community risks, and resource location.

- The agency should continue to look for educational opportunities and strategies to improve data quality. This may be done with the implementation of First In at District stations and/or through NERIS.
- Regularly review and update the community-driven strategic plan, risk assessment, and standards of cover documents.
- Make data-driven decisions as appropriate.
- Promote the accreditation model to help create a culture of continuous improvement across the entire organization.
- Determine if the current data analysis system utilized is sufficient or if more data accuracy is necessary.

As the District continues toward accreditation status, its processes will continue to grow and develop as determined to meet the continuing excellence standards established by CFAI and CPSE.

Section 9 – Glossary

Accreditation - A process in which an association or agency evaluates and recognizes a program of study or an institution as meeting certain criteria predetermined standards or qualifications. It applies only to institutions or agencies and their study programs or services. Accreditation ensures a basic level of quality in the services received from an agency.

ALS – Acronym for Advanced Life Support. Advanced field medical procedures performed by EMT-I and EMT-P firefighter/paramedics.

Apparatus – The term apparatus is used to signify the difference between vehicles and other fire equipment.

Auto Aid – Agreements through which fire departments assist neighboring departments during major incidents.

Baseline – A way to identify how the District is doing regarding response times.

BC – Acronym for Battalion Chief. First chief officer level and commander of the District’s fire battalion. The Battalion Chief is trained to be the primary Incident Commander.

Benchmark – A performance indicator for the District on where response times should be.

BLS – Acronym for Basic Life Safety Support. Basic field medical procedures performed by EMT-B firefighters.

BOD – Fire District Board of Directors. The elected officials of the District. The primary overseers and fiduciaries.

CAD – Acronym for Computer Aided Dispatch.

Captain—Also known as a company officer, a captain is an individual who is responsible for directing a fire company, usually an engine or truck crew.

Chief Officer – An officer of Battalion Chief, Deputy Chief, Division Chief, or Fire Chief rank.

CFAI – Acronym for the Commission on Fire Accreditation International.

CFIRS – Acronym for Colorado Fire Incident Reporting System.

CRA – Acronym for Community Risk Assessment.

CPR – Acronym for Cardiopulmonary Resuscitation.

CPSE – Acronym for Center for Public Safety Excellence.

CRR – Community Risk Reduction Division is charged with fire prevention activities, public education, fire codes, annual business fire safety inspections, plan reviews, and fire investigations.

D/O – Acronym for “Driver/Operator.” The position is responsible for driving and operating the fire apparatus.

EM – Acronym for Emergency Management or Emergency Manager.

EMS – Acronym for Emergency Medical Services.

EMT – Acronym for Emergency Medical Technician. In Colorado EMT's are licensed by the State Department of Health. BLS providers are titled EMTs. ALS providers are titled EMT-Is (Intermediates) and EMT-Ps (Paramedics).

Engine – First due response apparatus, carries at least 750 gallons of water, a 1500 gpm pump, various hoses for water delivery, safety equipment and tools. Engine companies also carry ALS equipment and often are staffed with ALS providers.

FFFD – Acronym for Frederick-Firestone Fire District synonymous with the District.

Firefighter – Those who deliver essential emergency and non-emergency services at the primary level.

Fire Chief – The Executive Officer of the organization. Appointed by the Fire District Board of Directors and reports directly to them.

Fire Marshal – The Chief fire code official of the organization. At FFFD, the Fire Marshal also holds the title of Assistant Chief of Planning.

GIS – Acronym for Geographic Information System, which captures, stores, manipulates, analyzes, manages, and presents all types of geographic data.

IAFC – Acronym for the International Association of Fire Chiefs, sometimes called the I-Chiefs.

IC – Acronym for Incident Command. On a fire or EMS scene, the incident commander guides the on-scene operations. This is most likely the Battalion Chief or other high-ranking officers on the scene.

IGA – Stands for Intergovernmental Agreement.

ImageTrend – The records management system utilized to track incident responses.

Lieutenant – Officer that leads a fire crew.

Medic Unit – The fire-based definition of an ALS ambulance. Staffed by two firefighters, including at least one firefighter paramedic.

Mutual Aid – Agreements through which fire departments assist neighboring departments during a major incident by either standing by to respond to subsequent alarms or by assisting at the actual incident.

NIMS – National Incident Management System. The command structure by which an emergency incident is managed. Previously referred to as the Incident Command System or ICS.

NFPA – Acronym for the National Fire Protection Association.

NWS – Acronym for the National Weather Service.

OEM – Acronym for the Office of Emergency Management.

Outcome – A performance indication where qualitative consequences are associated with a program or service, i.e., the ultimate benefit to the customer.

Output – A performance indication where a quality or number of units produced is identified.

Performance Measure – A specific, measurable result for each goal and/or program that indicates achievement.

PIO – Acronym for Public Information Officer.

Planning Cycle - A defined period; for FFFD, this cycle is broken down into a three-year period.

PSAP – Acronym for Public Safety Answering Point. In this document, it refers to when an emergency call is received by Dispatch.

Reserve Apparatus—Fire apparatus kept in reserve and pressed into service when front-line apparatus is unavailable; it may also be staffed as additional resources during major incidents.

RMS – Acronym for Records Management System.

Service Quality – A performance indication that identifies the degree to which customers are satisfied with a program or how accurately or timely a service is provided.

SOG – Acronym for Standard Operating Guideline.

SOP – Acronym for Standard Operating Policy.

Stakeholder—Any person, group, or organization that can claim on or influence the organization’s resources or outputs, is affected by those outputs or has an interest in or expectation of the organization. At the District, stakeholders are divided into two groups: internal and external.

Standards of Cover – Defines the number of units and methodology of how those units are deployed to a variety of emergencies. In this case, it is combined with the Community Risk Assessment.

Strategic Goal – Guides the District toward specific targets and goals that have been identified as important in carrying out its mission. Each goal has a result that will help the District move forward.

Strategy – A methodology for achieving a goal.

WCRCC – Acronym for Weld County Regional Communication Center, which provides emergency services dispatch to the District.

Section 10 – Appendices

Appendix A: Emergent Benchmarks and Baselines

Suppression

Low-Risk Fire Suppression

Low-Risk Fire Suppression - 90th Percentile - Baseline Performance (Emergent)			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:45	5:38	3:58	4:28	1:30	3:14
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:27	2:20	2:13	2:10	1:30	0:56
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:46	7:06	6:00	8:39	4:30	3:15
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	8:28	7:06	6:00	8:49	7:30	0:58
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:06 n=26	12:03 n=11	11:03 n=8	12:41 n=7	7:30	4:35
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:35 n=26	12:03 n=11	11:03 n=8	13:45 n=7	10:30	2:05
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Fire Suppression

Moderate-Risk Fire Suppression - 90th Percentile - Baseline Performance (Emergent)			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:13	2:56	3:40	4:56	1:30	1:43
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:17	2:33	2:05	1:44	1:30	0:47
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:16	4:49	6:57	8:36	4:30	1:46
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	11:17	12:22	9:12	9:20	7:30	3:46
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	9:22 n=40	8:15 n=18	10:33 n=14	8:53 n=8	7:30	1:51
		Rural	N/A	N/A	N/A	N/A		
	Total Response Time ERF Concentration	Urban	12:56 n=22	14:55 n=13	12:33 n=7	12:10 n=2	10:30	2:26
		Rural	N/A	N/A	N/A	N/A		

High-Risk Fire Suppression

High-Risk Fire Suppression (Structural) - 90th Percentile - Baseline Performance			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:40	4:58	3:43	3:57	1:30	3:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:04	1:33	1:56	1:30	0:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	5:48	1:50	5:24	6:07	4:30	1:18
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	9:46	8:41	11:52	9:42	7:30	2:16
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	9:54 n=15	7:17 n=2	10:35 n=6	9:52 n=7	7:30	2:23
		Rural	N/A	N/A	N/A	N/A		
	Total Response Time ERF Concentration	Urban	13:24 n=14	13:11 n=2	16:03 n=6	12:55 n=7	10:30	2:53
		Rural	N/A	N/A	N/A	N/A		

Emergency Medical Services (EMS)

Low-Risk EMS (Omega Levels):

Low Risk Emergency Medical Services (Omega) - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:02	2:44	4:00	6:46	1:30	2:31
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:05	2:07	1:25	1:58	1:30	0:35
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:45	6:23	6:05	5:34	4:30	2:15
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	6:45	6:23	6:05	5:34	7:30	0:45
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:15 n=20	10:19 n=10	8:58 n=3	9:55 n=7	7:30	2:45
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	10:16 n=21	10:19 n=10	8:58 n=3	12:51 n=8	10:30	0:14
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Low-Risk EMS (Alpha and Bravo Levels):

Low Risk Emergency Medical Services (Alpha, Bravo) - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:41	2:59	3:36	4:23	1:30	2:11
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:48	1:56	1:41	1:45	1:30	0:18
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:08	7:09	6:45	7:33	4:30	2:38
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	9:20	9:02	9:32	9:39	7:30	1:49
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:41 n=3,092	10:32 n=1,014	10:41 n=1,065	10:52 n=1,013	7:30	3:11
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:24 n=2,252	11:47 n=750	12:34 n=825	12:39 n=677	10:30	1:53
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk EMS (Charlie and Delta Levels):

Moderate Risk Emergency Medical Services (Charlie, Delta) - 90th Percentile - Baseline Performance - (Emergent)			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:36	2:56	3:36	4:08	1:30	2:06
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:47	1:55	1:41	1:44	1:30	0:17
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:53	6:45	6:43	7:16	4:30	2:23
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	9:33	9:09	9:39	10:00	7:30	2:03
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:44 n=3,082	10:25 n=990	10:41 n=1,061	11:23 n=1,031	7:30	3:14
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:35 n=2,691	12:06 n=948	12:48 n=971	12:58 n=772	10:30	2:05
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk EMS (Motor Vehicle Accidents (MVA) and MV/PED with or without injury):

Moderate Risk Emergency Medical Services - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:14	3:09	3:42	6:27	1:30	2:43
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:56	2:12	1:40	1:46	1:30	0:26
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:22	7:24	6:05	6:01	4:30	1:52
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	6:39	7:24	6:09	6:01	7:30	0:52
		Rural	N/A	N/A	N/A	N/A	7:30	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:43 n=580	11:05 n=213	10:07 n=200	10:58 n=167	7:30	3:13
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	10:52 n=583	11:05 n=213	10:10 n=201	11:22 n=169	10:30	0:21
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

High-Risk EMS (Echo Levels and Motor Vehicle Accidents with extrication or Commercial Vehicle Accidents with injury):

High-Risk Emergency Medical Services - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:41	2:57	3:36	4:29	1:30	2:11
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:48	1:56	1:40	1:44	1:30	0:18
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:32	6:27	6:16	6:53	4:30	2:02
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	10:47	9:58	11:32	11:18	7:30	3:16
		Rural	N/A	N/A	N/A	N/A	N/S	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:15 n=3,468	10:01 n=1,139	10:06 n=1,202	10:35 n=1,127	7:30	2:45
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	13:07 n=1,194	12:22 n=436	13:15 n=484	13:50 n=274	10:30	2:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Wildland

Low-Risk Wildland:

Low-Risk Wildland - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:07	2:46	3:52	2:58	1:30	1:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	3:08	2:48	3:01	4:05	1:30	1:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	5:21	5:07	5:19	5:49	4:30	0:51
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	7:59	7:59	7:07	N/A	7:30	0:28
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:40 n=25	9:10 n=10	10:53 n=8	9:54 n=7	7:30	3:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	11:26 n=8	11:13 n=5	10:59 n=3	N/A	10:30	0:55
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Wildland:

Moderate-Risk Wildland - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:07	2:46	3:52	2:58	1:30	1:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	3:19	2:25	1:36	4:53	1:30	1:49
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:60	5:29	5:19	11:33	4:30	3:29
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	8:37	N/A	8:37	N/A	7:30	1:07
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:48 n=30	8:57 n=10	10:13 n=8	13:53 n=12	7:30	4:18
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	11:14	N/A	11:14	N/A	10:30	0:44
		Rural	n=1	N/A	n=1	N/A	N/A	N/A

High-Risk Wildland:

All high-risk wildland calls for the District have been dispatched as emergent. Therefore, the chart on page 71 contains the correct baseline performance.

Hazmat

Low-Risk Hazmat:

Low-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:42	3:32	3:37	3:38	1:30	2:11
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:06	2:17	1:42	1:58	1:30	0:35
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:51	7:44	7:26	6:36	4:30	2:21
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	7:26	7:44	7:26	6:37	7:30	0:04
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:40 n=31	13:07 n=8	10:19 n=11	10:32 n=12	7:30	4:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	11:46 n=31	13:07 n=8	10:19 n=11	11:37 n=12	10:30	1:16
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Hazmat:

Moderate-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:58	2:33	4:12	3:58	1:30	2:28
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:09	2:16	1:55	2:09	1:30	0:39
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:25	6:46	5:55	8:45	4:30	2:55
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	9:18	7:33	9:43	9:13	7:30	1:47
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:30 n=96	10:49 n=27	10:19 n=36	12:05 n=33	7:30	4:00
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:59 n=30	11:02 n=4	12:28 n=12	12:60 n=14	10:30	2:29
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

High-Risk Hazmat:

High-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:09	2:27	4:14	4:07	1:30	2:39
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:08	2:16	1:50	2:10	1:30	0:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	7:25	6:40	5:43	9:02	4:30	2:55
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	7:30	7:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:29 n=89	10:18 n=26	10:25 n=33	12:03 n=30	7:30	3:59
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	10:30	10:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Special Operations

Emergent All Hazards Special Operations:

Special Operations Response (2022-2024) - 90th Percentile - Baseline Performance - Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:14	N/A	3:02	3:11	1:30	1:43
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:22	N/A	1:19	1:20	1:30	0:08
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	4:34	N/A	2:29	4:52	4:30	0:03
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	4:34	N/A	2:30	4:52	7:30	2:57
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	8:27 n=4	N/A	5:51 n=2	8:56 n=2	7:30	0:57
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	8:27 n=4	N/A	5:51 n=2	8:56 n=2	10:30	2:03
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Appendix B: Non-Emergent Benchmarks and Baselines

Suppression

Low-Risk Fire Suppression:

Low-Risk Fire Suppression - 90th Percentile - Baseline Performance (Non-Emergent)			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:21	3:50	4:17	3:36	1:30	2:51
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:42	1:51	1:16	1:20	1:30	0:12
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	11:51	8:30	6:13	12:37	4:30	7:20
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	11:51	8:30	6:13	12:37	7:30	4:20
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	14:27 n=6	11:54 n=2	10:42 n=1	15:15 n=3	7:30	6:57
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	14:27 n=6	11:54 n=2	10:42 n=1	15:15 n=3	10:30	3:57
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Fire Suppression:

Moderate-Risk Fire Suppression - 90th Percentile - Baseline Performance (Non-Emergent)			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	2:44	2:39	1:59	N/A	1:30	1:43
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:02	2:08	1:10	N/A	1:30	0:43
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	5:39	4:54	5:48	N/A	4:30	1:39
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	7:30	3:46
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	8:41 n=3	7:37 n=2	8:57 n=1	N/A N/A	7:30	1:45
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	N/A N/A	N/A N/A	N/A N/A	N/A N/A	10:30	2:26
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

High-Risk Fire Suppression:

Response data for 2022-2024 resulted in no non-emergent incidents in the category of high-risk fire suppression.

Emergency Medical Services (EMS)

Low-Risk EMS (Omega Levels):

Low Risk Emergency Medical Services (Omega) - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:15	3:04	3:47	2:47	1:30	1:50
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:00	2:08	1:42	1:43	1:30	0:33
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	8:43	8:23	8:04	9:13	4:30	4:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	8:43	8:23	8:04	9:13	7:30	1:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:45 n=162	11:35 n=74	11:45 n=61	11:52 n=27	7:30	4:14
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:02 n=166	11:49 n=77	11:45 n=61	12:20 n=28	10:30	1:27
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Low-Risk EMS (Alpha and Bravo Levels):

Low Risk Emergency Medical Services (Alpha, Bravo) - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:06	3:10	3:33	5:50	1:30	2:36
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:55	1:58	1:52	1:53	1:30	0:24
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	8:41	8:15	8:18	9:28	4:30	4:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	12:41	13:44	12:46	11:22	7:30	5:10
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:58 n=1,200	11:36 n=456	11:47 n=425	12:40 n=319	7:30	4:28
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	13:54 n=793	13:31 n=316	14:27 n=281	14:05 n=196	10:30	3:24
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk EMS (Charlie and Delta Levels):

Moderate Risk Emergency Medical Services (Charlie, Delta) - 90th Percentile - Baseline Performance - (Non-Emergent)			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:59	3:09	3:31	5:50	1:30	2:28
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:53	1:56	1:52	1:52	1:30	0:23
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	8:21	8:04	8:15	9:01	4:30	3:51
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	12:47	13:26	12:52	11:46	7:30	5:17
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:56 n=1,254	11:42 n=459	11:56 n=432	14:03 n=363	7:30	5:25
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	14:20 n=957	14:01 n=957	15:05 n=331	14:04 n=228	10:30	3:49
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk EMS (Motor Vehicle Accidents (MVA) and MV/PED with or without injury):

Moderate Risk Emergency Medical Services - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	6:54	2:51	2:12	8:07	1:30	5:24
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:53	1:54	1:55	1:39	1:30	0:23
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	9:20	9:24	11:15	6:46	4:30	4:50
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	9:39	10:02	11:15	6:46	7:30	2:08
		Rural	N/A	N/A	N/A	N/A	7:30	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:12 n=61	12:27 n=23	12:00 n=18	11:41 n=20	7:30	4:42
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:56 n=64	12:55 n=24	12:00 n=18	14:22 n=22	10:30	2:26
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

High-Risk EMS (Echo Levels and Motor Vehicle Accidents with extrication or Commercial Vehicle Accidents with injury):

High-Risk Emergency Medical Services - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:60	3:09	3:30	7:10	1:30	2:29
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:53	1:57	1:47	1:51	1:30	0:23
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	8:04	7:45	7:53	8:59	4:30	3:34
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	15:03	13:44	16:31	11:53	7:30	7:32
		Rural	N/A	N/A	N/A	N/A	N/S	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	11:38 n=1,246	11:10 n=472	11:40 n=445	12:13 n=329	7:30	4:08
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	14:54 n=309	14:36 n=140	15:44 n=114	14:18 n=55	10:30	4:24
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Wildland

Low-Risk Wildland:

Low-Risk Wildland - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	2:12	0:39	2:13	N/A	1:30	0:41
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:43	1:43	0:01	N/A	1:30	0:13
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	9:33	10:16	6:29	N/A	4:30	5:03
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	7:30	7:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:13 n=3	12:38 n=1	10:26 n=2	N/A N/A	7:30	4:42
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	10:30	10:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Wildland:

Moderate-Risk Wildland - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchmark)	Gap
Alarm Handling	Pick-up to Dispatch	Urban	2:12	0:39	2:13	N/A	1:30	0:41
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:43	1:43	0:01	N/A	1:30	0:13
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	9:33	10:16	6:29	N/A	4:30	5:03
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	7:30	7:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:13 n=3	12:38 n=1	10:26 n=2	N/A N/A	7:30	4:42
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	N/A	N/A	11:14	N/A	10:30	10:30
		Rural	N/A	N/A	n=1	N/A	N/A	N/A

High-Risk Wildland:

All high-risk wildland responses were dispatched emergent for the years of 2022-2024.

Hazmat

Low-Risk Hazmat:

Low-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance - Non_Emergent			2022-2024	2024	2023	2022	Target (Agency Benchma	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:19	4:11	4:285	3:14	1:30	2:48
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	2:08	2:21	2:04	1:56	1:30	0:38
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	10:02	14:41	8:02	10:02	4:30	5:32
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	10:07	14:41	8:02	10:07	7:30	2:37
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:39 n=39	12:36 n=12	12:00 n=16	12:40 n=11	7:30	5:09
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	12:42 n=39	15:25 n=13	12:00 n=16	11:40 n=10	10:30	2:11
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Moderate-Risk Hazmat:

Moderate-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchma	Gap
Alarm Handling	Pick-up to Dispatch	Urban	4:05	3:46	4:32	3:26	1:30	2:34
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:55	1:53	2:08	1:55	1:30	0:25
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	9:27	7:37	9:04	13:29	4:30	4:56
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	10:29	10:28	7:50	10:57	7:30	2:59
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	12:55 n=59	12:35 n=18	13:10 n=23	11:24 n=18	7:30	5:24
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	15:20 n=10	15:32 n=5	12:16 n=3	12:60 n=2	10:30	4:50
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

High-Risk Hazmat:

High-Risk Hazardous Materials Response - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchma	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:56	3:13	4:56	3:19	1:30	2:26
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:49	1:46	1:44	1:47	1:30	0:19
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	9:02	7:55	8:54	14:13	4:30	4:32
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	7:30	7:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	13:11 n=52	12:51 n=15	13:54 n=22	10:24 n=15	7:30	5:40
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	N/A	N/A	N/A	N/A	10:30	10:30
		Rural	N/A	N/A	N/A	N/A	N/A	N/A

Special Operations:

Non-Emergent All Hazards Special Operations:

Special Operations Response (2022-2024) - 90th Percentile - Baseline Performance - Non-Emergent			2022-2024	2024	2023	2022	Target (Agency Benchma	Gap
Alarm Handling	Pick-up to Dispatch	Urban	3:14	1:55	N/A	3:38	1:30	1:44
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban	1:39	1:57	N/A	0:27	1:30	0:09
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban	6:38	6:39	N/A	6:04	4:30	2:08
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Travel Time ERF Concentration	Urban	6:38	6:39	N/A	6:04	7:30	0:52
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
Total Response Time	Total Response Time 1st Unit On Scene Distribution	Urban	10:47 n=3	10:33 n=1	N/A N/A	10:03 n=2	7:30	3:16
		Rural	N/A	N/A	N/A	N/A	N/A	N/A
	Total Response Time ERF Concentration	Urban	10:47 n=3	10:33 n=1	N/A N/A	10:03 n=2	10:30	0:16
		Rural	N/A	N/A	N/A	N/A	N/A	N/A