West Metro Fire Rescue

Standard of Cover

West Metro
Fire Rescue

2023

Document Revalidation Log

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Executive Summary

In the fall of 2008, West Metro Fire Protection District (District), also known as West Metro Fire Rescue (WMFR), began the process of becoming accredited by the Center for Fire Accreditation International (CFAI). This process began based on the recommendations from a Blue-Ribbon Panel's letter of recommendations to the District board of directors stating, "… we believe pursuing accreditation will benefit both the Department and the citizens of the District by establishing measurable goals concerning improved response times, incident management, appropriate apparatus deployment, and the delivery of quality services[1]." The Blue-Ribbon Panel was established to assist with a bond and tax election in 2006. The District has recognized accreditation as a tool to strengthen the continuous pursuit of excellence the citizens of the community have come to expect.

The following Standard of Cover document is required for accreditation by CFAI. CFAI defines the Standard of Cover process, known as "deployment analysis," as *those written policies and procedures that establish the distribution and concentration of fixed and mobile resources of your agency*[2].

This process uses a systems approach for deployment rather than a prescriptive formula. This means the District will evaluate data in the records management system and the computer aided dispatch (CAD) software, and then set standards based on that data. National standards[3] will be used as a goal. In a comprehensive approach, the District will be able to match community needs (risks and expectations) with appropriate levels of service to operate in a safe, efficient, and effective manner. Utilizing this information, the District's leadership should be able to assist the community, through the board of directors, in adopting appropriate and affordable service levels.

The purpose of this document is to assist the District in ensuring a safe and effective response force for fire suppression, emergency medical services, and special team response. In addition, it provides a baseline tool for defining emergency performance standards, a basis for continually measuring performance improvements over time, and to guide policy decisions dealing with resource procurement and allocation.

As the community changes, District leaders will have a valuable tool to assist with defining appropriate levels of service. There have been many attempts in the fire service to create a standard methodology for determining the exact number of firefighters, fire stations, or fire inspectors the community needs. However, the differences in fire service challenges in each

[1] *West Metro Fire Protection District; Blue Ribbon Advisory Panel; Final Report and Recommendations; Spring 2006*
[2] Center for Public Safety Excellence (CPSE); Quality Improvement for the Fire and Emergency Services; 2020
[3] National Fire Protection Association Standard 1710; *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.*

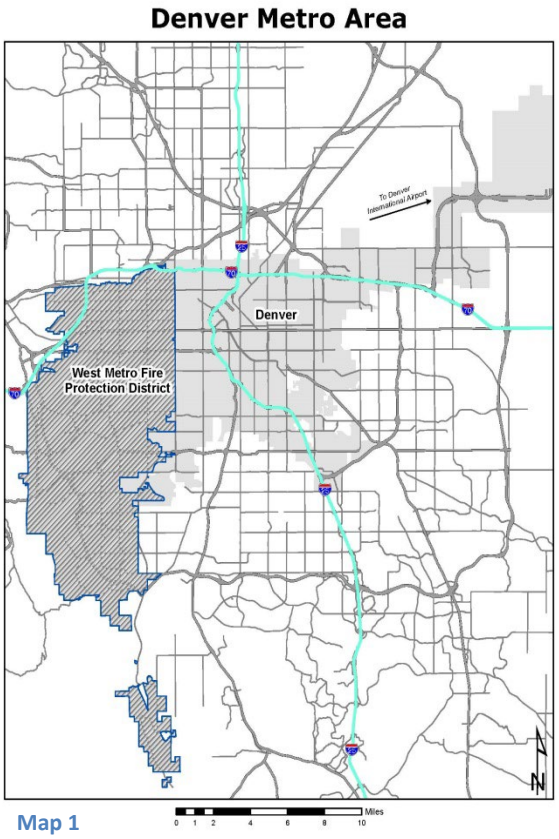
community have made it clear that there is not a “one-size-fits-all” solution. The variety of risks and levels of hazards that exist in the community have made it clear that the District needs to conduct a risk assessment and then design and develop an “all-hazards” response system that identifies service levels that are safe, efficient, and effective. Attempts to control an emergency before it has reached its maximum intensity requires geographic dispersion and clustering of resources near service delivery points for maximum effectiveness against the greatest number and types of risk.

Not all areas or exposures within the District are equal. Some types of emergencies, such as multiple vehicle collisions or hazardous materials incidents, require significant numbers of resources to control the scene, perform rescue operations, and provide medical care. A high-risk occupancy requires timely arrival of fire companies to rescue occupants or to control the emergency. Fires in high-risk buildings with high occupancy loads require more resources than fires in low-risk buildings with low occupancy loads. Fires in large, heavily loaded structures require more resources than fires in small buildings with limited contents.

Creating a Standard of Cover consists of an evaluation of the placement of resources (number, type, and location) in relation to the potential demand placed on them by the type of risk and historical needs in the community. Furthermore, if the Standard of Cover is to be meaningful to the community, the outcome must demonstrate that lives are saved, and properties are protected. The Standard of Cover is a living document and will be updated annually.

Section 1 – Description of the Community Served

The District is a special district organized under Colorado Revised Statutes Title 32 to provide fire protection for the areas west and southwest of the city of Denver, Colorado, and west up to the foothills. The District covers approximately 108 square miles within Jefferson and Douglas Counties including the city of Lakewood, the city of Wheat Ridge, and the towns of Morrison, Edgewater, Mountain View, and Lakeside. The District is 8.4 miles wide from east to west and over 26 miles long from north to south. The District is bounded by Clear Creek on the north, the city of Golden and the foothills on the west, the city and county of Denver and city of Littleton on the east, and Roxborough Park on the south.



Map 1

History

The Lakewood-Mountair Fire Department was founded in 1937. The Lakewood Fire Protection District was established through the consolidation of smaller fire departments during the late 1940s. The Bancroft Fire Protection District was formed in 1947. The District was consolidated from the Lakewood and Bancroft Fire Protection Districts on January 1, 1995. These two fire protection districts were managed as the Lakewood/Bancroft Combined Fire Authority from 1990 to 1995. In 1995, the Authority then became the West Metro Fire Protection District.

The Roxborough Metropolitan District was formed in 1972. Its volunteer fire department was established in 1980. The Roxborough Fire Protection District was added to the District in 1998. These mergers allowed the District to provide additional services (e.g., additional station, second tower) and deferred the need for additional revenue until 2006.

In 2016, the District merged with Wheat Ridge Fire Protection District, hiring 32 of its personnel and renaming two of its fire stations to WMFR Station 16 and Station 17. One Wheat Ridge fire station was closed due to age.

In 2006, the District passed a mill levy increase (from 11.382 mills to 12.382 mills) and a bond ($43 million) for capital projects that included a training center, five station replacements, a new aerial tower, and a third district chief. Four of these five stations were replaced at their

current locations (Stations 4, 5, 7 and 8). Station 10 was moved to the new training center site located at West Hampden Avenue and South Kipling Street. Station replacements were due to building age and serviceability.

In May 2014, the District held an election for a mill levy increase to address the budget deficit due to continued reductions in tax revenue. The election was not successful. In an effort to deal with the on-going deficits on a long-term basis, preparations for service delivery reduction and reorganization took place throughout the remainder of 2014. The reorganization was implemented on January 3, 2015, which included staffing level changes, impacts to promoted positions, and apparatus response reductions.

The District was awarded the Staffing for Adequate Fire & Emergency Response (SAFER) grant in September 2015, and added 24 firefighters on April 1, 2016, in addition to 14 (non-SAFER funded) firefighters hired in the same class.

In November 2018, the District held an election to exempt from a Colorado constitutional amendment that reduced tax revenues. The election was successful with nearly 69% of voters supporting the measure.

West Metro Fire Protection District is a full-service fire district providing structure and wildland fire protection, emergency medical services, advanced life support (ALS) transportation, and special teams that include hazardous materials, water rescue, technical rescue, and federal wildland firefighting. All first-line apparatus, except for chief vehicles and the investigator, are staffed with ALS personnel.

The District's Training Center is centrally located and provides training for all employees. The Training Center provides modern classrooms, office space, locker rooms, and fire academy facilities. The District is the sponsoring agency for the FEMA Urban Search and Rescue Colorado Task Force One, which is located in the Training Center building. The Training Center grounds encompass over 10 acres and include two residential-type burn buildings, a commercial-type building for fire attack and search training, multiple vehicles for motor vehicle accident and fire training, as well as props for technical rescue and hazardous materials training.

The District serves a diverse response area that includes high-rise buildings, wildland urban interface, open-space, major highways, light-rail, primary employers, medical manufacturing, concert venues, a prison, schools, light industrial, retail, multi-family structures, single-family homes, higher education facilities, and the Denver Federal Center. The two major cities served by the District were both formed in 1969 and lack traditional city cores.

The District is rated as a Class 01/1X organization by the Insurance Services Office (ISO). This rating was achieved in late 2017, which was an improvement from the past rating of Class 3/9.

Funding

The majority of District income, 67.63%, is from property taxes with the next highest portion, 17.89%, generated from medical services. The District also receives revenues from specific ownership tax, contracts, permits, grants, interest, fees, and donations. Figure 1 shows the percentage of revenues received by the District.

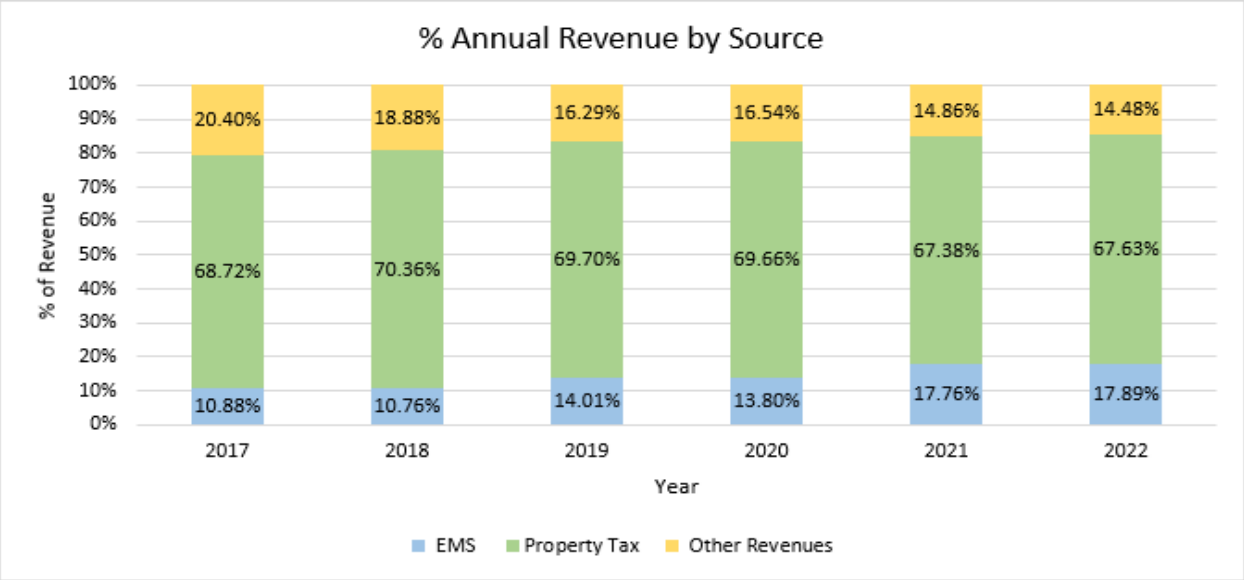


Figure 1

In Colorado, counties reassess residential and commercial property values in odd number years, commercial property can be reassessed anytime by the owner. Between 2007 and 2015, the District experienced decreases in tax revenues due to reassessment of property taxes. In 2010, the District experienced a 1% drop in commercial property tax revenue and the 2011 revaluation lowered property tax revenues by 5% over the next two years. Figure 2 shows the percentage of property tax revenue increases from 2014 through 2022.

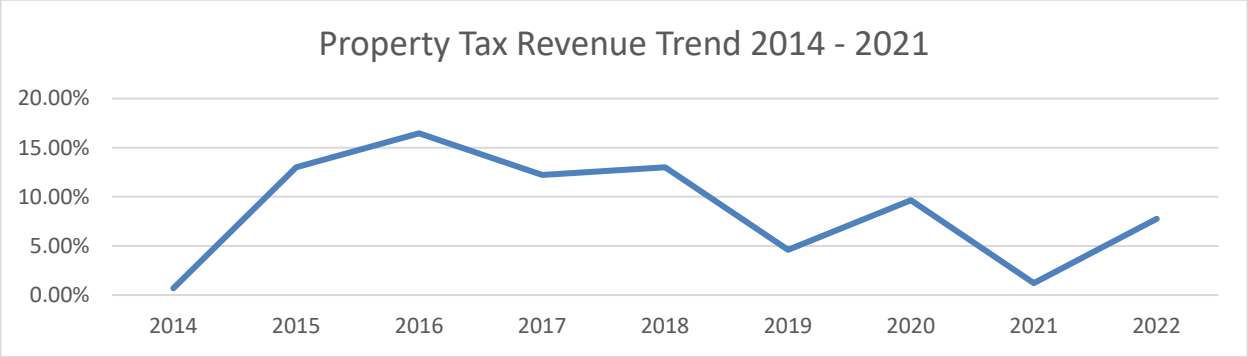
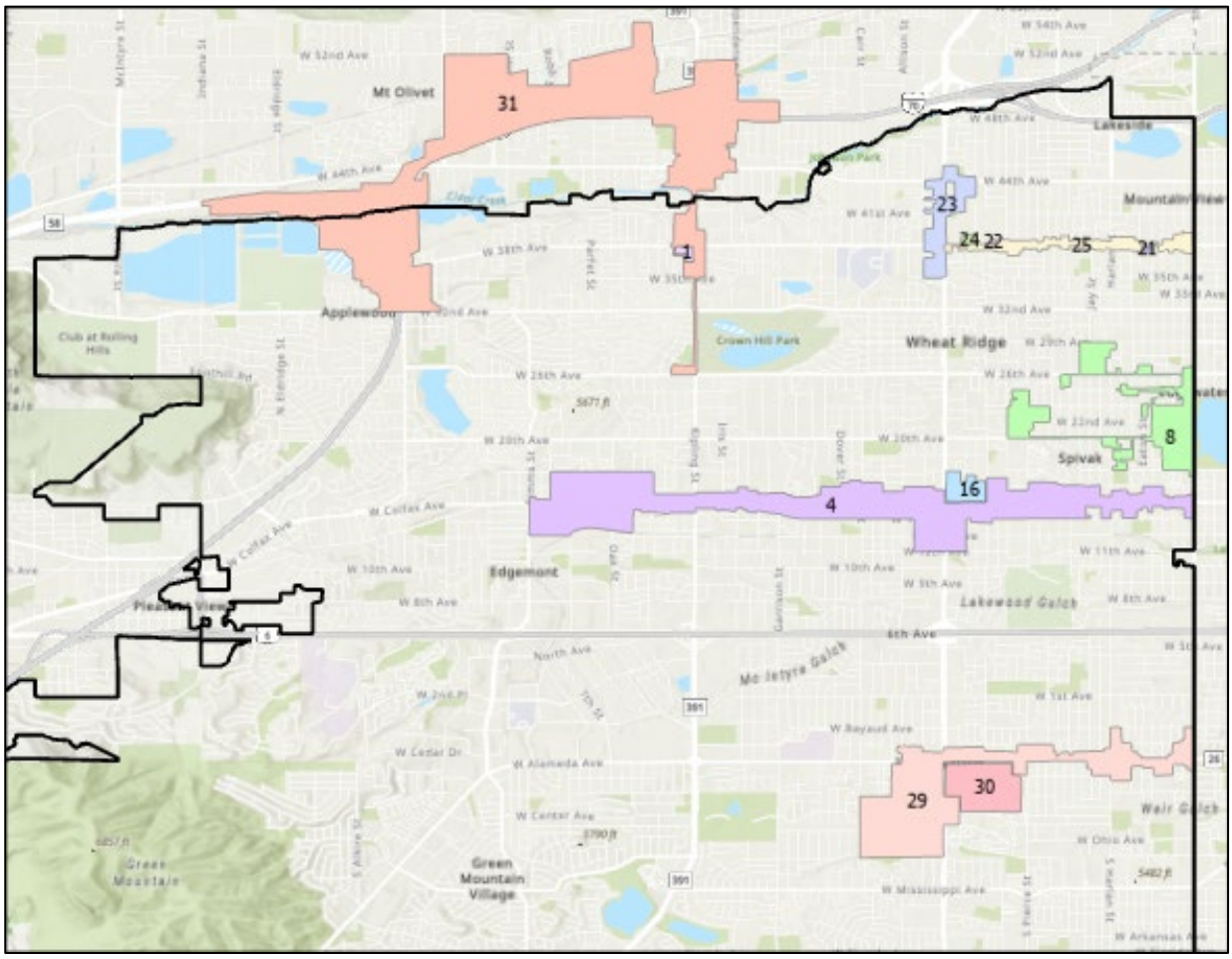


Figure 2

Growth within the District is fairly stable with some potential for growth along the C-470 corridor and in small pockets of undeveloped land throughout the District. There are also

several urban renewal projects or areas with tax incremental financing (TIF) under development within the District.

Under a TIF, the existing level of property tax in a project area is set as a base with an estimate then determined for the level of future expected tax revenues. The difference between the base and the expected level of increased taxes at the end of the project is how the 'tax increment' is determined. The base (the valuation prior to the project) continues to be paid to the District, while the increment is used to pay the developer (or reimburse bonds on the project). All TIFs within the District are scheduled for 25 years. Upon expiration, District TIF tax revenues follow standard property tax procedures with revenues realized in the second year after the end date. Map 2 shows current District TIF areas as cataloged by Jefferson County.



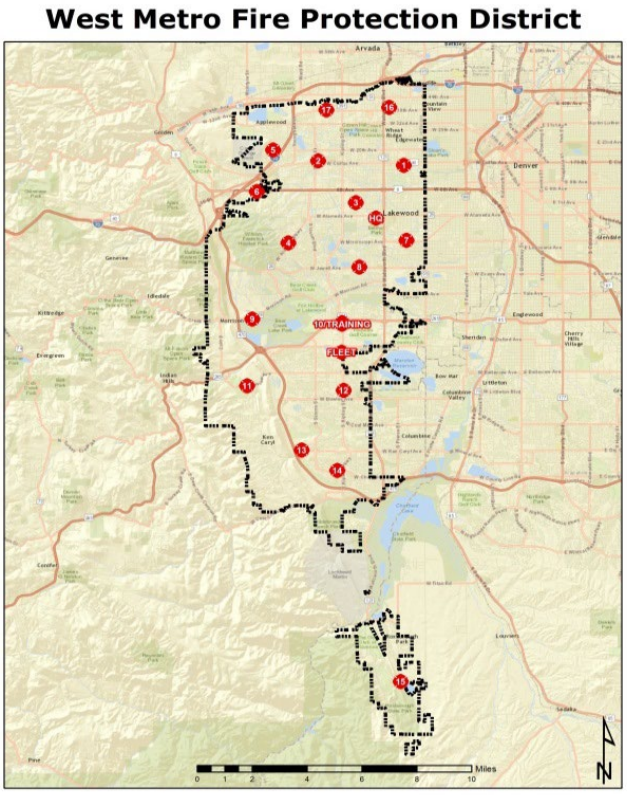
Map 2

Table 1 lists each TIF as of 2022, its expiration date, the amount of 2022 refund revenue received by the District, and the estimated annual tax revenue the District would have realized without the TIF in place. Refund revenue is the amount collected by the District to offset the loss of property tax revenue for the District. The $431,088 listed in refunds is $1,302,114 short of the $1,733,123 the District would have received if the TIFs were not in place.

Label	Name	Start Date	End Date	Refund Checks Received from Cities		Estimated Tax Revenue
25	38th Ave Corridor Redev Sub Mod	2015	2040			$5,341.00
21	38th Corridor Redev 4 Mod	2013	2038			$4,833.00
16	Colfax-Wadsworth Urban Redev	1999	2024			$81,515.00
8	Edgewater Redev Urban Renewal Auth	1999	2024			$58,228.00
31	I-70 Kipling Corridors 2	2015	2040	*2022 only	$7,488.00	$35,475.00
1	I-70/Kipling Corridors Urban Renewal	2014	2039			$24,564.00
22	Thirty Eight Avenue Corridor Redev Dist	2003	2028			$2,844.00
23	Wadsworth Blvd Corr Redev	2015	2040		$72,056.00	$71,104.00
29	West Alameda Ave Corridor Urban Redev Ph1	1998	2023			$312,593.00
30	West Alameda Ave Corridor Urban Redev Ph2	2000	2025			$781,691.00
4	West Colfax Ave Corridor Reinvestment	2005	2030		$309,444.53	$312,295.00
24	West End 38th Urb Renw	2015	2040		$42,020.00	$42,640.00
					$431,008.53	**$1,733,123.00**

Table 1

Topography



Map 3

The topography varies from flat urban areas in the central and eastern portions of the District, to steep undeveloped terrain on the western portions. Areas of Green Mountain, South Table Mountain, Willowbrook, Ken-Caryl, and Roxborough present access and egress challenges, especially during adverse weather conditions. The foothills of the Rocky Mountains are along the western border of the District and present a wildfire threat. There are three canyons that open out onto the plains: Waterton Canyon (Platte River, Waterton Canyon Road – seasonal access with heavy hiking/biking use), Turkey Creek Canyon (US 285 – major access to Southwestern Colorado), and Bear Creek Canyon.

There are several open space parks within the District. These areas include Roxborough Park, Green Mountain, Bear Creek Lake Park, Mount Falcon, Matthews/Winters, and Red Rocks. Ownership includes the state of Colorado, Jefferson County Open Space, the city of Lakewood, and Denver Mountain Parks. There are multiple smaller parks scattered throughout the District. The United States Forest Service (Pike National Forest) shares a border with the District in Roxborough Park and Waterton Canyon.

Red Rocks Park has a 9,450-seat amphitheater that hosted 179 events in 2019. The District has historically provided paramedic coverage for events through a contract with the city and county

of Denver; however, this contract was not renewed for 2020 and beyond. The District provides mutual aid to Red Rocks during events if requested but no longer provides on-site staffing. Most events in 2020 were canceled due to the COVID-19 pandemic. Red Rocks returned to a normal concert schedule in 2021; albeit, with little impact to District operations due to third party medical event coverage at the venue.

There are four major traffic corridors within the District: I-70, 6th Avenue, Highway 285, and C-470. I-70 and 6th Avenue are major access corridors to the downtown Denver area. Highway 285 serves as an access route for mountain communities to the cities of Englewood and Littleton. C-470 is a highway designed as a beltway between I-70 on the north and I-25 on the south.

A wildfire urban interface threat exists throughout the many greenbelts and open spaces within the District. These areas have brush and grass with the potential to burn and damage adjacent structures when a wildfire is present. The northern, western, and southern portions of the District each have exposure to large open space areas. These areas are defined in the West Metro Fire Rescue Risk Assessment (RA) and are further characterized in the District's Community Wildfire Protection Plan (CWPP). These areas include the Clear Creek Greenbelt, South Table Mountain, Willowbrook, Ken-Caryl, Willow Springs, Green Mountain, Rolling Hills, areas around Morrison, and Roxborough.

In 2006, the District completed a CWPP that outlined wildfire risk assessment, a mitigation plan, and emergency operations. The District's CWPP was updated and adopted in 2021. The CWPP's recommended actions for the District in the urban interface include: Continued work on mitigation work/defensible space with homeowners, complete existing and identify new fuel mitigation projects, evaluate and improve limited water supply for suppression in threatened areas, and improve addressing of properties and street markers for evacuation routes.

There are three additional CWPPs pertinent to the District. The first is for Douglas County as a whole. The second is the Roxborough area in Douglas County. This plan addresses specific community needs for the Roxborough community. The document is largely focused on fuel mitigation and local community efforts. The third is the Jefferson County CWPP. This document addresses goals and objectives pertinent to wildfire risk on the county level.

In order to assist the public, cities, towns, communities, developments, and organizations to plan, the District has developed and launched a Wildfire Risk Map on the District's website. Any user can identify wildfire risk by entering an address into the map search. The tool also allows users to submit feedback or questions regarding the tool.

There are multiple lakes, ponds and creeks within the District. There are no commercial airports, heavy rail or navigable waterways within the District. There is a light rail line along the Colfax corridor that transects the District east to west.

Climate

The climate varies from severe winter weather to hot dry summers. Winter weather can be severe with storms producing multiple feet of snow. These types of storms are rare. In March 2003, Denver recorded a 31.8-inch snowstorm, with portions of the District receiving up to four feet, making it the snowiest month on record. March of 2021 recorded the fourth largest snowstorm with over 27-inches and the second snowiest month on record. One of the most common weather occurrences is severe thunderstorms. These storms are capable of producing hail, flooding and high winds.

Drought has been a concern in the past, which increases the chances for a major wildland fire. The front range of Colorado is considered an arid climate with an annual moisture average of 16.17 inches and an average snowfall of 55.8 inches.

Large wildland fire growth is not common, but has happened in the past (e.g., Murphy Gulch 1978 – 3,300 acres and Cherokee Ranch 2003 – 2,500 acres).

Population

The District population in 2022 is 296,917 [4]. There is very little commuter adjusted population shift within the District. Table 5 shows that aging adults live throughout the District; however, the two planning zones with the highest percentage of this demographic group are Station 8 and Station 4.

The population density is considered to be urban throughout the District, yet there are some undeveloped and lower density areas along western portions.

Area Covered based on Planning Zone				
Area Covered	**Area (Square Miles)**	**Total Population**	**Population Percentage of District**	**Density/Square Mile 2022 Population**
Planning Zone 1	4.42	27,045	9.11%	6,119
Planning Zone 2	4.55	16,653	5.61%	3,660
Planning Zone 3	5.44	16,510	5.56%	3,035
Planning Zone 4	8.47	27,905	9.40%	3,295
Planning Zone 5	4.63	7,401	2.49%	1,598
Planning Zone 6	3.95	8,760	2.95%	2,218
Planning Zone 7	4.08	25,251	8.50%	6,189
Planning Zone 8	5.9	24,654	8.30%	4,179
Planning Zone 9	9.9	5,783	1.95%	584
Planning Zone 10	9.35	27,308	9.20%	2,921
Planning Zone 11	7.44	6,765	2.28%	909
Planning Zone 12	7.16	33,530	11.29%	4,683
Planning Zone 13	11.1	16,327	5.50%	1,471
Planning Zone 14	6.62	15,926	5.36%	2,406
Planning Zone 15	7.21	10,150	3.42%	1,408
Planning Zone 16	4.97	18,183	6.12%	3,659
Planning Zone 17	3.09	8,766	2.95%	2,837
Total	**108.28**	**296,917**	**100%**	**2,742**

Table 2

[4] 2020 Census and ESRI Community Survey

	Population Total		Ethnicity			
Planning Zone	Total Population	% of Total Population	Hispanic or Latino	% of Hispanic or Latino Population	Non Hispanic or Latino	% of Non Hispanic or Latino Population
1	27,045	9.11%	11,768	20.60%	15,276	6.37%
2	16,673	5.61%	2,949	5.16%	13,724	5.72%
3	16,514	5.56%	3,710	6.49%	12,804	5.34%
4	27,905	9.40%	3,305	5.78%	24,600	10.26%
5	7,401	2.49%	449	0.79%	6,952	2.90%
6	8,760	2.95%	950	1.66%	7,810	3.26%
7	25,251	8.50%	9,805	17.16%	15,445	6.44%
8	24,654	8.30%	4,468	7.82%	20,187	8.42%
9	5,783	1.95%	469	0.82%	5,313	2.22%
10	27,308	9.20%	5,139	8.99%	22,169	9.24%
11	6,765	2.28%	692	1.21%	6,074	2.53%
12	33,530	11.29%	4,075	7.13%	29,455	12.28%
13	16,327	5.50%	1,145	2.00%	15,182	6.33%
14	15,926	5.36%	1,592	2.79%	14,334	5.98%
15	10,150	3.42%	1,038	1.82%	9,112	3.80%
16	18,183	6.12%	4,403	7.71%	13,780	5.75%
17	8,766	2.95%	1,177	2.06%	7,589	3.16%
Total	**296,941**	**100.00%**	**57,134**	** **19.24%**	**239,806**	** **80.76%**

Table 3

	Total		Race													
Planning Zone	Total Population	% of Total Population	White	% of White Population	Black	% of Black Population	American Indian / Alaskan Native	% of American Indian / Alaskan Population	Asian	% of Asian Population	Pacific Islander	% of Pacific Islander Population	Other	% of Other Population	Multiple Races	% of Multiple Races Population
1	27,045	9.11%	19,168	7.86%	790	16.09%	603	18.27%	432	4.56%	43	12.80%	4,879	26.52%	1,131	10.65%
2	16,673	5.61%	14,132	5.80%	361	7.35%	255	7.72%	334	3.53%	39	11.61%	865	4.70%	687	6.47%
3	16,514	5.56%	13,452	5.52%	399	8.12%	217	6.57%	407	4.30%	21	6.25%	1,369	7.44%	648	6.10%
4	27,905	9.40%	24,664	10.12%	349	7.11%	251	7.60%	1,004	10.60%	37	11.01%	737	4.01%	865	8.15%
5	7,401	2.49%	687	0.28%	71	1.45%	45	1.36%	159	1.68%	8	2.38%	82	0.45%	158	1.49%
6	8,760	2.95%	7,542	3.09%	159	3.24%	68	2.06%	447	4.72%	6	1.79%	225	1.22%	313	2.95%
7	25,251	8.50%	17,991	7.38%	506	10.30%	433	13.12%	1,178	12.43%	25	7.44%	3,909	21.24%	1,209	11.39%
8	24,654	8.30%	20,841	8.55%	327	6.66%	250	7.57%	1,079	11.39%	18	5.36%	1,275	6.93%	865	8.15%
9	5,783	1.95%	5,245	2.15%	49	1.00%	29	0.88%	240	2.53%	4	1.19%	84	0.46%	132	1.24%
10	27,308	9.20%	22,217	9.12%	751	15.29%	416	12.60%	1,291	13.63%	53	15.77%	1,432	7.78%	1,148	10.81%
11	6,765	2.28%	6,235	2.56%	48	0.98%	45	1.36%	118	1.25%	8	2.38%	152	0.83%	160	1.51%
12	33,530	11.29%	29,637	12.16%	402	8.19%	187	5.66%	1,275	13.46%	19	5.65%	983	5.34%	1,026	9.66%
13	16,327	5.50%	15,176	6.23%	124	2.52%	41	1.24%	361	3.81%	14	4.17%	188	1.02%	424	3.99%
14	15,926	5.36%	14,469	5.94%	152	3.10%	74	2.24%	418	4.41%	9	2.68%	297	1.61%	508	4.78%
15	10,150	3.42%	9,234	3.79%	74	1.51%	65	1.97%	256	2.70%	6	1.79%	168	0.91%	347	3.27%
16	18,183	6.12%	15,152	6.22%	278	5.66%	221	6.69%	332	3.50%	24	7.14%	1,454	7.90%	723	6.81%
17	8,766	2.95%	7,874	3.23%	71	1.45%	101	3.06%	143	1.51%	2	0.60%	301	1.64%	274	2.58%
Total	**296,941**	**100.00%**	**243,716**	** **82.08%**	**4,911**	** **1.65%**	**3,301**	** **1.11%**	**9,474**	** **3.19%**	**336**	** **0.11%**	**18,400**	** **6.20%**	**10,618**	** **3.58%**

Table 4

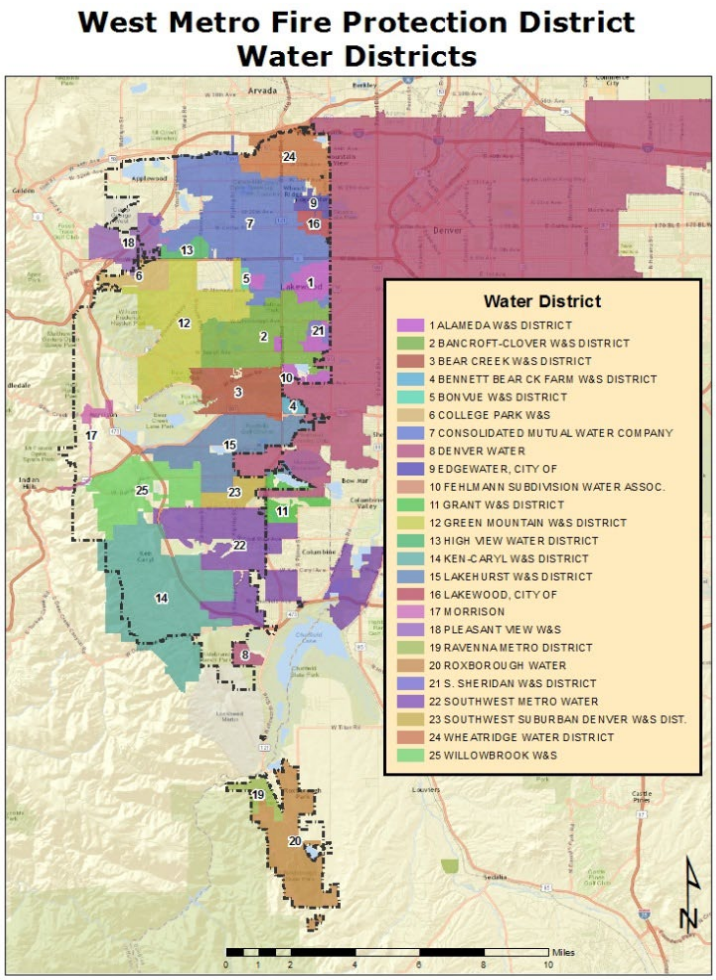
** Percentages based on the total population in the District

Percent of Population over 65 Based on Planning Zone				
Planning Zone	**Population**	**Population Over 65**	**% of Zone Population over 65**	**% of District Population over 65**
1	27,045	4,327	16%	7.78%
2	16,653	3,497	21%	6.29%
3	16,510	3,632	22%	6.53%
4	27,905	5,860	21%	10.54%
5	7,401	1,924	26%	3.46%
6	8,760	1,577	18%	2.84%
7	25,251	4,040	16%	7.26%
8	24,654	6,164	25%	11.08%
9	5,783	1,099	19%	1.98%
10	27,308	3,823	14%	6.87%
11	6,765	1,421	21%	2.55%
12	33,530	5,030	15%	9.04%
13	16,327	2,449	15%	4.40%
14	15,926	2,389	15%	4.30%
15	10,150	1,117	11%	2.01%
16	18,183	4,728	26%	8.50%
17	8,766	2,542	29%	4.57%
Total	**296,917**	**55,618**	18.73%	

Table 5

Water Districts

There are 23 water districts (and two sanitation districts) within the District. These water districts were developed as the area grew. The availability of water was the deciding factor in large scale growth; thus, the growth was generally from the edge of available water. The majority of the growth was prior to the establishment of the city of Lakewood (incorporated in 1969); thus, these districts do not operate a municipal water system (they do manage the Lakewood Water Utility). The town of Morrison, which has its own municipal water system, was established in 1874.



Map 4

The water supplies in the metropolitan areas of Denver are generally managed by Denver Water. There are four types of water districts within District boundaries: total service, read and bill, master meter, and municipal service. Total service, read and bill, and master meter water districts purchase water from Denver Water and the municipal service has a private water supply. The total service water districts contract with Denver Water to provide water, meter reading, billing and operations of the distribution system. The read and bill water districts contract with Denver Water to read the meters and bill customers, but Denver Water does not operate the distribution system. Master meter districts purchase the water through a master meter and the water district provides the meter reading, billing and operations of the distribution system. The town of Morrison is the only municipal service and draws its water from Bear Creek.

Master meter districts generally maintain offices and have staff for contacts on the status of their system. Total service and read and bill districts are difficult to contact, generally do not maintain staff, and maintain little or no information on their distribution systems. All of the districts have maintained the distribution system for firefighting.

Facilities and Apparatus

The District has 17 fire stations, an apparatus maintenance facility (opened in October 2000), an administration building (opened in September 2004), and a Training Center/USAR headquarters (opened in October 2009). In 2006, the District went to the citizens with a capital improvement plan that provided an aerial tower, rebuilt five stations, and built the Training Center/USAR headquarters.

The District currently staffs 15 first-line engines, one combination heavy rescue/pumper, two tower companies, one ladder company (also a first-line response apparatus), 14 medic units, three district chiefs, two safety and medical officers, one investigator, and one advanced resource medic unit. Additional equipment includes two brush engines, six brush trucks, a hazardous materials van, water rescue vans, collapse truck, two UTVs, an e-bike and a fleet of support vehicles. The District also maintains a reserve apparatus fleet to ensure adequate deployment and concentration.

Urban Search and Rescue

The District is the sponsoring agency for the Colorado Urban Search and Rescue team which is housed at the Training Center. The Federal Emergency Management Agency (FEMA) provides funding for this team directly to the District. These funds pay for the administration of the team and for equipment. Multiple District employees are members of the team and have impacted daily staffing during deployments. FEMA fully reimburses the District for extra duty and backfill of deployed employees. The District provides one full-time assistant chief, one full-time captain and three support personnel for the management of the team. Urban search and rescue involves the location, rescue (extrication), and initial medical stabilization of victims from natural and human-caused disasters. Due to the frequency of events and needs of the country, the mission scope of the urban search and rescue system has expanded beyond the original focus of structural collapse, transportation accidents, mines, and collapsed trenches, to now include additional multi-hazard capabilities. Urban search and rescue resources frequently deploy to disasters including earthquakes, hurricanes, severe storms and tornadoes, and floods, and are capable of operating at dam failures, technological accidents, terrorist activities, and hazardous materials releases.

Wildland Deployments

The wildland team provides engines and single resources (for overhead positions) for federal fire deployment throughout the fire season. The positions are filled by on duty personnel and are fully reimbursed, including replacement personnel, for all costs. Due to staffing requirements, the Districts limits the number of personnel available for deployment to 15 individuals at any given time. Officers are limited to 28 days of deployment during any calendar year. This ensures that minimum District staffing can be maintained at all times.

The District has three types of engines available for deployment: Type 1 front-line engines, Type 6 brush trucks, and Type 3 wildland-interface engines. Regardless of deployments, three wildland apparatus (Type 3 or Type 6) must remain available in the District; with one of the resources housed at Station 9. Single resources include command and general staff positions, mid-level management (task force or strike team leaders), a Rapid Extraction Module (REMS) crew, and individual firefighters deploying on hand crews or as fire line medics.

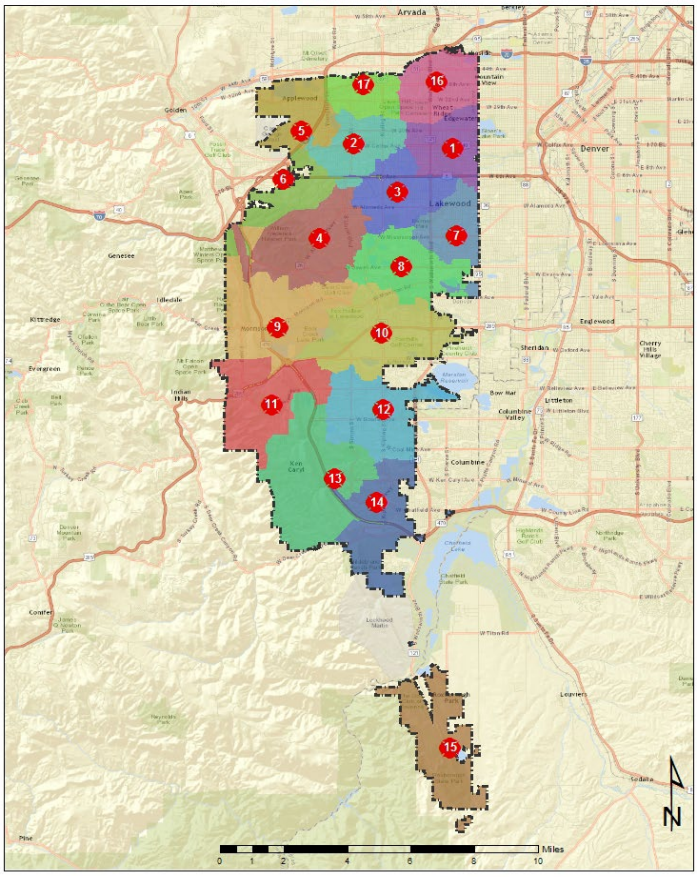
The District also participates in the Metro Fire Chief Response Group, which supports strike team or task force deployments for initial attack and/or immediate need. The resources are deployable outside the District, considered mutual aid, available for all risk types, and should normally only operate for the initial operational period – not to exceed 12 hours. The agreement is in place to provide rapid response and is not meant to usurp state or federal resource ordering. As a participant in this process, the District can also request appropriate resources when necessary.

Section 2 – Services Provided

West Metro Fire Protection District is a "full service/all-risk" fire district. Services include all aspects of emergency response, including structural firefighting, advanced life support (ALS) and ALS transportation, mobile integrated healthcare (Advanced Resource Medic – ARM car), hazardous materials response and mitigation, technical rescue, water rescue, wildland fire suppression, community wildfire mitigation, and fire investigation with the ability to file charges with a district attorney. The District also provides community outreach services including injury prevention education, car seat installation, business safety, and other education and prevention programs.

The District maintains ALS on all apparatus (except chief and investigator vehicles) with approximately 250 paramedics throughout the ranks: representing 65% of all uniformed personnel.

West Metro Fire Protection District
First Due



Map 5

Apparatus Staffing

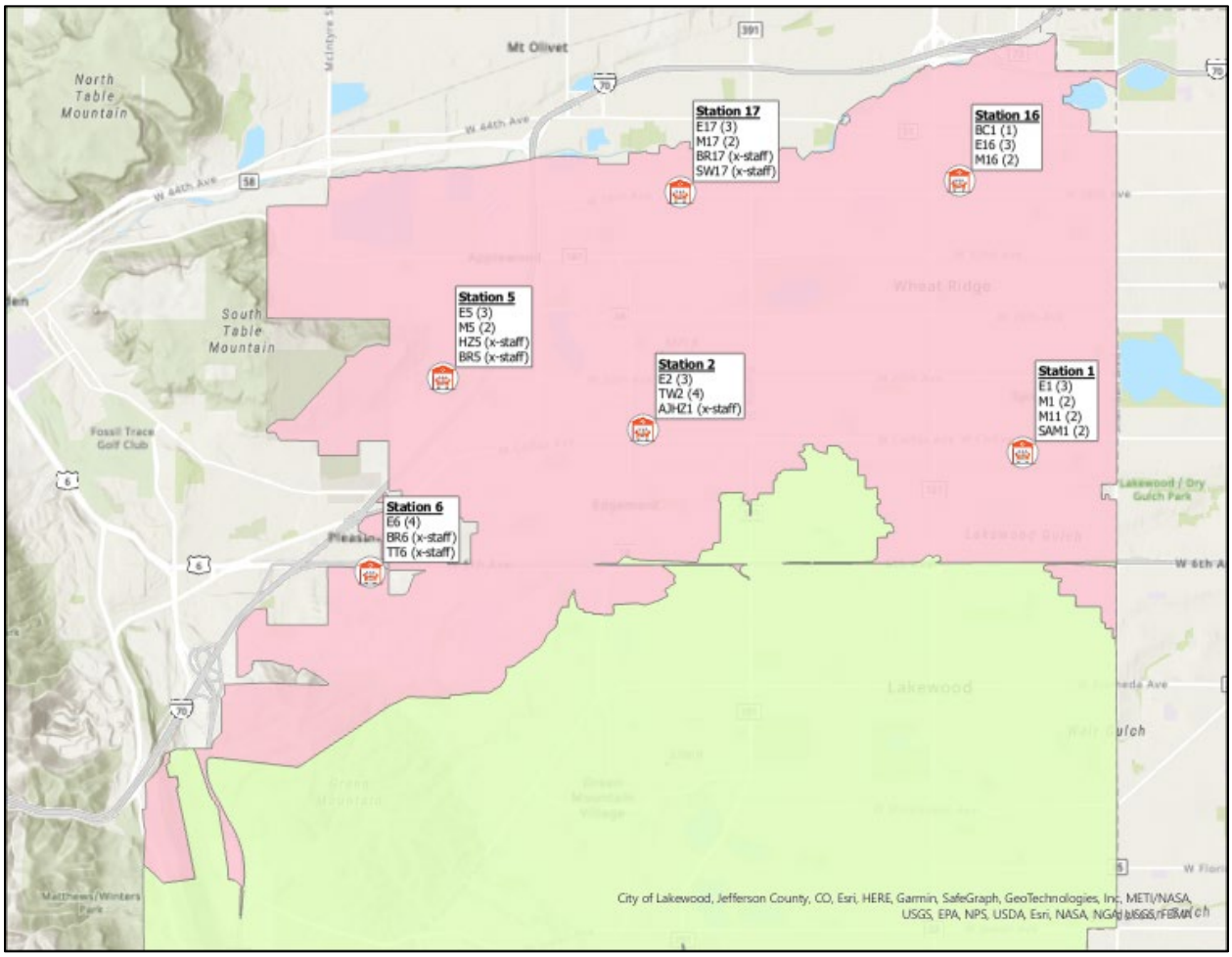
The District has set a minimum staffing level of three firefighters per engine when assigned to a multiple company station. Single engine stations are set at a minimum of four firefighters. Each tower/ladder and the rescue pumper are staffed with a minimum of four firefighters. Each engine, tower, and rescue has full ALS capability, including a certified paramedic, heart monitor/defibrillator, and ALS medications. Each medic unit is staffed, at a minimum, with one paramedic plus one additional firefighter/EMT. All medic units are considered fire medic units; staffed by firefighters with full personal protective equipment and can function as either an EMS transport unit or fire ground operations unit.

Emergency Call Back

The District has a policy in place to bring back personnel as needed. Special team personnel can be called back to augment operations during times of anticipated need. Historically, during high wildland fire danger over the Fourth of July, brush trucks have been staffed and additional fire investigators have been brought in to augment daily resources.

District 1

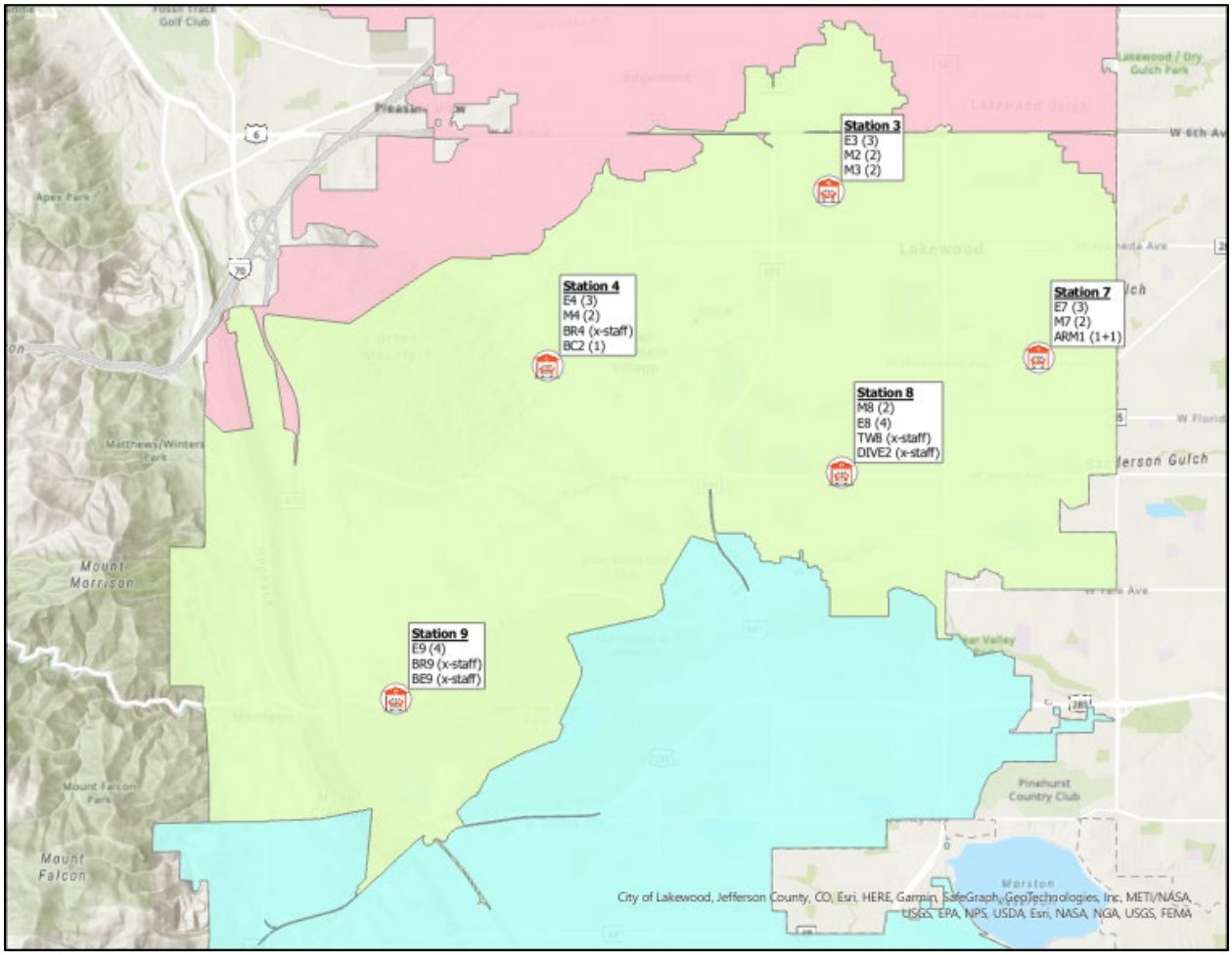
This district (1) is comprised of the first-in areas for Stations 1, 2, 5, 6, 16, and 17. It is bounded to the north by Clear Creek River and the District boundary, Sheridan Boulevard to the east, parts of 6th Avenue and southern boundaries of Stations 1,2 and 6 to the south, and the District's boundary to the west. This district also contains some of the District's busiest response areas, including portions of Colfax Avenue that have a high volume of calls for service. The district chief operates out of Station 16.



Map 6

District 2

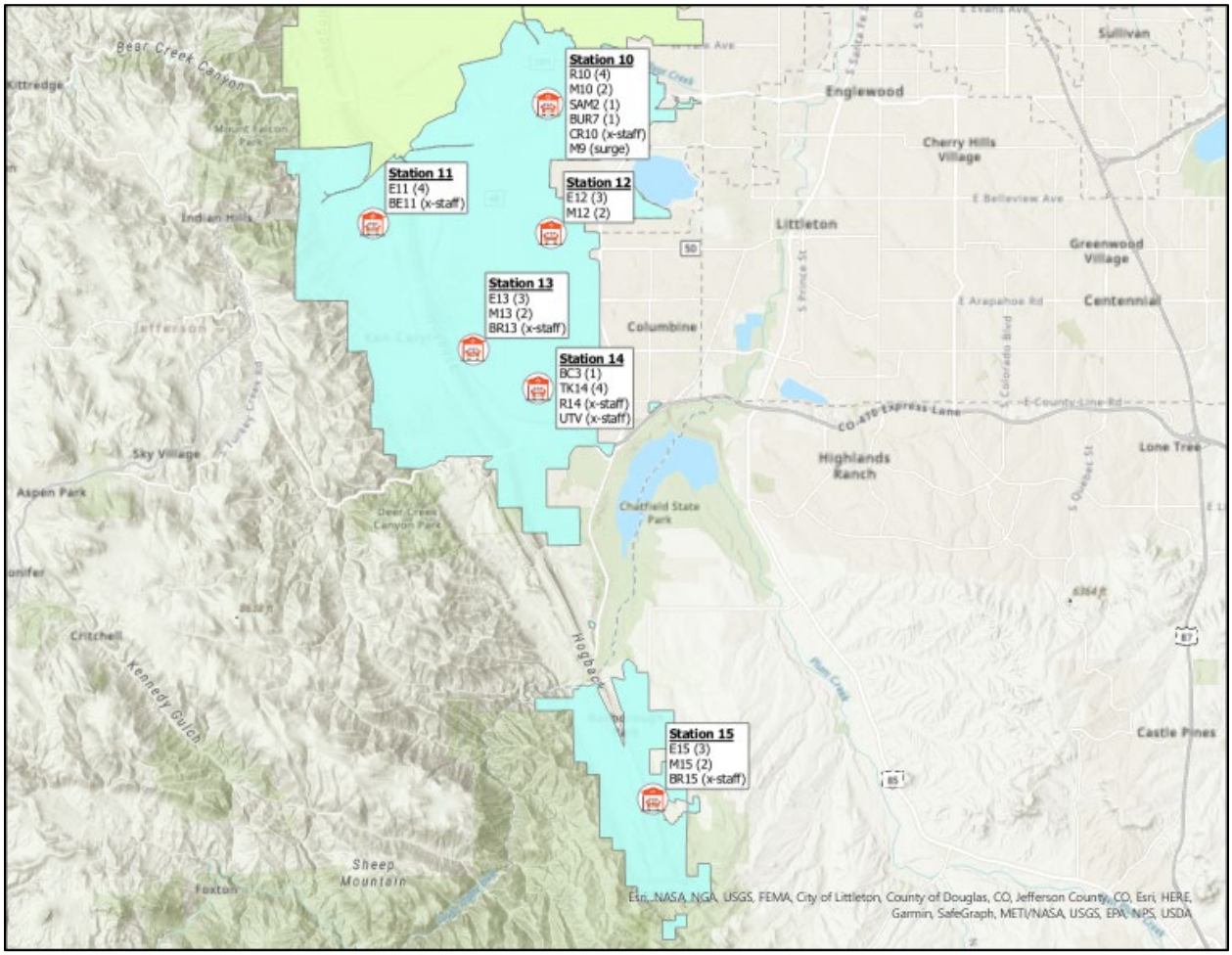
This district (2) is comprised of first-in areas for Stations 3, 4, 7, 8, and 9. It is bounded to the north by portions of 6th Avenue and the northern boundaries of Stations 3, 4 and 7, Sheridan Boulevard to the east, the southern boundaries of Stations 8 and 9 to the south, and the District's boundary to the west. This district contains two major open space areas in its western half, Green Mountain and Bear Creek Lake Park, as well as the District's administrative building. The shift commander operates out of Station 4.



Map 7

District 3

This district (3) is comprised of first-in areas for Stations 10, 11, 12, 13, 14, and 15. It is bounded to the north by the northern boundaries of Stations 10 and 11 first-in areas, to the east by Marston Reservoir, Wadsworth Boulevard, and the District's eastern boundary, the District's southern boundary to the south, and the District's western boundary to the west. The first-in area for Station 15 (Roxborough Park) is also included, this area is geographically separated and somewhat isolated from the rest of the District. The district chief operates out of Station 14.



Map 8

Types of Apparatus

In order to provide the highest level of service available to the community and meet the mission of protecting the community by providing an all-hazards emergency response, the District deploys different types of apparatus. Apparatus are distributed throughout the response area based on the RA. The following section summarizes the types of apparatus utilized to meet the response needs of the District.

Fire Engine (Type 1):

- 15 engines deployed throughout the District
- Staffed with one officer, one engineer, and one or two firefighters
- Advanced life support capable (one member must be a paramedic)
- Carries:
  - 500 gallons of water
  - 1250 gallons per minute pumping capacity
  - Preconnected handlines (minimum of two)
  - 1000 feet of five-inch supply line
  - Self-contained breathing apparatus
  - Ground ladders
  - Firefighting tools and equipment

Tower:

- Two deployed (Station 2 and Station 8)
- Staffed with one officer, one engineer, and two firefighters
- Advanced life support capable (one member must be a paramedic)
- 100’ aerial platform
- Auto extrication capable
- Classified as a truck company
- Carries:
  - 300 gallons of water
  - 2000 gallons per minute pumping capacity
  - Preconnected handlines (minimum of two)
  - 1000 feet of five-inch supply line
  - Self-contained breathing apparatus
  - Ground ladders
  - Firefighting tools and equipment

Truck (107’ ladder truck):

- One deployed at Station 14
- Staffed with one officer, one engineer, and two firefighters
- Advanced life support capable (one member must be a paramedic)
- 107’ straight ladder truck
- Auto extrication capable
- Classified as a truck company
- Carries:
  - 500 gallons of water
  - 1500 gallons per minute pumping capacity
  - Preconnected handlines (minimum of two)
  - 1000 feet of five-inch supply line
  - Self-contained breathing apparatus
  - Ground ladders
  - Firefighting tools and equipment

Rescue Pumper:

- One deployed at Station 10
- Staffed with one officer, one engineer, and two firefighters
- Advanced life support capable (one member must be a paramedic)
- Auto extrication capable
- Classified as a truck company
- Equipped with specialized technical rescue equipment
- Carries:
  - 500 gallons of water
  - 1250 gallons per minute pumping capacity
  - Preconnected handlines (minimum of two)
  - 1000 feet of five-inch supply line
  - Self-contained breathing apparatus
  - Ground ladders
  - Firefighting tools and equipment

Medic Unit:

- 14 deployed throughout the District
- Staffed with two firefighters (with firefighting equipment)
- Advanced life support capable (one member must be a paramedic)
- Equipped for transporting patients
- Equipped to support firefighting activities
- Carries:
  - Patient monitoring and transport supplies
  - Self-contained breathing apparatus
  - Firefighting tools

Advanced Resource Medic (ARM):

- Deployed at Station 7
- Mobile urgent care to treat patients at home and avoid emergency room visits
- Staffing:
  - One advanced practice paramedic
  - One paramedic firefighter
  - One mid-level provider (physician assistant or nurse practitioner 0800 – 1800)
- Advanced life support capable
- Expanded medical practice capabilities
  - Labs
  - Imaging
  - Advanced wound care (suturing)
  - Expanded medication administration and prescription capabilities

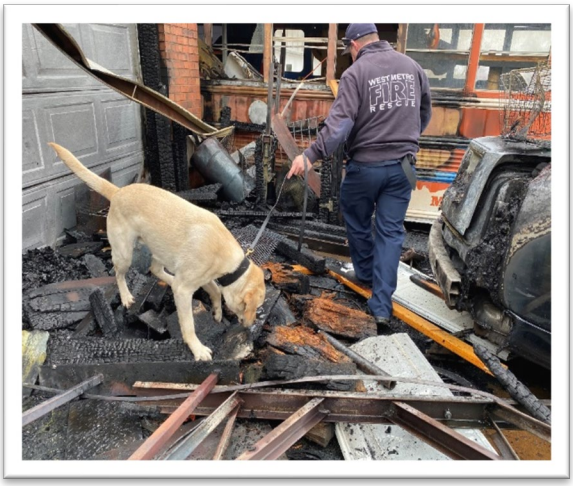
Brush Trucks (Type 6 engines):

- Six deployed throughout the District
- Cross-staffed with three firefighters
- Four-wheel drive
- Pump-and-roll capacity
- Available for deployment out of the District
- Carries:
  - 300 gallons of water
  - 300 gallons per minute pumping capacity
  - Equipped with lightweight wildland hose
  - Fixed booster line
  - Winch

Brush Engine (Type 3 engines):

- Two deployed (Station 9 and Station 11)
- Cross-staffed with three firefighters
- Four-wheel drive
- Pump-and-roll capacity
- Available for deployment out of the District
- Carries:
  - 500 gallons of water
  - 1200 gallons per minute pumping capacity
  - Equipped with lightweight wildland hose
  - Fixed booster line

Other Specialty Apparatus:



Fire Stations

STATION	APPARATUS	MINIMUM STAFFING	CROSS STREETS	SPECIALTY
Station 1 6401 West 14th Ave. Lakewood, CO 80214	Engine 1 Medic 1 Medic 11 SaM 1	3 2 2 2	14th & Lamar	
Station 2 1545 Robb St. Lakewood, CO 80215	Engine 2 Tower 2 Hazmat 1	3 4 Cross-staffed	Colfax & Robb	Hazardous Materials
Station 3 95 Garrison St. Lakewood, CO 80226	Engine 3 Medic 3 Medic 2	3 2 2	1st & Garrison	
Station 4 13155 West Alameda Pkwy. Lakewood, CO 80228	Engine 4 Medic 4 District 2 Brush 4	3 2 1 Cross-staffed	Alameda & Green Mountain	Wildland Urban Interface
Station 5 14055 West 20th Ave. Golden, CO 80401	Engine 5 Medic 5 Hazmat 5	3 2 Cross-staffed	20th & Eldridge	Hazardous Materials
Station 6 15100 West 6th Ave. Golden, CO 80401	Engine 6 Brush 6	4 Cross-staffed	6th & Indiana	Wildland Urban Interface
Station 7 6315 West Mississippi Ave. Lakewood, CO 80226	Engine 7 Medic 7 Arm 1	3+1 2 1+1	Mississippi & Kendall	Daytime staffing is 1 advanced provider on the ARM with the firefighter rotating to Engine 7
Station 8 9001 West Jewell Ave. Lakewood, CO 80232	Engine 8 Tower 8 Medic 8 Dive 2	3 4 2 Cross-staffed	Jewell & Garrison	Water Rescue
Station 9 101 Red Rocks Business Dr. Morrison, CO 80465	Engine 9 Brush 9 Brush Engine 9	4 Cross-staffed Cross-staffed	Morrison Road & C-470	Wildland Fire
Station 10 3535 South Kipling Street Lakewood, CO 80227	Rescue 10 Medic 10 Medic 9 SaM 2 Collapse Bureau 7	4 2 Surge 1 Cross-staffed 1	Hampden & Kipling	Technical Rescue
Station 11 15629 West Belleview Ave. Morrison, CO 80465	Engine 11 Brush Engine 11	4 Cross-staffed	Belleview & C-470	Wildland Urban Interface
Station 12 9900 West Alamo Pl. Littleton, CO 80123	Engine 12 Medic 12	3 2	Kipling & Alamo	
Station 13 12613 West Indore Pl. Littleton, CO 80127	Engine 13 Medic 13 Brush 13	3 2 Cross-staffed	C-470 & Ken-Caryl	Wildland Urban Interface
Station 14 10305 West Chatfield Littleton, CO 80127	Truck 14 District 3 Rescue 14 Air Truck	4 1 Cross-staffed Cross-staffed	Chatfield & Kipling	Technical Rescue
Station 15 6220 N. Roxborough Park Rd. Littleton, CO 80125	Engine 15 Medic 15 Brush 15	3 2 Cross-staffed	Rampart Range & Roxborough	Wildland Urban Interface
Station 16 3880 Upham Street, Wheat Ridge, CO 80033	Engine 16 Medic 16 District 1	3 2 1	38th & Wadsworth	
Station 17 10901 West 38th Avenue, Wheat Ridge, 80033	Engine 17 Medic 17 Brush 17 Swift Water 17	4 2 Cross-staffed Cross-staffed	38th & Owens	Swift Water Rescue Wildland Urban Interface

Table 6

Live Routing

All units are dispatched using the nearest apparatus. Each apparatus has an automatic vehicle locator connected to CAD software, enabling the dispatching of the nearest appropriate unit. Live routing is not available with South Metro resources (auto-aid) because the agencies lack a direct CAD to CAD connection.

Effective Response Force

The effective response force (ERF) is the type and number of resources the District has determined to be the minimum response necessary to mitigate the incident. It is understood that this is a basic response that can mitigate the majority of incidents. It is also understood that this force may not be able to suppress every emergency, but provides a layered response (first-alarm, second alarm, etc.) that provides a standard modular group designed to layer additional resources into the emergency until the resources overcome the emergency.

The ERF is for all emergencies including structure fires, wildland fires, medical incidents, extrications, technical rescues, hazardous materials, and special operations. These ERFs have been identified through actual operations and have been determined through the experience of the responders.

Structural Fire Response

The District has multiple levels of response, depending on the incident and the severity of that incident. The philosophy behind this multi-level system is to protect the citizens and members from accidents when responding.

The first-due fire apparatus is pre-alerted and will consider the call emergent until proven otherwise. Additional units are added to the response based on predetermined response procedures built into the CAD system. Officers are empowered to respond emergent (lights and sirens) or non-emergent (using normal speeds and obeying all traffic laws) based on call notes, dispatch information, or additional community inputs. The dispatcher, first-due officer, or district chief can upgrade the response based on verification of a confirmed structure fire.

The ERF consists of the resources the District has identified as necessary to be on-scene at an emergency to effectively mitigate the incident, including structure fires.

The initial support force is the safety and medical (SaM) officer and fire investigator. This force is not counted as a part of the ERF and is not counted in the analysis. These resources are not considered essential to the outcome of the incident. In the absence of these resources the incident commander takes direct responsibility for (or delegates) these functions to on-scene personnel.

The first-alarm assignment consists of:

Effective Response Force (Full Response) (non-commercial structure)		
Apparatus	**Mode**	**Staffing**
Four Engines	Emergent	12 to 15
Two Medic Units	Emergent	4
Two District Chiefs	Emergent	2
Two Towers/Trucks/Rescue Pumpers	Emergent	8
	Total	26 to 30
Effective Response Force (Full Response) (confirmed commercial structure fire)		
Apparatus	**Mode**	**Staffing**
Four Engines	Emergent	12 to 15
Two Medic Units	Emergent	4
Two District Chiefs	Emergent	2
Two Towers/Trucks/Rescue Pumpers	Emergent	8
	Total	26 to 30

Table 7

Additional alarms consist of three engines, a district chief, one medic unit, a tower, rescue pumper or truck, an air truck (consists of an air compressor for filling air bottles), and a rehab truck. Additionally, chiefs 1-9, a public information officer, and an investigations supervisor will be notified to respond.

Emergency Medical Response

Response to a standard medical emergency consists of an engine or tower (depending on location of unit) in conjunction with a medic unit with the exception of the Station 1 service area where SaM-1 will respond in lieu of an engine for low-acuity incidents. If the medical call is a vehicle accident with patients trapped, an additional tower/rescue pumper, district chief and SaM officer will be dispatched.

From 2018-2022 emergency medical service (EMS) accounted for 64.9% of District call volume (64.2% in 2022). The District at one time required all new personnel to become paramedics,

which was replaced with a career track process that requires either paramedic school or pursuit of an associate degree. The District retains the ability to place firefighters into paramedic school if the numbers are not sustainable for the EMS system. 17 new paramedics graduated from paramedic school in 2022.

Major Highway Response

Response to auto accidents on major highways (I-70, Highway 285, 6th Avenue, C-470) includes a highway safety unit consisting of an additional engine to act as a blocking unit for traffic. The engine is positioned to physically block any traffic from impacting the accident scene and the crew is available to assist in operations if necessary. Multiple incidents have occurred nationally, as well as within the District, that illustrate the critical need for these units.

Mass Casualty Response

A mass casualty incident (MCI) protocol is implemented per District SOPs or if the officer on scene determines that the number of patients at an event or emergency requires enhanced overhead scene management and a significant increase in medical personnel for treatment and transport. The classification of an MCI will initiate a response of five or more medic units above the initial response, two additional engines, a district chief and a SaM officer. An MCI can be encountered at any type of emergency response.

Hazardous Materials Response

The District is a member of the Adams/Jeffco Hazmat Response Authority (AJCHRA). This authority was set up to provide depth for large hazardous materials incidents.

The District has two levels of hazardous materials response. The first level is designated as a hazardous condition. Incidents of this type require one or two engines (depending on the incident type) and include incidents such as carbon monoxide alarms, fuel spills of less than ten gallons, and unknown odors. Hazardous conditions are expected to be managed by the initial arriving crew without the assistance of specialized apparatus or hazardous materials technicians.

The second level is a hazardous materials incident. Incidents of this type include the first level response plus additional hazardous materials apparatus and technicians. The minimum hazardous materials response is an engine, medic unit, district chief, two hazardous materials apparatus and the SaM officer. Incidents of this nature may require mutual aid or involvement

of the AJCHRA and include incidents such as large spills, unknown odors with medical complaints, and chemical releases. District hazardous materials units are Hazmat 1 which is cross-staffed at Station 2 and Hazmat 5 which is cross-staffed at Station 5. Hazmat 1 is a shared resource with AJCHRA.

When a hazardous materials incident exceeds the capabilities of the AJCHRA response, the District can coordinate with the Civilian Support Team (CST) out of Buckley Air Force Base to support with state and federal resources.

Over the past five years the District has taken action to contain, control, or remove hazardous materials on 670 separate occasions.

Incident Type	2018	2019	2020	2021	2022	Total
Hazardous materials leak control & containment	61	41	55	58	154	369
Hazardous materials spill control and confinement	46	45	37	37	119	284
Remove hazardous materials	3	2	3	2	7	17
Total	**110**	**88**	**95**	**97**	**280**	**670**

Table 8

All uniformed personnel are required to maintain an operations and awareness level certification in hazardous materials, based on state law. The District maintains 11 hazardous materials technician personnel on each shift (split between Stations 2 and 5) in order to maintain adequate hazardous materials response capabilities. Hazardous materials response capability and personnel training levels are based on U.S. Code of Federal Regulations 1910-120. In addition, all hazardous materials technicians must meet the NFPA 472 Standard for Competence of Responders to Hazardous, Materials/Weapons of Mass Destruction Incidents, NFPA 473 Standard for Competencies for EMS Personnel Responding to Hazardous Materials/Weapons of Mass Destruction Incidents, and NFPA 1072 Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications.

Wildland Fire Response

The District has six Type 6 brush trucks, two Type 3 engines, a combination structural/interface Type 1 engine at Station 15, and a wildland Rapid Extraction Module (REMS) UTV with chase vehicle. The brush trucks are assigned to Stations 4, 6, 9, 13, 15, and 17. The Type 3 engines are available for federal assignments and District use, and are located at Stations 9 and 11. The REMS unit is located at Station 9 and is available for District use when not deployed on a federal assignment. The District has identified Stations 4, 6, 9, 11, 13, 15, and 17 as wildland interface stations. These stations have specialized equipment and receive additional training. The remaining frontline engines throughout the District have wildland fire initial attack capability with personnel trained for structural protection, safety, wildfire tactics. The District maintains a wildland fire team that is responsible for staffing engines, the REMS unit, and single resource positions during federal wildland fire deployments. Wildland deployments are based on two

types of operations: local mutual aid and national federal deployments. Local mutual aid is generally for short periods (first 12-hours are non-reimbursable) to help a neighboring fire department or county.

These may develop into an extended incident where the neighboring requester may pay for costs of the resources exceeding the first 12-hours. During mutual aid requests, district chiefs may move team members into the apparatus assigned to the mutual aid response. If this is not feasible, then crews assigned will handle initial response and wildland team members will generally replace them at the scene if the incident lasts longer than the initial 12-hour non-reimbursable period. Federal deployments can last up to 14 or 21 days and under extreme conditions, apparatus may be employed nationally for periods lasting months utilizing crew swaps at two-week intervals. The District has brush trucks, Type 3 wildland-interface engines, structural engines, a REMS UTV and medic units for use on wildland operations.

Federal and extended mutual-aid deployments are reimbursed by the authority having jurisdiction and financially cost neutral. They also provide valuable experience supporting wildland operations within the District. The reimbursement covers a base rate for the apparatus and covers all of the expenses of the firefighter(s), including base salary, overtime, benefits, and back fill.

All firefighters assigned to the wildland team must meet the National Wildfire Coordinating Group's (NWCG) Wildland Fire Qualification System (310-1) standards. This includes single resources and firefighters assigned to the engines. Standards vary based on the particular position. All District personnel are trained to the basic wildfire firefighter type 2 level per the 310-1 standard and must meet the yearly refresher safety training and the physical fitness requirement. All wildland team members are required to attend additional trainings to achieve the NWCG firefighter type 1 level within three years.

In 2021 the District implemented a daily Wildland Preparedness Level (WPL) classification utilized during the wildfire season. The WPL classification is used to determine when wildland apparatus should be mobilized on routine operations in the District on very high or extreme

danger days. It is also used to upstaff interface stations and additional wildland apparatus at the discretion of the deputy chief of operations.

The WPL is established using a combination of two data sources to determine risk. The first source is the fire danger rating as determined by the United States Forest Service and the second is the hot dry windy index for the District's response area. The WPL classifies wildland risk into three tiers that affect daily staffing models for wildland specific apparatus. Modified and upstaffed wildland apparatus will assist the District with providing the appropriate ERF and reducing reflex and response times to wildland fire incidents.

Technical Rescue Response

Due to the diverse response area of the District and the need for an all-hazards response, Station 10 is staffed with six technical rescue team members and Station 14 is staffed with four technical rescue team members. Personnel permanently assigned to these stations are required to meet the special team requirements (technician level for Trench Rescue, Confined Space Rescue, Rope Rescue, as well as Operation level for Structural Collapse Rescue as outlined in NFPA 1006 2021 Edition) for each station within one year of assignment. When regular staffing levels fall below acceptable minimum technician staffing requirements for special team stations, the district chiefs are able to rove other certified members from around the District into the special team stations to ensure mission readiness. District chiefs and company officers also manage staffing based on daily risk (i.e., if water levels are low, there is a

lower likelihood of a swift water event), in contrast, the likelihood of a wildfire or interface fire is much higher during Red Flag conditions.

Each technical rescue response starts with the closest engine company and expands to include specialized personnel and apparatus necessary to ensure a safe, efficient, and effective response. The first-due engine company accomplishes initial response and size-up on all technical incidents. The initial predetermined response can be expanded or contracted based on the nature of the incident by the first-in company officer. Dispatch personnel are also trained to recognize the potential for technical rescues and are empowered to deploy additional apparatus and crews.

Specialized resource mobilization is currently accomplished through the rescue pumper at Station 10, the collapse truck at Station 10, the truck and rescue (with a rope and confined space equipment) at Station 14.

Water Rescue Response

Within the District are multiple lakes, ponds, creeks and rivers. Water rescue capabilities include underwater rescue and recovery, swift water rescue and recovery, and ice rescue.

A dive response is Company 8 (responding with seven personnel on Dive 2 and Boat 2) and Company 17 (responding with four personnel on SW17 and E17). Also included is a first-due engine, medic unit, district chief, and safety officer for a total ERF of 18 or 20. All fire companies are trained and equipped for ice rescue as well as shore based swift water rescue (throw ropes).

All personnel assigned to the dive team at Station 8 must be certified to Public Safety Diver, Dive Rescue 1, Swift Water 1, and Swift Water 2 as outlined by Dive Rescue International. Personnel assigned to Station 17 must be certified to Swift Water 1 and Swift Water 2 certification. All certifications must be attained within one year of assignment at these stations.

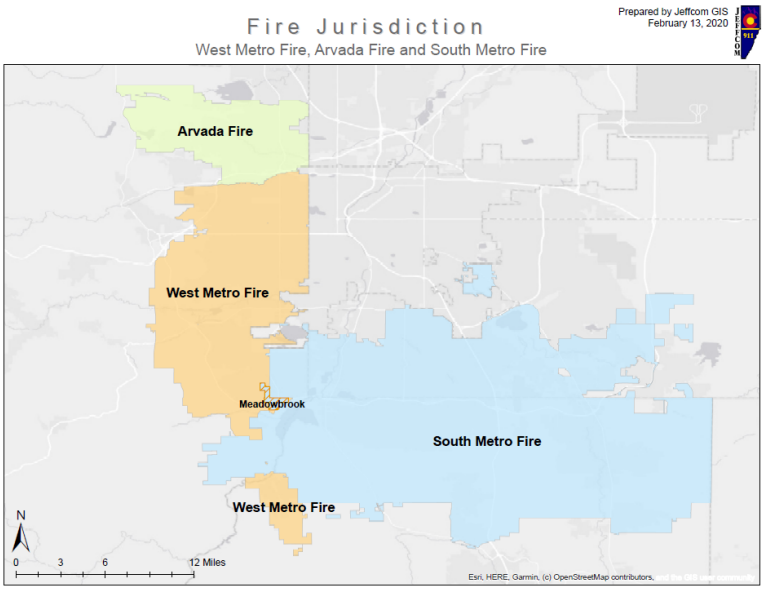
Urban Search and Rescue

The District is the sponsoring agency for the Colorado Urban Search and Rescue Task Force One, a national FEMA resource, which is also considered a state asset. FEMA provides funding, overall direction, and control; the District provides management, recruiting, and training. One dedicated full-time chief, one dedicated full-time captain, two full-time civilian employees, and one part-time civilian employee are assigned to the team. Full team membership is distributed throughout 23 participating agencies throughout Colorado. The District provides personnel

during deployments and all expenses are covered by FEMA under the Department of Homeland Security.

Automatic and Mutual Aid

The District entered into automatic/mutual aid agreements with two neighboring agencies in 2019 and Map 9 displays the area covered by these two agreements. The agreements have provided more consistent emergency response coverage by dispatching the closest appropriate unit regardless of the location from where the unit is responding. The agreement with the South Metro Fire Rescue Authority (South Metro) was implemented in January 2019 and the agreement with the Arvada Fire Protection District (Arvada) became effective in July 2019. The agreement with Arvada was amended in 2021 in order to account for an imbalance in the frequency of automatic aid given versus automatic aid received. Moving forward, the District and Arvada have agreed to only provide automatic aid for structure fires; vegetation fires; water rescues; and a limited number of EMS call types including cardiac arrest, choking, drowning, electrocution, penetrating trauma, and stroke. Preliminary analysis has shown that the modification to the agreement with Arvada has reduced the frequency of District automatic aid responses into Arvada's area by 76%.



Map 9

The agreement between the District and South Metro delineates automatic aid for initial responses across each district's entire response area and mutual aid for additional requested resources. South Metro also pays the District an annual fee to provide automatic aid into the Meadowbrook-Fairview Metropolitan District.

Communications Center

On January 1, 2018, the District transferred dispatching responsibility from an in-house division to the newly formed Jeffcom communications center. Jeffcom is the consolidation of eight public safety answering points (PSAPs) in Jefferson County, Colorado, including Arvada Fire, Arvada Police, Evergreen Fire Rescue, Golden Police, Lakewood Police, Jefferson County Sheriff, Wheat Ridge Police, and West Metro Fire Protection District, into one centralized location. The District was previously reliant upon multiple PSAPs for directing 911 calls to the

Communications Center. Today, all 911 calls received in the Jefferson County portion of the District are processed at Jeffcom. Calls originating within Douglas County are initially received at the Douglas County PSAP and then routed to Jeffcom.

The District and Jeffcom have adopted the use of priority dispatch and Jeffcom is certified by the National Academy of Emergency Medical Dispatch. Priority dispatch is a medically approved, unified system used to dispatch appropriate aid to medical emergencies. The system starts with the dispatcher asking the caller key questions. These questions allow the dispatchers to categorize the call by chief complaint and set a determinant level ranging from A (minor) to E (immediately life threatening) relating to the severity of the patient's condition. This system provides the appropriate resources to be dispatched and improved information gathering for personnel to determine proper response mode to the incident. The District has modified the priority dispatch system to ensure that closest units are dispatched quickly while the balance of the ERF is dispatched. In addition to moving away from priority dispatch and in an effort to shorten call processing times, the District added pre-alerting on all call types in December of 2019. Initial analysis demonstrated a significant improvement with alarm handling times; however, further monitoring is necessary in order to determine the long-term impacts of these changes.

Section 3 – Community Expectations and Performance Goals

Understanding community expectations and developing performance goals to meet those expectations are important components of the process within the Standard of Cover. The District is committed to incorporating the needs and service expectations of the citizens.

Community Expectations

In 2017, the District conducted a resident survey and in 2018, the District also conducted a survey of external stakeholders as a portion of a District SWOT analysis. The citizens were asked to list services in order of importance. The citizens support the services presently provided:

1. Medical Response
2. Fire Response
3. Special Response (water or rope rescue)
4. Life Safety Services (fire and injury prevention)
5. Community Outreach (tours and school visits)

Community Baselines and Benchmarks

Establishing community baselines is essential to understanding the performance of the delivery system. Once the baselines have been identified, the District can then evaluate improvements or modifications to the Standard of Cover. Current performance measurements are applied to the overall District and to station planning zones.

The definition of a “baseline” statement is a statement that establishes how well the District is performing. A “benchmark” is the goal for which the District is striving. The gap between the baselines and benchmarks is evaluated to develop plans for bridging the gap. The idea is to develop action steps that move the baselines toward the benchmarks.

Processing time and turnout times are subject to changes in policies that may reduce these times but should reach a saturation point where there will be little or no improvement, while travel time improvements are budgetary in nature and may involve moving stations or installing traffic light preemption devices. Due to these limitations the gap between baselines and benchmarks may widen as population increases and traffic flow devices are installed in congested areas.

The District has identified the 2020 edition of the National Fire Protection Association’s 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments as a goal for defining community benchmarks. The standard states that the first company apparatus needs to arrive with a travel time of 4:00, and that all companies assigned on the first alarm

must arrive within 8:00, 90 percent of the time. The standard also allows a 1:04 alarm handling time and an 1:20 turnout time. Turnout time includes the time to receive the alarm at the station, don protective clothing, staff the apparatus, and go enroute. In essence, the first unit should be able to arrive at an emergency within 6:24 of the emergency request.

The District uses 4:30 as its travel time benchmark, rather than 4:00 as suggested by NFPA 1710. This is based on baseline data which shows that travel times met the benchmark 74% of the time for fires and 83% of the time for EMS between 2013 and 2017. This is an indicator that the 4:30 benchmark is realistic. Total response time should be 6:54 for fires and special operations and 6:34 for EMS.

Performance benchmarks, and their associated baselines, are shown in Section 7 - Performance Objectives and Measurement.

Resource Drawdown

The District has developed response plans based on historical incidents. These plans evolve as hazards change, technology improves equipment and apparatus, and changes in operational techniques are identified and incorporated. For each type of incident, an ERF has been identified assigning apparatus and personnel to provide an initial level of operations. These plans are scalable and can provide additional apparatus, equipment, or staffing and allow a reduction of the response as needed.

Historically, the District has had events that stress resource availability. Generally, these periods have been initiated by a wildland fire or a single weather event, usually a severe thunderstorm. During these events a chief officer will assist the dispatchers with prioritizing incidents. These incidents are rare, and all incidents have been appropriately handled.

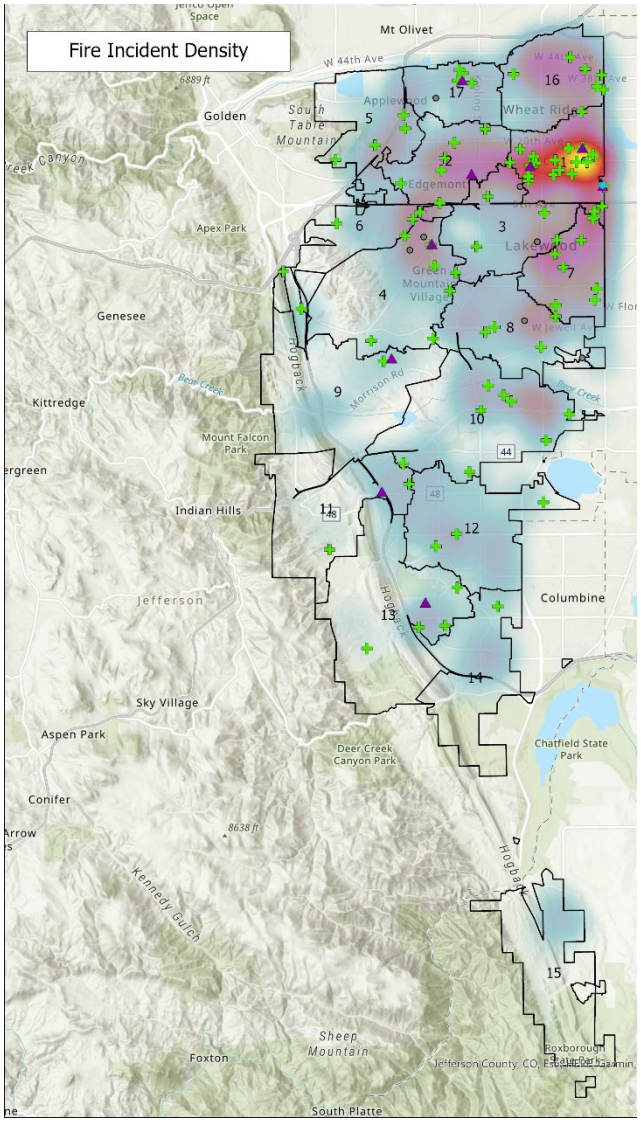
During normal daily operations any one resource may be out of service on another incident, training, or receiving routine maintenance. The District has policies in place to limit out of service times. The majority of the unavailable time is based on a resource being out of service due to an incident. The District will relocate resources around the District to cover areas with a heavy incident volume or to cover the outlying stations when a resource will be out of service for an extended period of time. Automatic vehicle location technology is used on every response apparatus and ensures that closest units are sent to incidents, regardless of their fire station affiliation.

Large incidents occur and have been mitigated using on duty resources with occasional mutual aid. These incidents have generally been wildland fires, such as the 2016 and 2017 Green Mountain Fires and the 2021 Bear Creek Fire. The Denver Metro and the Front Range area have a mutual aid agreement in place and would bring additional resources as needed.

Historically, catastrophic incidents are rare. If one occurred, the District would provide the initial response and command structure while automatic/mutual aid would bring additional resources. Depending on the complexity and scope of the incident, county resources can be used. Jefferson County has a Type III incident management team utilizing local personnel which could be brought in quickly to manage an incident. The District has members on this team. If the incident exceeds county resources, then state and federal resources can be brought in to assume responsibility for the incident.

Fire Outcomes

Over the past five years (2018-2022) the District experienced 111 fire civilian casualties, seven of which were deaths and 104 were injuries. Map 10 shows the location and type of each casualty, overlaid on a heatmap of fire incident location density for the past five years. The only notable cluster of both fire incidents and casualties is located in a northeastern portion of the District that includes Colfax Avenue and is consistent with the area containing the highest call volume for the District as a whole.



Map 10

The District strives for zero civilian fire deaths on a yearly basis. The District's goal for civilian injuries is no greater than 5% of the total number of fire incidents for the year. For example, in 2022 the District experienced 168 fires with 17 civilian fire related injuries. This results in a 10.1% injury rate for civilian fire related injuries. Over the past five years the District has experienced a 9.5% civilian fire related injury rate.

Tables 9, 10, and 11 look at fire civilian casualties, for both deaths and injuries, by year and cause of ignition, property use type, and age of individual.

Fire Civilian Casualties by Cause of Ignition							
	Cause Of Ignition	2018	2019	2020	2021	2022	Total
Death	Cause under investigation	-	-	-	1	-	1
	Cause undetermined after investigation	1	1	-	-	1	3
	Intentional	-	1	-	-	2	3
	Unintentional	1	2	-	-	-	3
Injury	Cause undetermined after investigation	2	2	-	2	-	6
	Cause, other	1	-	-	-	-	1
	Failure of equipment or heat source	3	5	1	-	1	10
	Intentional	2	4	2	-	10	18
	Unintentional	20	11	9	11	6	57
Total Casualties		30	26	12	14	20	102

Table 9

Cause of Ignition: Of the 10 civilian fire deaths in the District over the last five years, the cause of ignition was determined to be unintentional or undetermined for six of the ten deaths. Most civilian fire injuries are caused by unintentional fires.

Property Use: The 1 or 2 family dwelling property use type is the most common location where civilian fire related casualties (deaths and injuries) occurred over the past five years. Multifamily dwellings are next. Other categories includes a wide range of property use types for which there are no discernable patterns.

Fire Civilian Casualties by Property Use							
	Property Use Type	2018	2019	2020	2021	2022	Total
Death	1 or 2 family dwelling	1	2	-	1	1	5
	Highway or divided highway	-	1	-	-	-	1
	Multifamily dwelling	1	-	-	-	2	3
	Vehicle parking area	-	1	-	-	-	1
Injury	1 or 2 family dwelling	12	11	8	8	4	43
	Multifamily dwelling	7	5	3	3	11	29
	Hotel/motel, commercial	2	1	-	-	-	3
	Highway or divided highway	-	2	-	-	-	2
	Other	7	3	1	2	2	15
Total Casualties		30	26	12	14	20	102

Table 10

Fire Civilian Casualties by Age							
	Age Bracket	2018	2019	2020	2021	2022	Total
Death	0-18	-	-	-	-	1	1
	35-64	1	2	-	-	1	4
	65+	1	2	-	1	1	5
Injury	0-18	4	2	2	-	5	13
	19-34	7	4	3	6	5	25
	35-64	15	12	5	6	6	44
	65+	2	4	2	1	1	10
Total Casualties		30	26	12	14	20	102

Table

Age: Of the 10 civilian fire deaths over the last five years, one was in the infant/children bracket (0-18). The majority of fire injuries occur in the (35-64) age bracket.

Figure 3, below, shows the percentage of total property and content value that has been lost each year for the past three years. The District maintains a goal of limiting property and content loss to less than two percent of the total property and content value prior to the incident. The average property and content loss over the last four years was 2.42%.

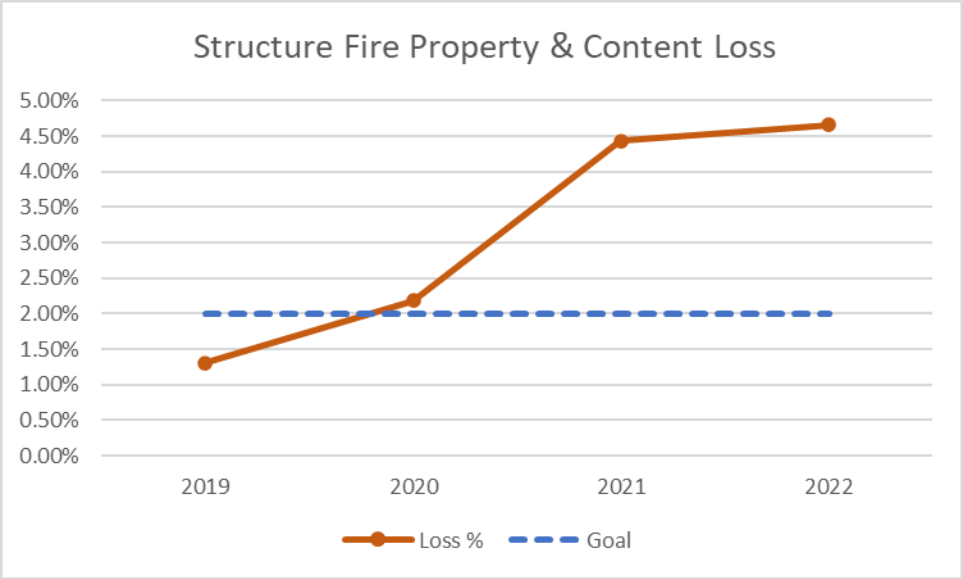


Figure 3

YEAR	STRUCTURE FIRES	WORKING BUILDING FIRES	FIRES CONTAINED TO ROOM OF ORIGIN	% OF WORKING FIRES CONTAINED TOROOM OF ORIGIN	DETECTOR ACTIVATIONS	SPRINKLER HEAD ACTIVATIONS	TOTAL PROPERTY & CONTENT PRE-INCIDENT VALUE	TOTAL PROPERTY & CONTENT LOSS	TOTAL PROPERTY & CONTENT SAVED	WILDLAND FIRES
*2018	252	171	116	67.8%	44	27	$529,364,191	$4,058,471	$525,305,720	90
2019	181	123	75	61.0%	38	7	$236,916,960	$3,085,153	$43,204,837	60
2020	184	115	77	67.0%	46	9	$265,948,455	$5,808,055	$260,140,400	113
2021	182	108	63	58.3%	41	5	$225,339,069	$10,947,469	$214,391,600	96
2022	168	96	64	66.7%	38	6	$295,404,500	$13,771,930	$281,632,570	93
Total	**967**	**613**	**395**	**64.2%**	**207**	**54**	**$1,552,973,175**	**$37,671,078**	**$1,324,675,127**	**452**

Table 12

Table 12, above, provides information on the District's structure fires for the last five years. A change in incident record management system and reporting policies in 2019 accounts for the significant change in total structure fires from the previous two years. The District has contained 64.2% of all structure fires to the room of origin in the past five years.

EMS Outcomes

The District assesses EMS outcomes by analyzing EMS pre-hospital alerts and the rate of return of spontaneous circulation (ROSC) achieved by District responders. A hospital alert occurs when a paramedic notifies a receiving hospital that a patient is in need of specialized services. These totals are shown in Table 13. The rate of ROSC, which helps communities measure performance and identify how to improve cardiac arrest survival rates is shown in Table 14.

EMS PRE-HOSPITAL ALERTS	2018	2019	2020	2021	2022
Sepsis Notification	53	59	70	141	320
STEMI (ST Elevation Myocardial Infarction) Alert	67	58	79	105	101
Stroke Alert	103	114	234	251	342
Trauma Alert	44	51	69	80	101
Total Alerts	**267**	**282**	**452**	**577**	**858**

Table 13

CARDIAC ARREST RETURN OF SPONTANEOUS CIRCULATION	2018	2019	2020	2021	2022
No Return of Spontaneous Circulation	146	162	193	193	282
Yes, Prior to ED Arrival Only	62	48	60	88	86
Yes, at Arrival at the ED	9	32	7	8	10
Yes, Sustained for 20 Consecutive Minutes	19	8	11	13	9
Total Arrests	**236**	**250**	**271**	**302**	**387**

Table 14

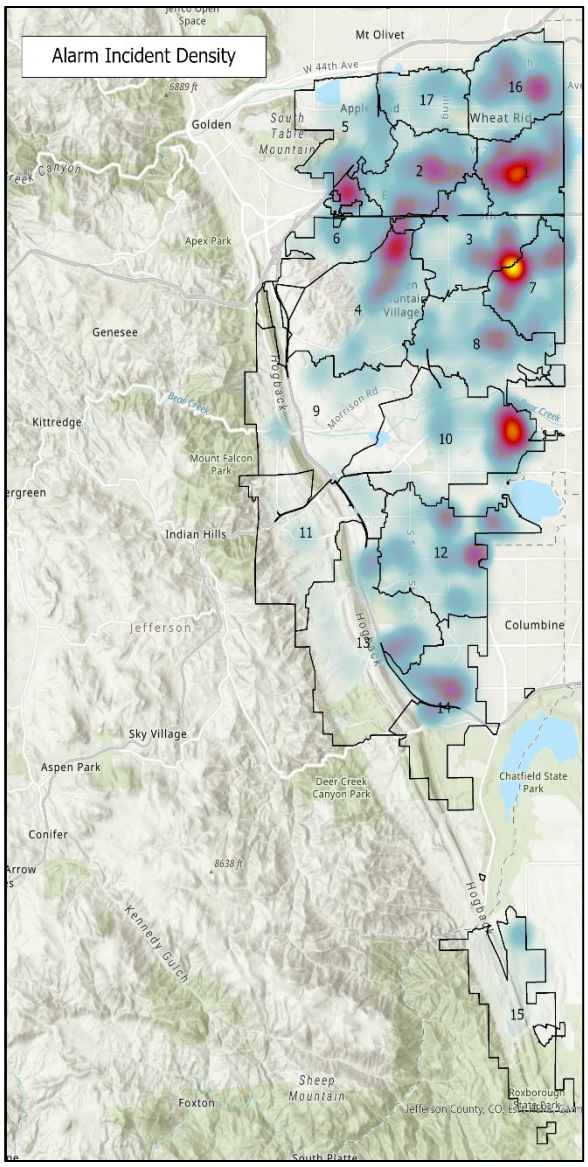
There were a total of 2,436 pre-hospital alerts in the past five years: 643 sepsis notifications, 410 STEMI alerts, 1,044 stroke alerts, and 345 trauma alerts. ROSC was achieved in 470 out of 1,446 cardiac arrests (32.5%).

Call Density by Incident Categorization

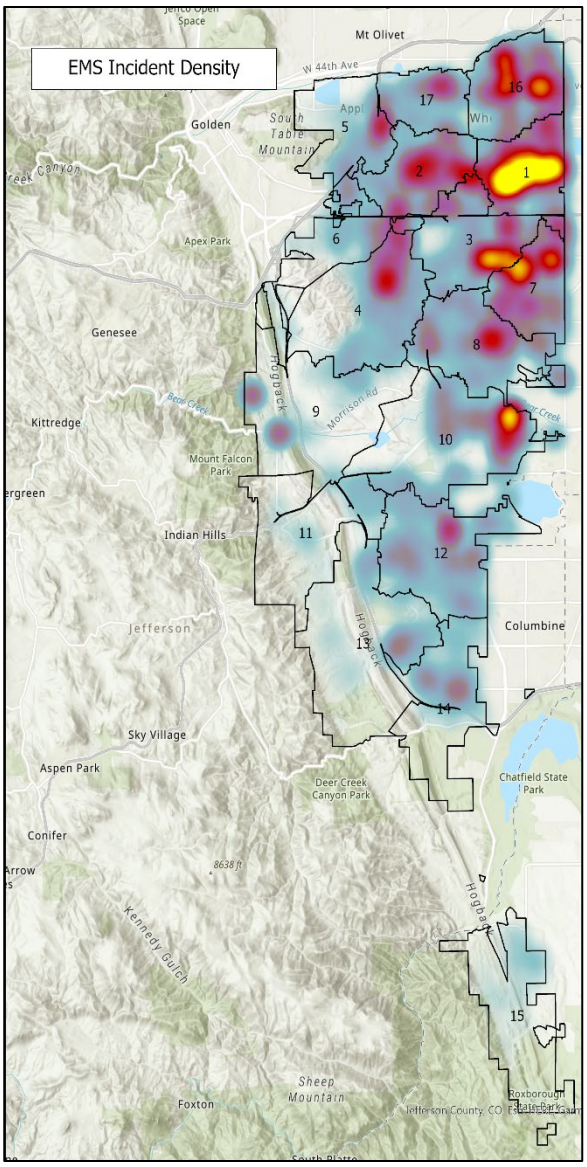
The District captures and documents emergent and non-emergent service demands for incident categories over the past five years. An analysis of this information provides the District insight into the probably of the type and location of incidents that are likely to occur in the future. Table 15 below shows the categorization of incidents over the past five years and the heat maps that follow show the distribution density of each category.

Five Year Incident Type Summary								
Year	**Alarm**	**EMS**	**Fire**	**Public Assist**	**Hazmat**	**Rescue**	**Other**	**Total**
2017	4114	23598	573	2530	319	161	3626	**34921**
2018	3997	23004	625	2309	328	175	4390	**34828**
2019	3699	23652	478	2959	333	128	4840	**36089**
2020	3507	22830	629	2988	360	127	4915	**35356**
2021	3977	25280	648	3322	377	145	5601	**39350**
2022	4051	26450	617	3929	500	160	5524	**41231**
Total	**19231**	**121216**	**2997**	**15507**	**1898**	**735**	**25270**	**186854**
Percent	**10.29%**	**64.87%**	**1.60%**	**8.30%**	**1.02%**	**0.39%**	**13.52%**	**100.00%**

Table 15



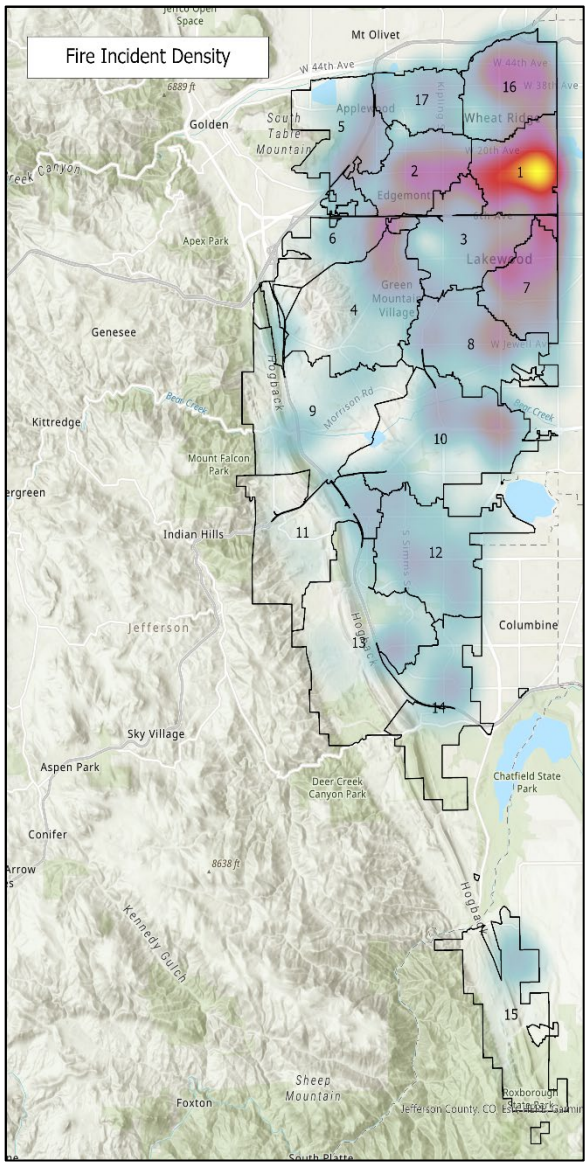
Map 11



Map 12

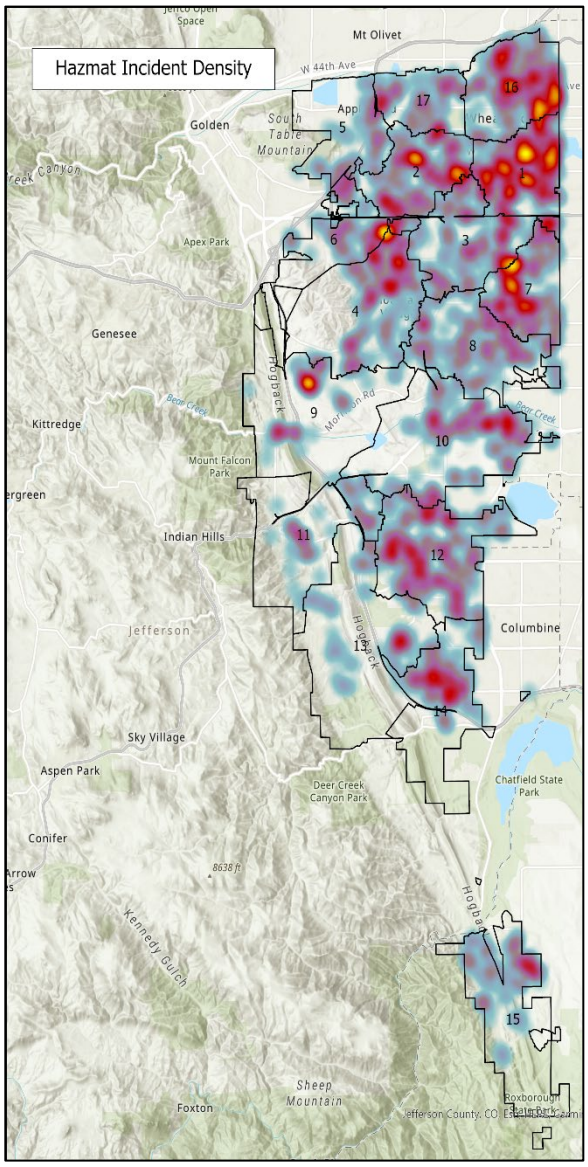
The major clusters of alarm incidents are all concentrated in areas of the District that are primarily committed to commercial businesses.

EMS incidents are more concentrated in the northeastern portion of the district where urban population density is higher and there are more areas lower on the socio-economic scale.



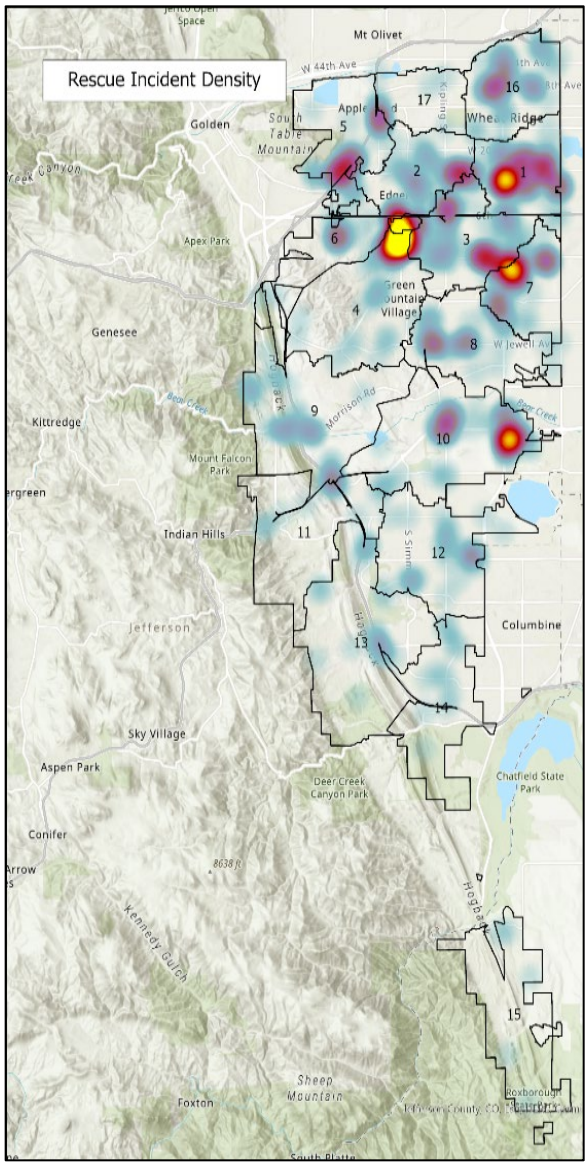
Map 13

Fire incidents are experienced throughout the District in both residential and commercial areas. The major cluster of fire incidents is located within Station 1's first-in area.



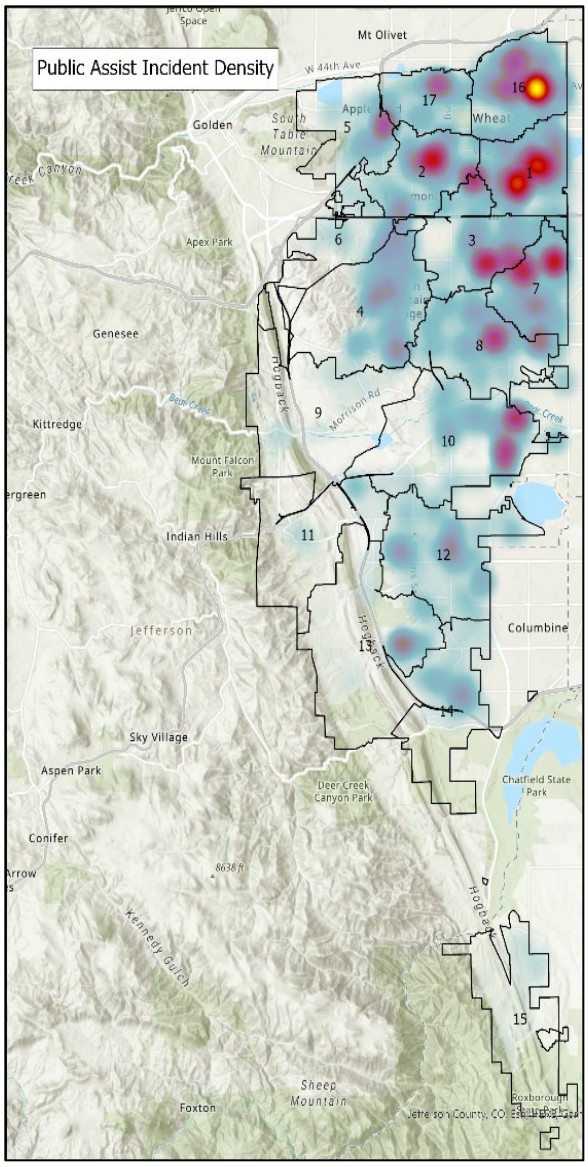
Map 14

HazMat incidents have a relatively low volume when compared to other incident types, however these incidents tend to be spread evenly throughout the District boundaries.



Map 15

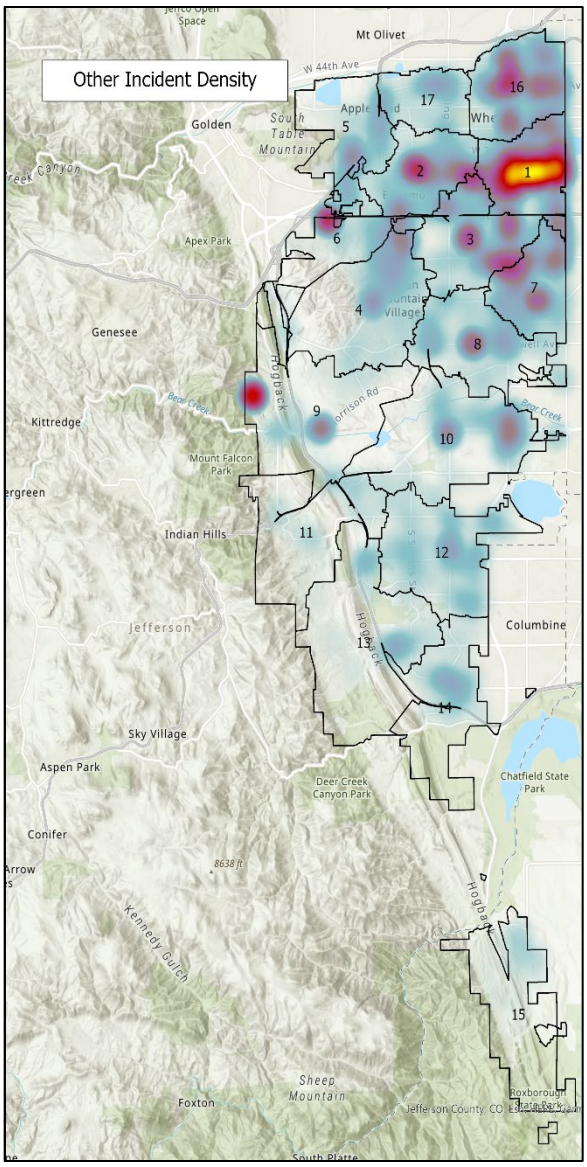
Major clusters of rescue incidents take place in areas with multi-story buildings with elevators where rescue from stalled elevators take place.



Map 16

Public assist incidents tend to be grouped around areas with assisted living facilities where lift-assist calls are frequently run.

All incident responses categorized as “other” tend to take place within the District’s busiest response areas in the northeastern portion of the District, especially within Station 1’s area. The cluster on the western edge of the District within Station 9’s area is the Red Rocks Amphitheater, where the District previously provided EMS staffing for special events. This agreement ended early in 2020 and the District no longer staffs Red Rocks events.



Map 17

Station Reliability

The District calculates overall station reliability as the percentage of incidents for which the primary response unit for that station planning zone is the first to arrive on scene. Primary response units are defined as an engine, Tower 2, Tower 8, Rescue 10, Truck 14, or SaM1. This does not consider incidents where only a medic unit or ARM1 is dispatched. The below table displays station reliability for all call types over the past five years in aggregate. This shows that 15 of the 17 primary response units are more than 90% reliable, which validates the distribution of District resources. A more detailed breakdown of station responses, including all apparatus, is available in Appendix B.

Station	Incident Count	Station Arrived First	Reliability %
Station-01	28,278	27,048	95.65%
Station-02	13,999	13,419	95.86%
Station-03	14,111	13,111	92.91%
Station-04	10,681	9,887	92.57%
Station-05	4,653	4,308	92.59%
Station-06	4,121	3,912	94.93%
Station-07	14,681	13,705	93.35%
Station-08	11,778	11,381	96.63%
Station-09	3,237	3,005	92.83%
Station-10	13,096	11,611	88.66%
Station-11	2,158	1,987	92.08%
Station-12	11,344	10,729	94.58%
Station-13	4,660	4,385	94.10%
Station-14	4,824	4,594	95.23%
Station-15	1,801	1,771	98.33%
Station-16	16,309	15,426	94.59%
Station-17	6,157	5,962	96.83%

Table 16

Multiple Alarms

The District had 11 multi-alarm fires during the 2018-2022 planning period: seven structure fires, three wildland fires, and one multi-vehicle highway fire.

DATE	ADDRESS	TYPE OF ALARM	TYPE/AREA
1/4/2018	11904 W. Cedar Drive	Structure Fire	Commercial
4/29/2018	42 S. Holman Way	Structure Fire	Multifamily
12/10/2018	4725 S. Taft Court	Structure Fire	Single Family
2/14/2019	314 Wright Street B-106	Structure Fire	Multifamily
4/25/2019	Mile Marker 263 Interstate Highway 70 Eastbound at I-70 and Denver West Parkway	Passenger/Road Freight Vehicle Fire	Interstate Highway
2/7/2021	Bear Creek Fire	Wildfire	Open Space Park
7/17/2021	10368 Totem Run	Structure Fire	Single Family
12/27/2021	Oak Fire	Wildfire	Open Space
02/11/2022	1805 S. Balsam Way	Structure Fire	Skilled Nursing
07/12/2022	Snow Creek Fire	Wildfire	Open Space
10/31/2022	5255 W. 9th Avenue	Structure Fire	Multifamily

Table 17

Section 4 – Community Risk Assessment

This section is an assessment of the community risks and potential risks. The District analyzed the physical, economic and sociologic demographics of the community to assess the hazards and risks threatening the citizens. This includes exposure to natural and human-made disasters as well as public health emergencies (COVID-19).

Physical Risk Factors

This section will document those features which may increase demand, adversely affect the capability to respond, increase the probability of an emergency, or increase the consequences of life safety and economic impact upon the community.

Growth

Growth within the District is based on two factors: undeveloped land and redevelopment. There are some infill areas that should have a low impact on service demands. Redevelopment has resulted in negative financial impacts on the District. Due to the process of urban renewal, property valuations may be reduced to encourage redevelopment, which reduces the property tax revenue for the District. In this scenario, services must still be provided. The following areas are in various stages of development and their growth will impact service demand:

Rooney Valley – The Rooney Valley is located along C-470 in the Alameda/Morrison Road area. Developments include large residences, mixed commercial/industrial, and multi-family dwellings.

Lakewood Center – This area includes the Belmar district and Lakewood Commons, near the intersection of Alameda Avenue and Wadsworth Boulevard. The Lakewood Center is an ongoing project that is adding multiple large multi-story buildings, mixed commercial, and residential.

C-470/Bowles/Belleview – This area is being developed with mixed commercial, including large box stores, hotels, and mixed residential.

Population

Figure 4 shows the population growth of the District since 1998. The intergovernmental agreement to provide service to the Wheat Ridge Fire Protection District began on April 15, 2016, becoming a merger on October 24, 2016. This resulted in a 10.85% service area population increase.

The population had grown at an average rate of 2.15%[5] between 1989 and 2000. The growth rate flattened to less than 1% after 2000[6] and has continued at that rate until 2019, where the District saw a slight drop in population.

The District analyzes population density to determine response time benchmarks and baselines. Using GIS information as defined by the 2010 U.S. Census Bureau guidelines, the District determined that it's response area is "urban."

Geospatial modeling was used to download 2020 census data to determine population densities and pull response data based on an urban profile for the entire District. Areas with greater population densities are generally in the northern and eastern portions of the District, while lower population densities are in southern and western sections. Communities on the western edge of the District have the lowest population densities. The District's RA document provides a breakdown of the numbers of incidents each station responded to in 2018 through 2022.

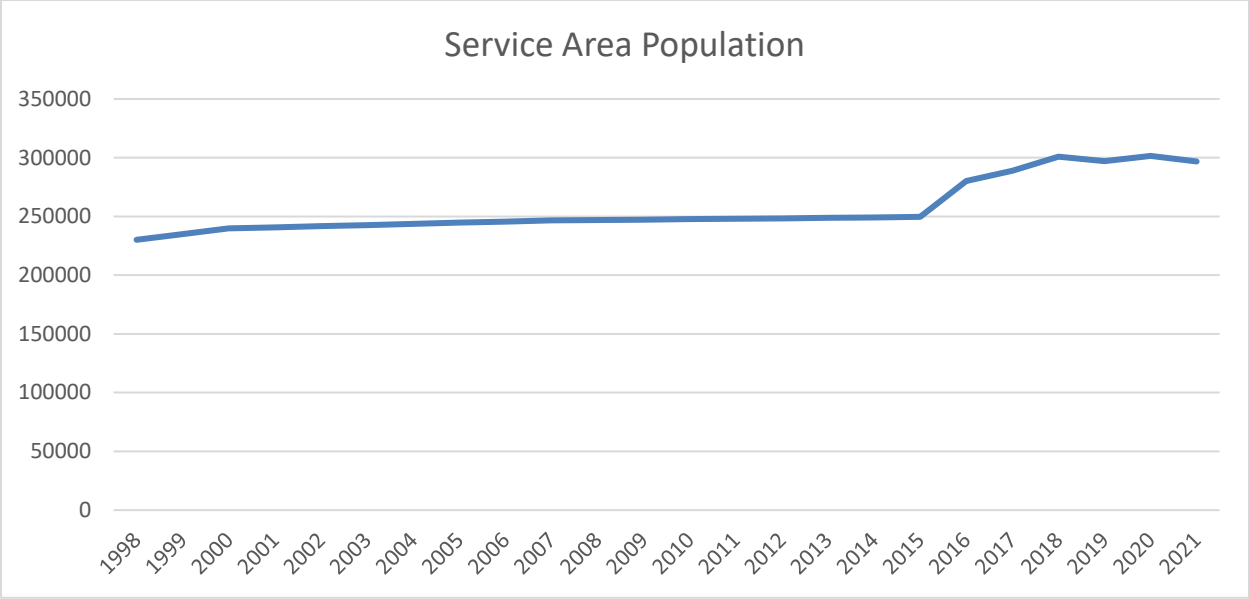


Figure 4

Infrastructure Limitations

Water Supply – Within the District there are 23 water districts. The majority provide adequate water supply for fire protection, but some small areas have limited access to hydrants.

Rural Firefighting – Rural firefighting areas (non-hydrant) are along the west edge of the District. These areas include Red Rocks Park and Amphitheater and adjoining residential areas, areas south of the town of Morrison – north of Highway 285, and the area northwest of the intersection of C-470 and Bowles.

[5] *South Jefferson County Community Plan*
[6] Based on 2000, 2010, and 2020 census, and the District Annual Compliance Report

Waterton Canyon – The District is responsible for wildland fire initial attack and EMS in Waterton Canyon. There is a trail network within all of these areas, and it can be a challenge to remove injured users. The ownership of these areas provides operational challenges due to the multiple agreements for fire protection and EMS. There is difficult access on the steep slopes and some areas are heavily forested. Some areas have thick and mature oak brush which can have an explosive nature when burning.

Red Rocks Amphitheater and Park – Red Rocks Park is a Denver Mountain park on the west side of the District's response area. The District provides emergency services to the park through an intergovernmental agreement with the City and County of Denver. There is a large 10,000 seat amphitheater within the park that historically hosts on average 175 events each year. The District had maintained a contract for concert medical services at the amphitheater but opted not to renew the contract for events beyond 2019. The District will provide mutual aid medical and technical rescue responses during these events if requested. The amphitheater itself is nestled between two massive rock formations that are attractive for concert goers to climb on. Despite a ban on climbing, the District has performed numerous technical rescues in the area.

Major Structure Fire Exposures – The major exposures are wooden multi-story apartment complexes, assisted living residences, and commercial office structures. Fires in multi-story multi-family complexes are a concern and have resulted in the majority of multiple-alarm structure fire incidents from 2016-2020. The District also provides emergency services to a number of federal complexes including the Denver Federal Center and the National Renewable Energy Lab. Both have high-tech labs containing numerous hazardous materials. The Denver Federal Center also houses a 1.0 megawatt (MW) thermal power geological research nuclear reactor.

Weather Factors – There have been major snowstorms that stress the District's ability to provide services to all response areas. Generally, the storms are short in duration, but they can increase response times and decrease access during the winter months.

The area has fairly frequent severe thunderstorms that can stress response. These storms produce lightning, hail, and flooding for short durations. The canyons along the western edge of the District have flooded in the past.

Disaster Exposure Risk Factors

Disaster risks are less likely to occur but have a much larger consequence when they do occur. FEMA defines risk as a combination of hazard, vulnerability, and exposure: "It is the impact that a hazard would have on people, services, facilities, and structures in a community and refers to the likelihood of a hazard event resulting in an adverse condition that causes injury or damage."

The disaster risk assessment is based on Jefferson County's Multi-Hazard Mitigation Plan (JCMHMP)[7], 2021. The plan followed the methodology described in the FEMA publication "Understanding Your Risks-Identifying Hazards and Estimating Losses" (2002), which breaks the assessment down to a four-step process: 1. Identify Hazards; 2. Profile Hazards Events; 3. Inventory Assets; and 4. Estimate Losses.

For the SOC, a description of the event, the projected impact of the event, the probability of the event occurring and the potential needs for those events will be discussed. Only the events that have an overall significance of medium or high will be analyzed.

The JCMHMP evaluated 18 hazards (avalanche, dam and levee failure, drought, earthquake, erosion and deposition, expansive soils, extreme heat, flooding, fog, hailstorms, landslides, mud/debris flows, rock falls, lightning, subsidence, tornado, volcano, wildfire, windstorm, and winter weather). The JCMHMP identified four medium and four high hazards.

The classification of expansive soils has a higher potential of future occurrences within the District. In the southern sections of the District there are areas with expansive soils that have led to a higher risk of broken gas lines and damaged homes.

There have been many federal emergency declarations since 1953 in Jefferson County, including wildland fires, winter storms, and floods. In Colorado the top 12 costliest storms included eight due to hail, two due to tornadoes, one caused by heavy snow, and one caused by severe flooding. These criteria support the classification of the 10 most likely future disasters that may occur within the District:

High

- Severe thunderstorms
- Wildfire
- Winter weather
- Flooding/dam failure
- Earthquake
- Cyber attacks
- Pandemic/Public Health emergencies

Medium

- Windstorm
- Tornado
- Landslide, mud/debris flow, rock fall

[7] The Douglas County Multi-Hazard Mitigation Plan is similar and covers the same hazards.

Wildfires – wildfires are an ongoing concern for the District, Jefferson County, and the state of Colorado. Wildfires are most likely to occur during the traditional fire season (June through September) and March (prior to the monsoon season). However, the fire season's duration is impacted by local fire conditions and wildfires have occurred in every month of the year.

Fire conditions are impacted by hot weather, wind, vegetation growth, and low moisture content in air and fuel. These conditions, especially when combined with high winds and years of drought, increase the potential for wildfire to occur.

The wildfire risk to the District is predominantly associated with the wildland urban interface (WUI). The WUI areas are where development is interspersed or adjacent to landscapes that support wildland fire. While traditionally associated with forested mountain areas, WUI areas are also present in grasslands, prairies, valleys, or in any area where a sustained wildfire may occur and impact developed areas. Fires in the WUI may result in major losses of property and structures, threaten human lives, and incur larger financial costs. In addition, WUI fires may be more dangerous than wildfires that do not threaten developed areas, as firefighters may continue to work in more dangerous conditions in order to protect structures such as businesses and homes. As the development of WUI areas increases, the likelihood of severe wildfire also increases.

The District has areas of WUI that are threatened by wildfires. The wildland areas are intermixed through the District (green belts, parks/open space and undeveloped prairie); along the western edge there are areas with intermix of brush/timber type fuel models with steep rugged terrain. The potential for a catastrophic wildfire is greatest along the western and southern areas of the District, particularly in the Willowbrook/Willow Springs, Red Rocks, and Roxborough areas. The 2016 JCMHMP identified 19 wildfire events in Jefferson County in the previous 37 years with 287 wildfires between 2007 and 2009. The September 1978 Murphy Gulch Fire burned approximately 3,300 acres in the West Metro and Inter-Canyon Fire districts and several structures were lost. This fire was located in the foothills west of the Ken-Caryl Ranch subdivision. This is the only event recorded by the JCMHMP located within the District, but a fire in December of 1990 (Ruby Ranch Fire), burned 200 acres. On August 4, 2008, a 363-acre fire burned on the north side of Green Mountain damaging two structures. Several large fires have occurred on Green Mountain since that time. In February of 2021, a high wind event fueled a 535-acre fire in Bear Creek requiring mutual aid responses from neighboring agencies. And in December of 2021, the 152-acre Oak Fire required multiple alarms, evacuations, and mutual/automatic aid.

The District's plan for wildfire mitigation centers around prevention and reducing the impact of wildfires on the built environment. In 2012, the District identified the need to work directly with

homeowners and homeowner's associations (HOAs) to educate, assist and implement home wildfire mitigation. Initial efforts began by working with HOAs in the Roxborough area, Willowbrook neighborhood and the Ken Caryl Valley. Crews at these wildland urban interface station were engaged with homeowners and HOAs helping to implement nationally recognized mitigation programs like Ready, Set, Go!© and Firewise USA® to reduce overall risk to private property. In 2018 the District formalized these efforts and consolidated the mitigation efforts to operate out of Station 13. In 2022, the District plans on relocating this function to Station 15 and another WUI station. Additionally, the District has prioritized the need to suppress wildfires with a safe and aggressive initial attack and incident command structure. Specialized wildland equipment has been strategically located throughout the District to facilitate rapid response. The District assigns specially trained firefighters to staff stations in the seven identified Wildland Urban Interface stations. Fighting wildfires requires special training and experience working in these difficult and dangerous conditions. Colorado's sporadic fire seasons make gaining experience locally difficult. However, severe seasons do occur (1996, 2000, 2002, 2012, 2013, 2018, and 2020). Wildland team members are deployed on federal wildland fires to gain experience and promote this knowledge throughout the organization. Typically, these team members will be assigned to WUI stations.

If incidents do become catastrophic, Jefferson County has a Type III incident management team (Jeffco IMT Team One) which can provide support with resources, an Emergency Operations Center, and finances. If the wildfire moves past the ability of the county, state and federal support is available. The Jeffco IMT averages about one deployment every other year.

Winter Weather - winter storms along the Front Range, including strong winds and blizzard conditions, may cause localized power and phone outages, closures of streets, highways, schools, businesses, and nonessential government operations, and increase the likelihood of winter weather-related injury or death. People may be stranded in vehicles or other locations not suited to sheltering operations or isolated from essential services. A winter storm can escalate, creating life threatening situations when emergency response is limited by severe winter conditions. Other issues associated with severe winter weather include the threat of physical overexertion that may lead to heart attack or stroke. Snow removal costs can pose significant budget impacts, as can repairing the associated damage caused by downed power lines, trees, structural damage, etc. Heavy snowfall during winter can also lead to flooding or landslides during the spring if the area snowpack melts too quickly.

The damage caused by severe winter storms and blizzards varies and is dependent on several factors: the duration of the storm, the extent of the area affected, temperatures and temperature changes, the time of year and the advanced warning of the storm. Effects from the storm dictate the magnitude of the event, emphasizing that the amount of snow may not always directly correlate to the associated impact. Damaged power lines and dangerous or impassable

roadways may delay the delivery of critical services such as medical and emergency assistance, the delivery of food supplies and medications, or even the provision of basic utilities such as heat, electricity and running water.

When events happen with a long warning time, it is possible to pre-mitigate the effects of insufficient supply levels or to pre-test emergency generators, which may prevent some of the previously described impacts from occurring. Unanticipated storms increase the number of people stranded, both in cars and at public locations, which may increase the number of injuries and deaths attributed to the event (often caused by exposure) and place uneven and unanticipated strains on public sheltering capacities. The weight of the snow, driven by the snow water equivalent, increases the potential for damage caused to structures and trees.

Winter storms which go through periods of thaw and freeze prolong dangerous icy conditions, increasing the likelihood of frozen and damaged water pipes, impassable or dangerous roadways, damaged electrical lines, or more extensive damage to infrastructure and structures caused by seeping water freezing under roofs, porches, patios, inside siding, or causing damage to vehicles. Since 2000, there have been three major snowstorms where snow totals exceeded 15 inches. The most severe storm was March 17–20, 2003, with a total of 31.8 inches. The recorded snow fall, in some areas, was in excess of three feet and caused extensive damage throughout the District. $93.3 million in insurance claims were recorded in the region. District resources were strained due to the multiple storm related calls occurring simultaneously with regular emergency operations. Relief personnel were delayed, prompting additional work hours for on-duty personnel. County and city EOCs were opened and supported the crews by providing non-emergency response and the National Guard was activated to support response.

Flooding/Dam Failure - Floods can be among the most frequent and costly natural disasters in terms of human hardship and economic loss. They are caused by a number of different weather events. Floods can cause injuries and deaths and substantial damage to structures, landscapes, and critical infrastructure and services. Certain health hazards are also common to flood events. Standing water and wet materials in structures can become a breeding ground for microorganisms such as bacteria, mold, and viruses. This can cause disease, trigger allergic reactions, and damage materials long after the flood event is over. There are two drainages with dams that may impact the District, Bear Creek and South Platte. Bear Creek has two dams; one upstream (Evergreen Lake Dam, which is a small overflow dam), and one in the District (Bear Creek Lake Dam, which is an earthen dam with flood control). South Platte has one upstream dam (Strontia Springs Reservoir, which is a concrete dam), and one just south of the District (Chatfield Reservoir, which is earthen with flood control). The Clear Creek drainage runs through the north end of the District in Wheat Ridge and is subject to flooding caused by snow melt run-off and heavy rainfall events.

Public Health Emergencies – In 2020, the COVID-19 virus exposed the District to a prolonged community emergency response unlike any event in its history. In anticipation of a predicted global transmission, the District stood up an Incident Management Team (IMT) within its ranks to coordinate with local, state and national resources to modify response vehicles, provide appropriate PPE, equipment, training and education for the responders. As the medical community developed safety measures and vaccines to protect the public and front-line healthcare workers, including fire and EMS personnel, the District implemented a vaccination plan with local public health agencies to protect District personnel. By the end of 2021, the nation had over 700,000 deaths related to COVID and almost 15% of the population had been infected. By the end of 2021 only two employees had been hospitalized and of the 21% of employees who contracted the illness, all recovered with no long-term adverse effects. For the duration of the pandemic, the services provided by the District to the community remained unaffected.

The District's response to the pandemic illustrated the adaptability necessary to continue providing uninterrupted emergency response services to the community while providing for the safety of the responders. However, the pandemic identified a critical need for the District to anticipate, plan and prepare for future public health emergencies.

Section 5 – Critical Task Analysis – Effective Response Force

The critical task analysis (CTA) evaluates tasks necessary at the emergency scene to ensure life safety, incident stabilization, and property conservation. This evaluation includes all operations the District performs based on historical incidents and community expectations. These operations include structural fires, emergency medical service, wildland fires/urban interface fires, hazardous materials, and technical rescue incidents. These incidents were identified using the RA and on historical response.

Firefighter safety and survivability of the victims is the first priority at all incidents.

The Standard of Cover Strategic Planning Team (SOC SPT) evaluated the District's standard operating procedures (SOPs), similar size fire departments' critical task analysis and risk assessment to determine the District's CTA. From this assessment the ERF was developed. The ERF is the number of firefighters necessary to mitigate most emergencies. It is understood that not all emergencies will be fully mitigated, and some may escalate beyond the ability of the ERF. The District is equipped to support longer duration and expanding incidents beyond the capabilities of the ERF using multiple alarm personnel and mutual aid requests.

The following is a breakdown of incident types, critical tasks, and the number of personnel required for life safety, incident stabilization, and property conservation.

Fire Effective Response Force:

Low Risk Fire - Cooking (contained), Vehicle, Recreational Vehicle, Chimney (contained), Rubbish, Smoke Investigations, and Attempts to Burn			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Officer assumes command, size up, initial incident safety officer	1
		Engineer operates pump	1
		Officer and/or firefighter(s) deploy hoseline and suppress fire	1-2
Total Effective Response Force	**3-4**	**Critical Task Analysis Staffing**	**3-4**
Moderate Risk Fire - Residential Structures, Outbuildings, and Structures other than Buildings			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command; size up, initial incident safety officer, develop IAP	1
		Engineer operates pump	1
		Officer and/or firefighter(s) extend appropriate hose line and begin initial fire attack or targeted rescue	1-2
Second-Due Engine	3-4	Water supply to first arriving engine; crew extends a second hose/backup line to assist with fire attack or primary search	3-4
Third-Due Engine	3-4	On-deck RIT or support other fireground functions	3-4
First-Due Tower/Rescue	4	Secure secondary means of egress, ventilate, force entry and conduct primary search as needed	4
Second-Due Tower	4	Elevated master streams, elevated rescue, RIT, other assignments as necessary	4
First-Due Medic	2	Support firefighter operations	2
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**20-23**	**Critical Task Analysis Staffing**	**20-23**
High Risk Fire - Multi Family, Commercial, Nursing/Assisted Living, and Road/Freight			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP	1
		Engineer operates pump	1
		Officer and/or firefighter(s) extend appropriate hose line and begin initial fire attack or targeted rescue	1-2
Second-Due Engine	3-4	Water supply to first arriving engine; crew extends a second hose/backup line to assist with fire attack or primary search	3-4
Third-Due Engine	3-4	Additional water supply, extend hoseline, search above/adjacent to fire room, or on-deck RIT	3-4
First-Due Tower/Rescue	4	Secure secondary means of egress, ventilate, force entry, and conduct primary search as needed	4
Second-Due Tower	4	Elevated master streams, extend hoseline and search above/adjacent to fire, elevated rescue, RIT, other assignments as necessary	4
First-Due Medic	2	Support firefighter operations	2
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	2
Total Effective Response Force	**20-23**	**Critical Task Analysis Staffing**	**20-23**
Fire Support Functions			
Unit	**Size**	**Crew**	
Fourth-Due Engine	3-4	Secondary search, salvage and overhaul, rehab	
Safety and Medical (SaM)	1-2	Safety officer	
Fire Investigator	1	Fire investigations	
Second-Due District Chief	1	Operations section chief, division supervisor, or group supervisor	
Second-Due Medic	2	Medical group and rehab	
Total Support Functions	**8-10**		

Table 18

EMS Effective Response Force:

Low Risk EMS Incident - Priority 3 (or lower) EMS incidents including Alpha, Bravo, Omega, and EMS incidents with no EHR			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, Truck, Rescue, Medic, or SaM	1	Assume command, size-up, provide incident documentation, complete patient care report	1
	1	ALS patient assessment, patient care, equipment management	1
Effective Response Force	**2**	**Critical Task Analysis Staffing**	**2**
Moderate Risk EMS Incident - Priority 2 EMS incidents and EMS incidents not classified as low, high, or special risk			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, Truck, Rescue, or SaM	1	Assume command, size-up, provide incident documentation	1
	1	ALS patient assessment, patient care, and equipment management	1
First-Due Engine Medic	2	Assume patient care, transport patient, complete patient care report	2
Effective Response Force	**4**	**Critical Task Analysis Staffing**	**4**
High Risk EMS Incident - Priority 1 and dispatched Medical 1 EMS incidents including cardiac arrests, penetrating traumas, echo medicals, strokes, chokings, drownings, technical rescues, second alarm fires, and struck by vehicle incidents.			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, Truck, Rescue	1	Assume command, size-up, provide incident documentation	1
	1	ALS patient assessment and patient care	1
	1	Equipment management and patient care	1
First-Due Engine Medic	2	Assume patient care, transport patient, complete patient care report	2
Effective Response Force	**5**	**Critical Task Analysis Staffing**	**5**
Special Risk EMS Incident - Mass Casualty Incident			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, Truck, or Rescue	3-4	Assume command, size up, initial incident safety officer, develop IAP	3-4
Second-Due Engine	3-4	Assist with patient care, lifting, and equipment shuttle	3-4
First-Due Medic	2	Triage and transport group supervisors	2
Additional four Medic Units	8	Treatment/Transport	8
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Effective Response Force	**17-19**	**Critical Task Analysis Staffing**	**17-19**
Emergency Medical Service Support Functions			
Unit	**Size**	**Crew**	
Safety and Medical (SaM)	1-2	Safety officer or EMS Group Supervisor on MCI	
District Chief	1	Family Liaison, donor alliance, provide incident documentation	
Advanced Resource Medic	2	Treat in place	
Total Support Functions	**4-5**		

Table 19

Wildland Fire Effective Response Force:

Low Risk Wildland Fire (2022 and Beyond) - Grass and Natural Vegetation (not classified)			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, or Rescue	3-4	Assume command, size up, initial incident safety officer, develop IAP	1
		Engineer operates pump	1
		Firefighter(s) initiate initial extinguishment and/or confinement actions	1-2
First-Due Brush Company	3-4	Continue extinguishment and/or confinement actions (e.g., mobile attack or progressive hose lays)	3-4
District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Effective Response Force	**7-9**	**Critical Task Analysis Staffing**	**7-9**
Moderate Risk Wildland Fire (2022 and Beyond) - Brush or Brush/Grass Mix			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, or Rescue	3-4	Assume command, size up, initial incident safety officer, develop IAP	1
		Engineer operates pump and secures a water supply (if available)	1
		Firefighter(s) initiate initial extinguishment and/or confinement actions	1-2
Two Brush Companies	6-8	Continue extinguishment and/or confinement actions (e.g., mobile attack or progressive hose lays)	6-8
Second-Due Engine	3-4	Secure water supply and continue extinguishment and/or confinement actions	3-4
Brush 9	4	Continue extinguishment and/or confinement actions (e.g., mobile attack or progressive hose lays)	4
First-Due Medic	4	Extinguishment and/or confinement actions	4
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Tender	4	Water Supply	4
Effective Response Force	**25-29**	**Critical Task Analysis Staffing**	**25-29**
High Risk Wildland Fire (2022 and Beyond) - 100 Acres or Greater			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, or Rescue	3-4	Assume command, size up, initial incident safety officer, develop IAP	1
		Engineer operates pump and secures a water supply (if available)	1
		Firefighter(s) initiate initial extinguishment and/or confinement actions	1-2
Two Brush Companies	6-8	Continue extinguishment and/or confinement actions (e.g., mobile attack or progressive hose lays)	6-8
Second-Due Engine	3-4	Secure water supply and continue extinguishment and/or confinement actions	3-4
Brush 9	4	Continue extinguishment and/or confinement actions (e.g., mobile attack or progressive hose lays)	4
First-Due Medic	4	Extinguishment and/or confinement actions	4
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Tender	4	Water Supply	4
Effective Response Force	**25-29**	**Critical Task Analysis Staffing**	**25-29**

Wildland Fire Effective Response Force Continued:

Wildland Fire Support Functions			
Unit	**Size**	**Crew**	
Safety and Medical (SaM)	1-2	Safety officer	
Fire Investigator	1	Fire investigations	
Second-Due District Chief	1	Operations section chief, division supervisor, or group supervisor	
Second-Due Medic	2	Medical group and rehab	
Total Support Functions	**5-6**		
2021 and Prior - ERF for low, moderate, and High Risk Vegetation Fires			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine, Tower, Rescue, or Brush	3-4	Assume command, size up, initial incident safety officer, develop IAP	1
		Engineer operates pump	1
		Firefighter(s) initiate initial extinguishment and/or confinement actions	1-2
Second-Due Engine, Tower, Rescue, or Brush	3-4	Continue extinguishment and/or confinement actions (e.g., mobile attack or progressive hose lays)	3-4
Third-Due Engine, Tower, Rescue, or Brush	3-4	Continue extinguishment and/or confinement actions (e.g., mobile attack or progressive hose lays)	3-4
Effective Response Force	**9-12**	**Critical Task Analysis Staffing**	**9-12**

Table 20

Hazardous Materials Effective Response Force:

Low Risk Hazardous Materials - Carbon Monoxide			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Officer assumes command, size up, initial incident safety officer	1
		Engineer investigates area to determine source of alarm and clear structure	1
		Firefighter(s) conduct air monitoring and clear structure	1-2
Total Effective Response Force	**3-4**	**Critical Task Analysis Staffing**	**3-4**
Moderate Risk Hazardous Materials - Natural Gas Leak, LPG Leak, and Unknown Odor (residential); Flammable Liquid Spill; Combustible Liquid Spill; Radioactive Condition; Chemical Hazard (no spill); Flammable or Combustible Gas; Refrigeration Leak; or Bomb Removal			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Officer assumes command, size up, initial incident safety officer	1
		Engineer isolates site and denies entry	1
		Firefighter(s) assist with investigation and isolation of site	1-2
Second-Due Engine (non-emergent)	3-4	Assist with scene isolation and protective measures	3-4
Total Effective Response Force	**6-8**	**Critical Task Analysis Staffing**	**6-8**
Moderate Risk Hazardous Materials - Natural Gas Leak, LPG Leak, or Unknown Odor in a commercial structure			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Officer assumes command, size up, initial incident safety officer	1
		Engineer isolates site and denies entry	1
		Firefighter(s) assist with investigation and isolation of site	1-2
Second-Due Engine (non-emergent)	3-4	Assist with scene isolation and protective measures	3-4
Truck company (non-emergent)	4	Forcible Entry, access roof, and investigate source	4
Total Effective Response Force	**10-12**	**Critical Task Analysis Staffing**	**10-12**
High Risk Hazardous Materials Incident - Chemical Spill or Leak, Toxic Condition, and Biological Hazard			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Line of sight (immediate) rescue, isolate site, deny entry, emergency decon if necessary	2-3
First-Due Medic	2	Medical team: pre-entry and post-entry vitals	2
First-Due Hazardous Materials Units: Company 2 with Hazmat 1 and Company 5 with Hazmat 5	12-14	Haz-Mat Group Supervisor	1
		Field Safety Officer (Haz-Mat certified)	1
		Entry Team	2
		Back-up Team	2
		Valets	2
		Decon Team	2-3
		Resource Team	1
		Research	1-2
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**18-21**	**Critical Task Analysis Staffing**	**18-21**
Hazardous Materials Support Functions			
Unit	**Size**	**Crew**	
Safety and Medical (SaM)	1-2	Safety officer	
Total Support Functions	**1-2**		

Table 21

Low and Moderate Risk Rescue Effective Response Force:

Low Risk Rescue - Elevator Rescue, Electrical Hazards (lines down), Extrication from Equipment, Vehicle Accident (no injury)			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Officer assumes command, size up, initial incident safety officer	1
		Engineer assists with investigation and rescue	1
		Officer and/or firefighter(s) removes person from hazardous situation	1-2
Total Effective Response Force	**3-4**	**Critical Task Analysis Staffing**	**3-4**
Moderate Risk Rescue - Extrication			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Protection line	1
		Assists with patient care, lifting, and equipment shuttle	1-2
First-Due Medic	2	Attending paramedic and transport	2
First-Due Tower, Ladder, or Rescue	4	Extrication group supervisor	1
		Extrication group	3
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**10-11**	**Critical Task Analysis Staffing**	**10-11**
Auto Accident with Extrication Support Force			
Unit	**Crew**	**Task**	
Second-Due Engine	3-4	Traffic safety, assist with protection line, or crew as necessary	3-4
Safety and Medical (SaM)	1-2	Safety officer	1-2
Total Support Force	**1-2**		

Table 22

High Risk Technical Rescue Effective Response Force:

High Risk Rescue - High or Low Angle Rescue			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Set up initial rope lowering system and assist with hauling	1-2
		Set-up and recon	1
First-Due Medic	2	Attending paramedic and transport	2
First-Due Rescue Company (Company 10 or Company 14)	6 (4)	Rescue group supervisor	1
		Field safety officer (tech qualified)	1
		Set-up anchors/main line/ belay line	2
		Line attendant	1
		Edge management	1-2
Second-Due Rescue Company (Company 10 or Company 14)	4 (6)	System set-up and haul team	4
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**16-17**	**Critical Task Analysis Staffing**	**16-17**

High Risk Rescue - Confined Space Rescue			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Lockout/tagout and establish perimeter	1-2
		Set-up and intelligence gathering	1
First-Due Medic	2	Attending paramedic and transport	2
First-Due Rescue Company (Company 10 or Company 14)	6 (4)	Rescue group supervisor	1
		Field safety officer (tech qualified)	1
		Rigging/rope/entry team and tenders	3
		Communications and air supply	1
Second-Due Rescue Company (Company 10 or Company 14)	4 (6)	Rigging/rope/back-up team and tenders	2
		Logistics	1
		Air monitoring and ventilation	1
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**16-17**	**Critical Task Analysis Staffing**	**16-17**

High Risk Technical Rescue Effective Response Force Continued:

High Risk Rescue - Collapse Rescue			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Establish perimeter	1-2
		Intelligence gathering	1
First-Due Medic	2	Attending paramedic and transport	2
First-Due Rescue Company (Company 10 or Company 14)	6 (4)	Rescue group supervisor	1
		Field safety officer (tech qualified)	1
		Rescue squad (team is 6 members with additional firefighter from second-due rescue company)	4
Second-Due Rescue Company (Company 10 or Company 14)	4 (6)	Rescue squad (team is 6 members with additional firefighter(s) to first-due rescue company)	4
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**16-17**	**Critical Task Analysis Staffing**	**16-17**
High Risk Rescue - Trench Rescue			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Establish perimeter	1-2
		Intelligence gathering	1
First-Due Medic	2	Attending paramedic and transport	2
First-Due Rescue Company (Company 10 or Company 14)	6 (4)	Rescue group supervisor	1
		Field safety officer (tech qualified)	1
		Panel shore team	4
Second-Due Rescue Company (Company 10 or Company 14)	4 (6)	Panel shore team	2
		Cut team/Rit team	2
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**16-17**	**Critical Task Analysis Staffing**	**16-17**
Technical Rescue Support Functions			
Unit	**Crew Size**	**Task**	
Safety and Medical (SaM)	1-2	Safety officer	
Haz-Mat 1	3	Air monitoring/ventilation/communications	
Medic	2	Rehab group	
Total Support Force	**6-7**		

Table 23

High Risk Water Rescue Effective Response Force:

High Risk Rescue - Recovery, Dive Rescue, Ice Rescue			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Immediate rescue, recon, and intelligence	2-3
First-Due Medic	2	Medical	2
Dive 2 staffed with Company 8	7-8	Primary, secondary, and 90% divers	3
		Dive group supervisor	1
		Dive safety officer	1
		Communications	1
		Tenders, valets, runners, and shore support	1-3
Swiftwater 17	4	Primary, secondary, or 90% divers, and shore support	4
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**17-19**	**Critical Task Analysis Staffing**	**17-19**
High Risk Rescue - Swift Water Rescue			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Assume command, size up, initial incident safety officer, develop IAP, notify and call additional resources	1
		Immediate rescue, recon, and intelligence	2-3
First-Due Medic	2	Medical	2
Dive 2 staffed with Company 8	7-8	Water Rescue Group Supervisor	1
		Water Rescue Safety Officer	1
		Rigging Team	1-3
		Boat Team or Entry Team	1-2
		Tenders, valets, runners, and shore support	2
Swiftwater 17	4	Boat Team or Entry Team	4
First-Due District Chief	1	Take command, provide continual size up, confirm accountability, refine IAP, account for incident safety	1
Total Effective Response Force	**17-19**	**Critical Task Analysis Staffing**	**16-20**
Water Rescue Support Functions			
Unit	**Size**	**Crew**	
Safety and Medical (SaM)	1-2	Safety officer	
Total Support Functions	**1-2**		

Table 24

Alarms Effective Response Force:

Low Risk Alarms - All Alarms excluding Moderate Risk			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Officer assumes command, size up, initial incident safety officer	1
		Engineer operates pump and ties into the fire sprinkler system if appropriate	1
		Officer and/or firefighter(s) investigate area to determine source of alarm	1-2
Total Effective Response Force	**3-4**	**Critical Task Analysis Staffing**	**3-4**
Moderate Risk Alarms - Water Flows, Saint Anthony and Lutheran Hospital, and calls occurring in DFC or NREL Special Planning Zones			
Unit	**ERF**	**Task**	**CTA**
First-Due Engine	3-4	Officer assumes command, size up, initial incident safety officer	1
		Engineer operates pump and ties into the fire sprinkler system if appropriate	1
		Officer and/or firefighter(s) investigate area to determine source of alarm	1-2
Total Effective Response Force	**3-4**	**Critical Task Analysis Staffing**	**3-4**
Alarm Support Functions			
Unit	**Size**	**Crew**	
Second-Due Engine	3-4	Assist with investigation on larger/complex structures	
Total Support Functions	**3-4**		

Table 25

Section 6 - Historical Perspective and Summary of System Performance

A review of historical performance and the measurement of the current system performance are essential to the success of this document. The measurement of system performance factors is used to define how resources can be used in the most efficient and effective manner to provide the needed services. Modeling (geographic information systems and the records management system) and statistical analysis have been utilized to prove resources are being used to the maximum efficiency. The results of the studies are presented here.

System performance falls into two different types of premises; distribution and concentration of resources. Distribution evaluates placement of all first-due resources (fire stations) for initial intervention in an emergency throughout the District, and concentration evaluates placement of specific resources around the areas that show historical need and/or potential need. There are certain resources that are not practical to have in each station (towers, heavy rescue, brush engines, dive rescue apparatus, medic units, and specialty individual resources [district chief, safety and medical officer, fire investigation]). These units are concentrated around historical and/or potential needs. Evaluating based on either historical or potential needs encompasses looking at where the incidents have happened and where a low frequency/high potential incident might escalate without quick intervention. For instance, the District's brush engines are concentrated along the western edge of the District in the urban interface areas, but the historical location of wildland fires is distributed throughout the District. Effective concentration is based on getting the correct type of resource or a group of resources to the scene of the emergency prior to the incident escalating beyond the capability of those resources. While this is the goal, it is not always practical due to budget limitations or other limits.

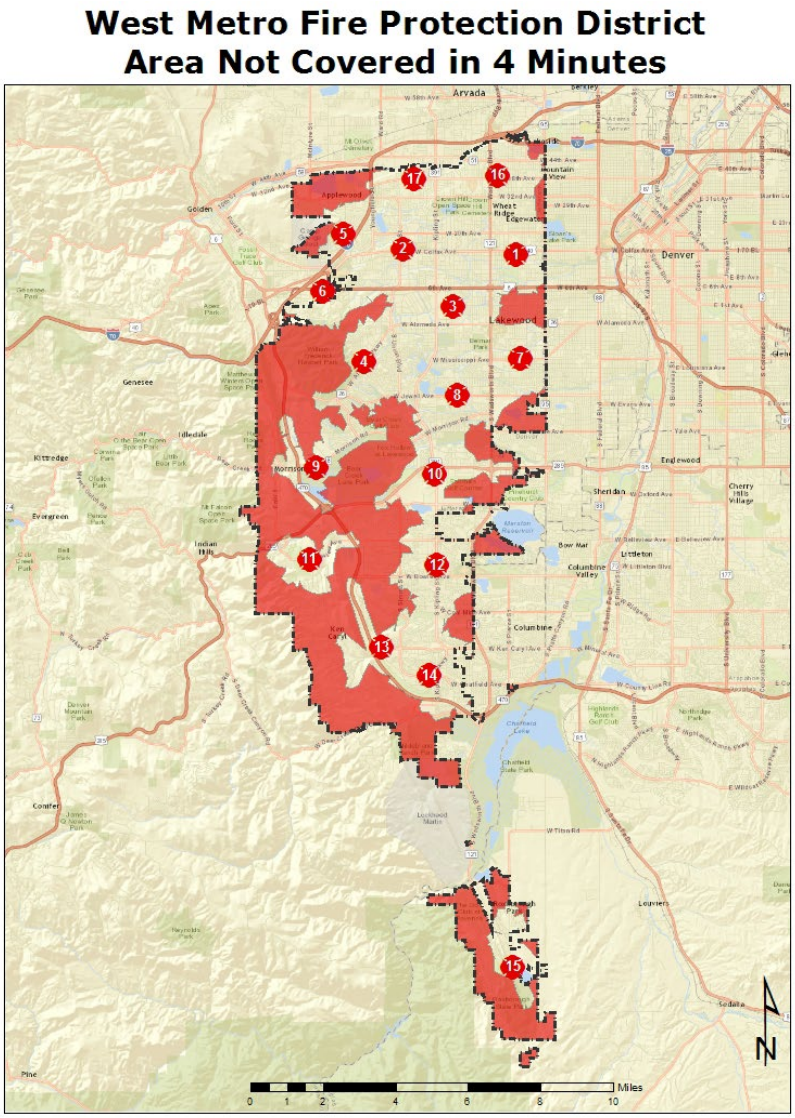
Distribution

Distribution is defined as the geographic location of all first-due resources for initial intervention. Generally measured from fixed response points, such as fire station, and expressed as a measure of time[8].

The District is a fire protection district formed from four merged fire districts: Bancroft, Lakewood, Roxborough, and Wheat Ridge. The Bancroft and Lakewood Fire Districts merged in 1995, Roxborough was added in 1998, and Wheat Ridge was added in 2016. Station 13 was added after the Lakewood/Bancroft merger to service the Ken-Caryl Valley. Station 15 was added with Roxborough. Stations 16 and 17 were added with Wheat Ridge. Station 10 was moved to the Training Center site in 2010.

[8] Center for Public Safety Excellence (CPSE); Quality Improvement for the Fire and Emergency Services pg. 129; 2020

Generally, new stations were added as the population growth was dense enough to justify a station and its cost. The location was generally based on what site was available, not on data support. This method placed some stations in areas that did not support the need. Stations 6 and 13 are examples.



Map 18

Station 6 is located just outside the District, on the western edge of the planning zone. The location was selected because it was available. Response from Station 6 is enhanced due to rapid access to the intersection of 6th Avenue and Indiana Street. The location also services 6th Avenue West and the Colorado Mills Mall. Station 13 was placed outside of the Ken-Caryl Valley due to opposition from the citizens. Its placement is close to Station 14. In accordance with our Strategic Plan, the location of these stations will be analyzed.

For the majority of the District the station locations cover the District within a four-minute travel time. The areas outside of the four-minute travel time are generally along the western edge of the District, are open space, or are sparsely populated.

These areas outside of a four-minute travel time are:

- North Applewood – West of Indiana along 32nd Avenue including the areas along the northern reaches of Station 5's planning zone
- Southeast Lakewood – Evans to Yale Avenue from Sheridan Boulevard to Pierce Street and east along Hampden Avenue from Sheridan Boulevard to Pierce Street
- Grant Ranch Subdivision

- Ken-Caryl Valley – north and southern reaches of the valley including Lockheed Martin
- Willow Springs – areas along the upper reaches of Willow Springs Drive and Sparrow Point Way
- Friendly Hills Subdivision – Belleview Avenue to State Highway 285 from Simms to State Highway C-470, including areas to the west and east of Alkire Street from Bowles Avenue to Belleview Avenue
- Morrison – south of the town of Morrison to Willow Springs Road along State Highway 8 and north of the town of Morrison along County Road 93 to District boundary including Red Rocks Park
- Rooney Valley including Solterra subdivision
- Roxborough – western edges of the Roxborough Park subdivision
- Open Space areas:
    - Hayden Green Mountain Park; South Table Mountain
    - Bear Creek Lake Park (there are structures within the Bear Creek Lake Park area, including park headquarters, maintenance structures, campground and a handful of residential structures)
    - Meadows Golf Club and surrounding open space
- North Lakewood – 20th to 26th Avenues from Wadsworth Boulevard to Kipling Street
- Smaller areas with extended response times:
    - South of 26th Avenue to 20th Avenue from Allison Street to Garrison Street
    - 6th Avenue to 1st Avenue from Reed Street to Depew Street
    - Hutchinson Park area – Along Auburn Avenue east of Yale Avenue to the end of the cul-de-sac
    - Denver Botanic Gardens along Deer Creek Road

Concentration

Spacing of multiple resources arranged so that an initial "effective response force" can arrive on scene within the time frames outlined in the on-scene performance expectations[9].

The hallmark of fire service response is based on a unit (generally an engine) being available for responding to emergencies. This is the basis for the distribution chapter. But the response is generally more complex than a single engine responding. To effectively suppress structure fires or other large emergencies multiple units are required to perform safe and effective operations on the scene of that emergency. In structure fire operations, the critical task analysis determined that in a single-family residence the District uses two engines, a tower, a medic unit, and a district chief to suppress a fire. The response includes support apparatus and personnel that are not critical to the safe operations and mitigation of an incident.

[9] Center for Public Safety Excellence (CPSE); Quality Improvement for the Fire and Emergency Services pg. 128; 2020

Not all stations have a tower, medic unit, or a district chief. Additionally, not all stations have a heavy rescue, hazardous materials unit, dive rescue unit or a brush engine. The cost to place these units in each station is prohibitive. Because of this, these resources are clustered in areas with high incident frequency, increased risks, or superior access to multiple planning zones.

Towers/Ladders – The District has two towers placed along a central corridor at Stations 2 and 8 and a truck at Station 14. Using an eight-minute total reflex time, they cover the majority of the District. For details on individual unit response see the RA document: Station 2, Station 8, and Station 14 planning zones. Each tower/ladder is staffed with four personnel with a minimum of one paramedic per apparatus.

Medic Units – The District has fourteen medic units. With the exception of Medic 15, all units have been concentrated in the areas of the District with the highest concentration of medical incidents. The northeastern older sections of the District (Planning Zones 1, 3, and 16) have the highest concentration of medic units and the highest concentration of medical calls. The medic units covering this area include Medics 1, 11, 2, 3, 7, and 16, supported by Medics 4 and 17. Medics 5, 8, 10, 12, 13, 15, and 17 cover the remainder of the District. Minimum medic unit staffing is one firefighter paramedic and a firefighter EMT; generally, two paramedics are staffed on each unit.

District Chiefs – The District has three district chiefs. They are located at Stations 16, 4, and 14. With modeling based on an eight-minute response time, the district chiefs cover the majority of the urban area within the identified ERF response times.

Heavy Rescue Pumper – The heavy rescue company is located at Station 10 and functions as both an engine company and a heavy rescue company. Truck 14 is also staffed with technical rescue personnel (cross staffing the light rescue at Station 14). The heavy rescue pumper is a single asset that was placed near the center of the district while the light rescue at Station 14 provides coverage to the open space areas at the south end of the District.

Hazardous Materials Units – The District has two hazardous materials units, located at Stations 2 and 5; each are cross-staffed. The reasoning behind this placement is to concentrate around the exposures of the Denver Federal Center at 6th Avenue and Kipling Street and The National Renewable Energy Lab on South Table Mountain. The modeling of the hazardous materials responses shows the incidents are scattered throughout the District. However, the greatest concentration of risk remains in the northern portion of the District.

Brush Engines – The District has one interface engine, six Type 6 brush trucks (cross-staffed with engines), and two Type 3 brush engines (cross-staffed with engines). The brush trucks are located at Stations 4, 6, 9, 13, 15, and 17 and the brush engines are located at Stations 9 and 11. The interface engine is a wildland modified Type 1 engine with all-wheel drive and pump-and-roll capabilities located at Station 15. The seven planning zones with brush trucks/engines have

been identified as having an urban/interface exposure. All other front-line engines are equipped for initial attack equipment to suppress minor grass/brush fires and provide structural protection.

Section 7 - Performance Objectives and Measurement

Benchmarks

Benchmarks are defined as the goal the District has established to provide a metric for evaluating responses. The District's identified benchmarks are determined by national fire service standards based on the National Fire Protection Association (NFPA) 1710: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. The standard states: for 90% of responses, the agency will arrive in six minutes total reflex time. The following benchmarks are based on previous performance while considering NFPA 1710 standards. Baseline data shows that travel times met a 4:30 benchmark 74% of the time between 2018 and 2022 indicating that the 4:30 benchmark is realistic. A 5:30 travel time benchmark is utilized for ERF medic unit responses because the District does not deploy a medic unit in every station.

Benchmark Objectives

The District's benchmarks determine how well the system is providing services based on response times. The metrics are based on urban responses. This provides an overview of the capability of the District to provide services within its response area. The District's benchmark objectives for 2018 to 2022 are reflected in Table 26, 27, and 28.

Benchmark Performance Objectives Low Risk			Fires	EMS	Wildland Fires	HazMat	Rescue	Alarms
Alarm Handling	Pick up to Dispatch	Urban	1:04	1:30	1:30	1:30	1:30	1:04
Turnout Time	Turnout Time 1st Unit	Urban	1:20	1:00	1:20	1:20	1:20	1:20
Travel Time	Travel Time 1st Unit Distribution	Urban	4:30	4:30	4:30	4:30	4:30	4:30
	Travel Time ERF Concentration	Urban	4:30	4:30	11:00	4:30	4:30	4:30
Total Response Time	Total Response Time 1st Unit On-Scene Distribution	Urban	6:54	7:00	7:20	7:20	7:20	6:54
	Total Response Time ERF Concentration	Urban	6:54	7:00	13:50	7:20	7:20	6:54

Table 26

Benchmark Performance Objectives Moderate Risk			Fires	EMS	Wildland Fires	Hazardous Materials	Rescue	Alarms
Alarm Handling	Pick up to Dispatch	Urban	1:04	1:30	1:30	1:30	1:30	1:04
Turnout Time	Turnout Time 1st Unit	Urban	1:20	1:00	1:20	1:20	1:20	1:20
Travel Time	Travel Time 1st Unit Distribution	Urban	4:30	4:30	4:30	4:30	4:30	4:30
	Travel Time ERF Concentration	Urban	8:00	5:30	11:00	4:30	8:00	4:30
Total Response Time	Total Response Time 1st Unit On-Scene Distribution	Urban	6:54	7:00	7:20	7:20	7:20	6:54
	Total Response Time ERF Concentration	Urban	10:24	8:00	13:50	7:20	10:50	6:54

Table 27

Benchmark Performance Objectives High Risk			Fires	EMS	Wildland Fires	HazMat	Rescue	Alarms	EMS Special Risk
Alarm Handling	Pick up to Dispatch	Urban	1:04	1:30	1:30	1:30	1:30	N/A	1:30
Turnout Time	Turnout Time 1st Unit	Urban	1:20	1:00	1:20	1:20	1:20	N/A	1:00
Travel Time	Travel Time 1st Unit Distribution	Urban	4:30	4:30	4:30	4:30	4:30	N/A	4:30
	Travel Time ERF Concentration	Urban	8:00	5:30	11:00	26:00	16:00	N/A	11:36
Total Response Time	Total Response Time 1st Unit On-Scene Distribution	Urban	6:54	7:00	7:20	7:20	7:20	N/A	7:00
	Total Response Time ERF Concentration	Urban	10:24	8:00	13:50	28:50	18:50	N/A	14:06

Table 28

Baseline Performance

Alarm Handling Time:

With the 2018 transition to Jefferson County Communications Center Authority (Jeffcom), a regional dispatch center, a significant change was noted in alarm handling times. Previously, the District was only able to track alarm handling from the point a call was transferred to the West Metro Fire Rescue dispatch center to the time it was dispatched. There was no accounting for alarm processing that occurred at the primary PSAP. This is reflected in the times listed for 2018.

With Jeffcom, the agency now tracks alarm handling from the initial 911 call through dispatch. The times provided are longer than what had previously been documented. As shown below, the District only met its 2019 Structure Fire Call Processing Benchmark of 1:04 11% of the time. Because of this, as well as slow call processing performance for all call types, a change to pre-alerting was made in December of 2019. This change resulted in an almost 1-minute improvement over previous call processing times. Further analysis has continued; however, further research is necessary to better understand additional opportunities for improvement.

Wildland Fire:

The District changed wildland fire deployment in 2021 in order to increase the initial response to wildland fires and align responses with automatic aid partners. This change altered the response for low, moderate, and high risk wildland fires. While these changes have been implemented with the communications center and are documented in the Critical Task Analysis and ERF tables, the results will not be included into benchmark and baseline statements until 2023, when a full year of data has been collected.

Hazardous Materials:

The District transitioned away from a HazMat IQ™ response in 2020. HazMat IQ utilized designated resources to a first-in response for all hazardous materials incidents. The District now defines low, moderate, and high risk hazardous material responses. A single engine is deployed to low risk hazardous materials incidents, two engines (single engine ERF) are deployed to moderated risk hazardous materials incidents, and a full hazardous materials response is deployed to a high risk hazardous materials incident.

Emergency Medical Services:

The District changed its RMS in January of 2019. Because the previous RMS and the new RMS utilize different dispatch priorities, and because the District utilizes EMS dispatch priority and incident type to determine EMS incident risk levels, only data from the new RMS (2019 – 2022) was included in the EMS response tables.

Response Tables:

Table 29, below, is a list of baseline tables covering the different types of responses for the District. Each type of response is categorized as low, moderate, or high risk based on the District's Risk Analysis. The District does not categorize any incidents as low or moderate risk water rescues or high risk alarms, which is highlighted in Table 29, because there is insufficient call volume to support statistical analysis*.

All tables adhere to the District's Outlier Policy and only include emergent responses (for the entire response) for the designated first-in unit and the ERF. In addition, mutual and automatic aid responses are included into the data set and all calculations are based on aggregate data. There are six general areas for call types: Fires, EMS, Wildland Fires, Hazardous Materials, Rescues, and Alarms.

Low Risk	Moderate Risk	High Risk
Low Risk Fire	Moderate Risk Fire	High Risk Fire
Low Risk EMS	Moderate Risk EMS	High Risk EMS
Low Risk Wildland Fire	Moderate Risk Wildland Fire	High Risk Wildland
Low Risk Hazardous Materials	Moderate Risk Hazardous Materials	High Risk Hazardous Materials
Low Risk Rescue	Moderate Risk Rescue	High Risk Technical Rescue
*Low Risk Water (No Table)	*Moderate Risk Water (No Table)	High Risk Water/Dive Rescue
Low Risk Alarm	Moderate Risk Alarm	*High Risk Alarm (No Table)

Table 29

Table 30 shows the frequency versus risk for the number of incidents for different types of responses from 2018 through 2022. The incidents are categorized as low, moderate, and high risk and then classified as either low or high frequency. Incidents occurring 150 or more times in the previous five years are considered high frequency. The table demonstrates the probability and frequency of potential future events based on historical analysis. Call types are classified by incident outcomes as categorized by the National Fire Incident Reporting System (NFIRS) coding applied in the final incident report. This table is also available on page seven of the District's Risk Analysis.

Frequency -v- Risk 2018-2022 (Number of Incidents)									
	Low Risk			Moderate Risk			High or Special Risk		
	Type	NFIRS Code	Count	Type	NFIRS Code	Count	Type	NFIRS Code	Count
High Frequency	Low Risk EMS*	311 320-324	20,606	Moderate Risk EMS*	311 320-324	48,125	High Risk EMS*	311 320-324	4,139
	Alarms	700-730 733-740 743-799	15,058	EMS (2018 all considered moderate risk in previous RMS)	311 320-324	22,349	Multi-Family Structure Fire	111	180
	Outside smoke investigation	651 653	1,011	Unknown odor or Haz Mat investigation; no Haz Mat found	650 652 671	729			
	Carbon monoxide incident	424	458	Natural gas or LPG leak	412	798			
	Outside rubbish, trash, or waste fire	151	550	Electrical hazard, short circuit, overheated motor, ballast, arcing	440-443 445	663			
	Elevator rescue	353	400	Alarms in: DFC & NREL St. Anthony Hospital Lutheran Hospital	731-732 741-742 (Water Flows)	340			
	Passenger vehicle fire, other than motor home	131-135 138	392	Structure fire involving an enclosed building	111	458			
	Dumpster or other outside trash receptacle fire	154	273	Gasoline or other flammable liquid spill	411	197			
	Electrical hazard, lines down	370-372 444	239						
	Grass fire	143	191						
	Natural vegetation fire, not otherwise classified	140-141	163						
	Outside rubbish fire, not otherwise classified	150	177						
Low Frequency	Cooking fire, confined to container	113	130	Brush, or brush and grass mixture fire	142	116	Commercial Structure Fire	111	35
	Chimney or flue fire, confined to chimney or flue	114	14	Fire in a structure other than a building	112	132	Water or ice related rescue	360-365	44
	Self-propelled recreational vehicle fire	136	8	Vehicle Extrication	352	86	High angle rescue	356	20
	Attempted burning or illegal action other	480-482	22	Oil or other combustible liquid spill	413	23	Chemical spill or leak	422	33
	Vehicle Accident (no injury), other accident	460 463	10	Other hazardous condition or radioactive	400 430 431	34	Nursing/Assisted Living Fires	111	9
	Recreational vehicle non-self-propelled fire	137	11	Chemical hazard (no spill or leak)	421	16	Toxic condition, other	420	10
	Extrication of victims from equipment	357	6	Flamm/comb gas or liquid condition, other	410	20	Extrication of victims from a building	351	4
				Refrigeration leak	423	6	Biological hazard, confirmed or suspected	451	4
				Explosive, bomb removal (for bomb scare, use 721)	471	1	Brush/Grass Fire > 100 acres	142	2
							Confined space rescue	355	2
							Multi-Alarm Road or Freight Fire	132	1
							Trench or below grade rescue	354	1
							Mass Casualty Incidents	Any	1

Table 30 * 2019-2022 only

Low Risk Fires

Call Types: Cooking Fires (contained), Dumpster Fires, Vehicle Fires, Recreational Vehicle Fires, Chimney Fires (contained), Rubbish Fires, Smoke Investigations, and Attempts to Burn.

Low Risk Fires Benchmark Statements:

> For 90 percent of all low risk fires, the total response time for the arrival of the first-due suppression unit, staffed with a minimum of three firefighters, shall be 6:54. The first-due unit shall be staffed with a minimum of three firefighters and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, and accomplishing fire suppression. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The total ERF for low risk fires is three or four personnel. Because of this the ERF shown in the table is the same as the first-due unit response.

Low Risk Fire Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continues to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for low risk fires is as follows:

> For 90 percent of all low risk fires, the total response time for the arrival of the first-due suppression unit, staffed with a minimum of three firefighters, is 9:50. The first-due unit is staffed with a minimum of three firefighters and is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, and accomplishing fire suppression. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Low Risk Fire 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:53	02:33	02:25	02:51	03:37	03:08	01:04	**01:49**
Turnout Time	1st Unit	Urban	01:59	02:00	02:03	02:00	01:58	01:48	01:20	**00:39**
Travel Time	1st Unit **Distribution**	Urban	05:50	06:23	05:40	06:07	05:30	05:28	04:30	**01:20**
	ERF **Concentration**	Urban	05:50	06:23	05:40	06:07	05:30	05:28	04:30	**01:20**
Total Response Time	1st Unit **Distribution**	Urban	09:50	11:45	11:23	13:13	13:30	11:42	06:54	**02:56**
		Num Incidents	1,672	422	381	316	253	300	-	-
	ERF **Concentration**	Urban	09:50	11:45	11:23	13:13	13:30	11:42	06:54	**02:56**
		Num Incidents	1,672	422	381	316	253	300	-	-

Table 31

Total Response Time Urban 1st Unit baseline for low risk fire performance increased by 0:22 in 2022. Turnout Times have stayed relatively stable from 2019-2022 in the 2:00 range. 2022 Travel Time returned to a level more consistent with the years 2018-2019 after hitting a high of 6:18 in 2020. This slowing of travel times was inconsistent with other District travel times during 2020.

The net result of the above differences was an increase of the Total Response Time, Urban 1st Unit baseline for low risk fire performance from 11:23 in 2021 to 11:45 in 2022. The five-year Total Response Time, Urban 1st Unit 90th percentile is now 9:50. This is 2:56 slower than the benchmark.

Based on five-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit low risk fire suppression responses for alarm handling time 33% of the time, for turnout time 57% of the time, for travel time 78% of the time, and for total response time 63% of the time.

Moderate Risk Fires

Call Types: Residential Structure Fires, Outbuildings, and Structure Fires other than in a Building.

Moderate Risk Fire Benchmark Statements:

> For 90 percent of all moderate risk fires, the total response time for the arrival of the first-due suppression unit, staffed with a minimum of three firefighters, shall be 6:54. The first-due unit shall be staffed with a minimum of three firefighters and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, and beginning initial fire attack or rescue. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all moderate risk fires, the total response time for the arrival of the ERF, staffed with 20 to 23 firefighters and officers shall be 10:24. The ERF shall be capable of establishing command, providing an uninterrupted water supply, advancing an attack line and a backup line for fire control, maintaining two in-two out, completing forcible entry, searching and rescuing at-risk victims, ventilating the structure, controlling utilities, and performing salvage and overhaul. The ERF for moderate risk fires shall also be capable of placing elevated streams into service from aerial ladders. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> Support functions for moderate risk fires are provided by a fourth-due engine, safety and medical unit, fire investigator, second-due district chief, and second-due medic. These units are not included in the ERF.

Moderate Risk Fire Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continue to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for structure fires is as follows:

> For 90 percent of all moderate risk fires, the total response time for the arrival of the first-due suppression unit, staffed with a minimum of three firefighters is 9:21. The first-due unit is staffed with a minimum of three firefighters and is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, and beginning initial fire attack or rescue. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

For 90 percent of all moderate risk fires, the total response time for the arrival of the ERF, staffed with 20 to 23 firefighters and officers is 20:14. The ERF for moderate risk fires is capable of establishing command, providing an uninterrupted water supply, advancing an attack line and a backup line for fire control, two in-two out, completing forcible entry, searching and rescuing at-risk victims, ventilating the structure, controlling utilities, and performing salvage and overhaul. The ERF for moderate risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Moderate Risk Fire 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:35	01:55	02:00	02:30	03:01	02:47	01:04	**01:31**
Turnout Time	1st Unit	Urban	02:04	01:59	02:18	02:03	01:59	01:58	01:20	**00:44**
Travel Time	1st Unit **Distribution**	Urban	05:37	05:35	06:22	05:08	06:19	04:56	04:30	**01:07**
	ERF **Concentration**	Urban	14:00	13:47	15:05	11:49	11:37	14:46	08:00	**06:00**
Total Response Time	1st Unit **Distribution**	Urban	08:52	09:23	11:20	10:52	12:54	10:37	06:54	**01:58**
		Num Incidents	388	72	70	71	77	98	-	
	ERF **Concentration**	Urban	20:14	17:09	28:28	16:19	15:18	17:09	10:24	**09:50**
		Num Incidents	90	20	18	21	16	15	-	

Table 32

District Alarm Handling Time, Urban 1st Unit baseline for moderate risk fire performance improved in 2022. This improvement is primarily attributed to a 0:53 decrease in travel time and a 0:19 decrease in turnout time.

The net result of the above differences was a decrease of the Total Response Time, Urban 1st Unit baseline for moderate risk fire performance from 11:20 in 2021 to 9:23 in 2022. The five-year Total Response Time, Urban 1st Unit 90th percentile is now 8:52. This remains 1:58 above the benchmark of 6:54.

The Total Response Time, Urban ERF baseline for moderate risk fire performance improved from 28:28 in 2021 to 17:09 in 2022, however this remains above the ERF benchmark of 9:50.

Based on five-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit moderate risk fire suppression responses for alarm handling time 36% of the time, for turnout time 56% of the time, for travel time 81% of the time, and for total response time 67% of the time.

The District meets the benchmark response objectives for all Urban ERF moderate risk fire suppression responses for travel time 26% of the time and for total response time 16% of the time.

High Risk Fires

Call Types: Commercial Fires, Multi-family Fires, Nursing Home Fires, Assisted Living Facility Fires, and Road/Freight Fires.

High Risk Fire Benchmark Statements:

> For 90 percent of all high risk fires, the total response time for the arrival of the first-due suppression unit, staffed with a minimum of three firefighters, shall be 6:54. The first-due unit shall be staffed with a minimum of three firefighters and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, and beginning initial fire attack or rescue. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all high risk fires, the total response time for the arrival of the ERF, staffed with 20 to 23 firefighters and officers, shall be 10:24. The ERF shall be capable of establishing command, providing an uninterrupted water supply, advancing an attack line and a backup line for fire control, maintaining two in-two out, completing forcible entry, searching and rescuing at-risk victims, ventilating the structure, controlling utilities, and performing salvage and overhaul. The ERF for high risk fires shall also be capable of placing elevated streams into service from aerial ladders. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> Support functions for high risk fires are provided by a fourth-due engine, safety and medical unit, fire investigator, second-due district chief, and second-due medic. These units are not included in the ERF.

High Risk Fire Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continues to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for structure fires is as follows:

> For 90 percent of all high risk fires, the total response time for the arrival of the first-due suppression unit, staffed with a minimum of three firefighters is 9:33. The first-due unit is staffed with a minimum of three firefighters and is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, and

beginning initial fire attack or rescue. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

For 90 percent of all high risk fires, the total response time for the arrival of the ERF, staffed with 20 to 23 firefighters and officers is 18:11. The ERF for high risk fires is capable of establishing command, providing an uninterrupted water supply, advancing an attack line and a backup line for fire control, two in-two out, completing forcible entry, searching and rescuing at-risk victims, ventilating the structure, controlling utilities, and performing salvage and overhaul. The ERF for high risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

High Risk Fire 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:58	02:22	02:10	02:19	03:31	03:05	01:04	**01:54**
Turnout Time	1st Unit	Urban	01:55	01:55	01:58	01:58	01:59	01:46	01:20	**00:35**
Travel Time	1st Unit **Distribution**	Urban	05:42	04:48	05:30	05:59	05:34	06:02	04:30	**01:12**
	ERF **Concentration**	Urban	11:47	09:01	11:37	10:32	10:30	13:13	08:00	**03:47**
Total Response Time	1st Unit **Distribution**	Urban	09:33	11:36	10:11	12:14	13:29	11:38	06:54	**02:39**
		Num Incidents	283	40	55	58	56	74	-	
	ERF **Concentration**	Urban	18:11	18:13	17:31	14:23	17:45	20:51	10:24	**07:47**
		Num Incidents	59	8	14	14	9	14	-	

Table 33

District Alarm Handling Time, Urban 1st Unit baseline for high risk fire performance decreased in 2022. Turnout and travel times improved.

The net result of the above differences was a decrease in the Total Response Time, Urban 1st Unit baseline for high risk fire performance from 10:11 in 2021 to 11:36 in 2022. The five-year Total Response Time, Urban 1st Unit 90th percentile is now 9:33. This remains 2:39 above the benchmark of 6:54.

The Total Response Time, Urban ERF baseline for high risk fire performance decreased from 17:31 in 2021 to 18:13 in 2022. The five-year 90th percentile is now 18:11.

Based on five-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit high risk fire suppression responses for alarm handling time 36% of the time, for

turnout time 57% of the time, for travel time 79% of the time, and for total response time 63% of the time.

The District meets the benchmark response objectives for all Urban ERF high risk fire suppression responses for travel time 34% of the time and for total response time 28% of the time.

Low Risk Emergency Medical Service (EMS)

Call Types: Priority 3 (or lower) EMS incidents including Alpha, Bravo, Omega and EMS incidents with no EHR.

Low Risk EMS Benchmark Statements:

> For 90 percent of all low risk EMS, the total response time for the arrival of the first-due/ERF ALS unit minimally staffed with two firefighters, shall be 7:00. The first-due unit shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures, developing an initial incident action plan, and initiating ALS patient care. Operations shall be done in accordance with District SOPs while providing for responder and public safety.
>
> Support functions for moderate risk EMS are provided by a safety and medical unit, district chief, or advanced resource medic. These units are not included in the ERF.

Low Risk EMS Baseline Statements:

The District's **baseline** statements reflect actual performance during 2019 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for emergency medical service is as follows:

> For 90 percent of all low risk EMS, the total response time for the arrival of the first-due/ERF ALS unit minimally staffed with two firefighters, is 9:57. The first arriving unit is capable of establishing command, sizing up the incident, utilizing safe operational procedures, developing an initial incident action plan and conducting an ALS assessment. These operations are done in accordance with District SOPs while providing for the safety of responders and public.

Low Risk EMS 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:46	02:02	02:08	02:23	03:25	-	01:30	**01:16**
Turnout Time	1st Unit	Urban	02:04	02:15	02:09	02:07	01:52	-	01:00	**01:04**
Travel Time	1st Unit **Distribution**	Urban	06:16	06:29	06:18	06:14	05:58	-	04:30	**01:46**
	ERF **Concentration**	Urban	06:16	06:29	06:18	06:14	05:58	-	04:30	**01:46**
Total Response Time	1st Unit **Distribution**	Urban	09:57	11:55	11:38	11:51	13:09	-	07:00	**02:57**
		Num Incidents	13,072	3,050	3,224	2,708	4,090	-	-	
	ERF **Concentration**	Urban	09:57	11:55	11:38	11:51	13:09	-	07:00	**02:57**
		Num Incidents	13,072	3,050	3,224	2,708	4,090	-	-	

Table 34

District Total Response Time, Urban 1st Unit baseline for low risk EMS performance decreased slightly from 2021 to 2022. Turnout times in 2022 increased by 0:06 compared to 2021. The Urban ERF baseline low risk EMS performance is the same as the 1st Unit baseline low risk EMS performance. The four-year 90th percentile for both 1st Unit and ERF Total Response Time, baseline for low risk EMS performance is 9:57. This is 2:57 slower than the 7:00 benchmark.

Based on four-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit low risk EMS responses for alarm handling time 56% of the time, for turnout time 36% of the time, for travel time 72% of the time, and for total response time 56% of the time.

Moderate Risk Emergency Medical Service (EMS)

Call Types: Priority 2 EMS incidents and EMS incidents not classified as low, high, or special risk.

Moderate Risk EMS Benchmark Statements:

> For 90 percent of all moderate risk EMS, the total response time for the arrival of the first-due ALS unit, minimally staffed with two firefighters, shall be 7:00. First-due units must have ALS capabilities and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures, developing an initial incident action plan, and initiating ALS patient care. Operations shall be done in accordance with District SOPs while providing for responder and public safety.
>
> For 90 percent of all moderate risk EMS, the total response time for the arrival of the ERF (with ALS), minimally staffed with four firefighters, shall be 8:00. One apparatus in the ERF must be a medic unit and be capable of providing patient transport. Operations shall be done in accordance with District SOPs while providing for responder and public safety.
>
> Support functions for moderate risk EMS are provided by a safety and medical unit, district chief, or advanced resource medic. These units are not included in the ERF.

Moderate Risk EMS Baseline Statements:

The District's **baseline** statements reflect actual performance during 2019 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for emergency medical service is as follows:

> For 90 percent of all moderate risk EMS, the total response time for the arrival of the first-due ALS unit, minimally staffed with two firefighters, is 9:03. First-due units are ALS and are capable of establishing command, sizing up the incident, utilizing safe operational procedures, and developing an initial incident action plan. Operations are done in accordance with District SOPs while providing for responder and public safety.
>
> For 90 percent of all moderate risk EMS, the total response time for the arrival of the ERF (with ALS), minimally staffed with four firefighters, is 11:33. One apparatus in the ERF is a medic unit capable of providing patient transport. Operations are done in accordance with District SOPs while providing for responder and public safety.

Moderate Risk EMS 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:26	01:58	01:58	02:11	03:12	-	01:30	**00:56**
Turnout Time	1st Unit	Urban	02:00	02:04	02:03	02:03	01:50	-	01:00	**01:00**
Travel Time	1st Unit **Distribution**	Urban	05:46	06:01	05:42	05:42	05:37	-	04:30	**01:16**
	ERF **Concentration**	Urban	07:51	08:04	07:40	07:49	07:49	-	05:30	**02:21**
Total Response Time	1st Unit **Distribution**	Urban	09:03	10:47	10:26	10:45	12:05	-	07:00	**02:03**
		Num Incidents	38,168	10,296	9,773	8,370	9,729	-	-	
	ERF **Concentration**	Urban	11:33	11:44	11:09	11:23	11:54	-	08:00	**03:33**
		Num Incidents	33,163	8,910	8,436	7,294	8,523	-	-	

Table 35

District Total Response Time, Urban 1st Unit baseline for moderate risk EMS performance in 2022 decreased from 10:26 in 2021 to 10:47 in 2022. Turnout times in 2022 remained consistent compared to 2021. The four-year 90th percentile is 9:03 for 1st Unit Total Response and 11:33 for ERF Total Response. This is 2:03 and 3:33 slower than the 7:00 and 8:00 minute benchmarks respectively.

Based on three-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit moderate risk EMS responses for alarm handling time 65% of the time, for turnout time 36% of the time, for travel time 79% of the time, and for total response time 67% of the time.

High Risk Emergency Medical Service (EMS)

Call Types: Priority 1 and dispatched Medical 1 EMS incidents including cardiac arrests, penetrating traumas, echo medicals, strokes, chokings, drownings, technical rescues, second alarm fires, and struck by vehicle incidents.

High Risk EMS Benchmark Statements:

For 90 percent of all high risk EMS, the total response time for the arrival of the first-due ALS unit, minimally staffed with three firefighters, shall be 7:00. First-due units must have ALS capabilities and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures, developing an initial incident action plan, and initiating ALS patient care. Operations shall be done in accordance with District SOPs while providing for responder and public safety.

For 90 percent of all high risk EMS, the total response time for the arrival of the ERF (with ALS), minimally staffed with five firefighters, shall be 8:00. One apparatus in the ERF must be a medic unit and be capable of providing patient transport. Operations shall be done in accordance with District SOPs while providing for responder and public safety.

Support functions for moderate risk EMS are provided by a safety and medical unit, district chief, or advanced resource medic. These units are not included in the ERF.

High Risk EMS Baseline Statements:

The District's **baseline** statements reflect actual performance during 2019 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for emergency medical service is as follows:

For 90 percent of all high risk EMS, the total response time for the arrival of the first-due ALS unit, minimally staffed with three firefighters, is 8:22. First-due units are ALS and capable of establishing command, sizing up the incident, utilizing safe operational procedures, and developing an initial incident action plan. Operations are done in accordance with District SOPs while providing for responder and public safety.

For 90 percent of all high risk EMS, the total response time for the arrival of the ERF (with ALS), minimally staffed with five firefighters, is 10:09. One apparatus in the ERF is a medic unit capable of providing patient transport. Operations are done in accordance with District SOPs while providing for responder and public safety.

High Risk EMS 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:02	01:54	01:50	01:56	02:36	-	01:30	**00:32**
Turnout Time	1st Unit	Urban	01:58	01:58	02:03	02:06	01:41	-	01:00	**00:58**
Travel Time	1st Unit **Distribution**	Urban	05:17	05:24	05:08	05:12	05:12	-	04:30	**00:47**
	ERF **Concentration**	Urban	06:45	06:59	06:41	06:27	06:55	-	05:30	**01:15**
Total Response Time	1st Unit **Distribution**	Urban	08:22	10:00	09:39	10:11	10:34	-	07:00	**01:22**
		Num Incidents	4,510	1,514	1,154	991	851	-	-	
	ERF **Concentration**	Urban	10:09	10:24	09:54	09:59	10:22	-	08:00	**02:09**
		Num Incidents	3,927	1,317	1,017	854	739	-	-	

Table 36

District Total Response Time, Urban 1st Unit baseline for high risk EMS performance in 2022 decreased slightly from 9:39 in 2021 to 10:00 in 2022. Turnout times in 2022 improved slightly compared to 2021. The four-year 90th percentile is 8:22 for 1st Unit Total Response and 10:09 for ERF Total Response. This is 1:22 and 2:09 slower than the 7:00 and 8:00 minute benchmarks respectively.

Based on five-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit high risk EMS responses for alarm handling time 73% of the time, for turnout time 37% of the time, for travel time 86% of the time, and for total response time 78% of the time.

Special Risk Emergency Medical Service (EMS)

Call Types: MCIs

High Risk EMS Benchmark Statements:

> For 90 percent of all high risk EMS, the total response time for the arrival of the first-due unit, staffed with a minimum of three firefighters, shall be 7:00. The first-due unit shall be staffed with a minimum of three firefighters and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, and developing an initial incident action plan. Operations shall be done in accordance with District SOPs while providing for responder and public safety.
>
> For 90 percent of all high risk EMS, the total response time for the arrival of the ERF, staffed with 17 to 19 firefighters and officers shall be 14:06. The ERF shall be capable of establishing triage, treatment, and transport groups; assisting with patient care; and shuttling patients. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> Support functions for high risk EMS are provided by a safety and medical unit or an advanced resource medic. These units are not included in the ERF.

High Risk EMS Baseline Statements:

The District has insufficient data supporting the statistical analysis of High Risk EMS incidents. The District only had one incident that met the requirements of a High Risk EMS incident from 2018 through 2022. The information from this single incident is included below even though the statistics do not meet the minimum frequency of at least 10 incidents to be considered statistically valid.

> For 90 percent of all high risk EMS, the total response time for the arrival of the first-due unit, staffed with a minimum of three firefighters, is 8:19. The first-due unit is staffed with a minimum of three firefighters and is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, and developing an initial incident action plan. Operations are done in accordance with District SOPs while providing for responder and public safety.
>
> For 90 percent of all high risk EMS, the total response time for the arrival of the ERF, staffed with 17 to 19 firefighters and officers is 56:36. The ERF is capable of establishing triage, treatment, and transport groups; assisting with patient care; and shuttling patients. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Special Risk EMS 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	01:16	-	-	-	01:16	-	01:30	**00:14**
Turnout Time	1st Unit	Urban	01:27	-	-	-	01:27	-	01:00	**00:27**
Travel Time	1st Unit **Distribution**	Urban	05:36	-	-	-	05:36	-	04:30	**01:06**
	ERF **Concentration**	Urban	45:48	-	-	-	45:48	-	08:00	**37:48**
Total Response Time	1st Unit **Distribution**	Urban	08:19	-	-	-	08:19	-	06:54	**01:25**
		Num Incidents	1	-	-	-	1	-	-	
	ERF **Concentration**	Urban	56:36	-	-	-	56:36	-	14:06	**42:30**
		Num Incidents	1	-	-	-	1	-	-	

Table 37

The District is unable to fully assess the ERF Urban High Risk EMS baseline response objectives because there was only one High Risk EMS incident that met the ERF requirement (entire ERF responding emergent).

Low Risk Wildland Fires

Call Types: Grass Fires and Natural Vegetation Fires (not classified).

Low Risk Wildland Fire Benchmark Statements:

> For 90 percent of all low risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, shall be 7:20. The first arriving unit shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in SOPs, developing an initial incident action plan, extending an appropriate hose line, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all low risk wildland fires, the total response time for the arrival of the ERF, staffed with nine to 12 firefighters, shall be 13:50. The ERF must be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending appropriate hose lines, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> Support functions for low risk wildland fires are provided by a safety and medical unit, fire investigator, second-due district chief, and a second-due medic unit. These units are not included in the ERF.

Low Risk Wildland Fire Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to provide its ERF complement of personnel. The District's actual baseline service level performance for wildland fires is as follows:

> For 90 percent of all low risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, is 10:26. The first arriving unit is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all low risk wildland fires, the total response time for the arrival of the ERF, staffed with nine to 12 firefighters is 24:36. The ERF is capable of establishing

command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending appropriate hose lines, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Low Risk Wildland 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:51	02:09	02:01	02:30	03:10	03:53	01:30	**01:21**
Turnout Time	1st Unit	Urban	02:06	01:57	02:19	02:18	02:14	01:58	01:20	**00:46**
Travel Time	1st Unit **Distribution**	Urban	06:29	06:31	06:02	06:09	07:19	06:57	04:30	**01:59**
	ERF **Concentration**	Urban	20:41	30:24	09:17	13:38	19:37	14:26	11:00	**09:41**
Total Response Time	1st Unit **Distribution**	Urban	10:04	09:44	09:15	09:35	11:18	12:03	07:20	**02:44**
		Num Incidents	248	51	45	62	42	48	-	
	ERF **Concentration**	Urban	24:36	32:35	12:49	16:37	23:45	20:10	13:50	**10:46**
		Num Incidents	40	10	6	9	11	4	-	

Table 38

District Total Response Time, Urban 1st Unit baseline for low risk wildland performance decreased in 2022. Turnout time improved from 2:19 in 2021 to 1:57 in 2022. Travel times increased from 6:02 to 6:31.

Based on five-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit low risk wildland responses for alarm handling time 55% of the time, for turnout time 50% of the time, for travel time 67% of the time, and for total response time 60% of the time.

The District meets the benchmark response objectives for all Urban ERF low risk wildland responses for travel time 78% of the time and for total response time 70% of the time.

Moderate Risk Wildland Fires

Call Types: Brush Fires or Brush/Grass Mixed Fires.

Moderate Risk Wildland Fire Benchmark Statements:

> For 90 percent of all moderate risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, shall be 7:20. The first arriving unit shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in SOPs, developing an initial incident action plan, extending an appropriate hose line, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all moderate risk wildland fires, the total response time for the arrival of the ERF, staffed with nine to 12 firefighters, shall be 13:50. The ERF must be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending appropriate hose lines, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> Support functions for moderate risk wildland fires are provided by a safety and medical unit, fire investigator, second-due district chief, and a second-due medic unit. These units are not included in the ERF.

Moderate Risk Wildland Fire Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to provide its ERF complement of personnel. The District's actual baseline service level performance for wildland fires is as follows:

> For 90 percent of all moderate risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, is 10:44. The first arriving unit is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all moderate risk wildland fires, the total response time for the arrival of the ERF, staffed with nine to 12 firefighters is 32:08. The ERF is capable of establishing

command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending appropriate hose lines, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Moderate Risk Wildland 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:58	02:18	02:04	02:19	03:23	04:59	01:30	**01:28**
Turnout Time	1st Unit	Urban	02:18	02:04	03:02	02:10	02:05	01:55	01:20	**00:58**
Travel Time	1st Unit **Distribution**	Urban	07:12	06:52	07:48	05:41	04:15	07:34	04:30	**02:42**
	ERF **Concentration**	Urban	16:46	07:37	14:02	12:41	08:46	17:50	11:00	**05:46**
Total Response Time	1st Unit **Distribution**	Urban	10:44	09:29	10:33	09:13	08:04	17:25	07:20	**03:24**
		Num Incidents	88	16	16	18	6	32	-	
	ERF **Concentration**	Urban	32:08	15:13	34:02	22:04	14:43	32:08	13:50	**18:18**
		Num Incidents	17	1	4	3	2	7	-	

Table 39

District Total Response Time, Urban 1st Unit baseline for moderate risk wildland improved in 2022. Turnout time improved to 2:04 in 2022 from 3:02 in 2021. Travel times decreased to 6:52 from 7:48.

Based on five-year aggregate data, the District meets the benchmark response objectives for all Urban 1st Unit moderate risk wildland responses for alarm handling time 55% of the time, for turnout time 48% of the time, for travel time 57% of the time, and for total response time 53% of the time.

The District meets the benchmark response objectives for all Urban ERF moderate risk wildland responses for travel time 65% of the time and for total response time 65% of the time.

High Risk Wildland Fires

Call Types: Brush Fires or Brush/Grass Mixed Fires over 100 acres in size.

High Risk Wildland Fire Benchmark Statements:

> For 90 percent of all high risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, shall be 7:20. The first arriving unit shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in SOPs, developing an initial incident action plan, extending an appropriate hose line, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all high risk wildland fires, the total response time for the arrival of the ERF, staffed with nine to 12 firefighters, shall be 13:50. The ERF must be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending appropriate hose lines, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> Support functions for high risk wildland fires are provided by a safety and medical unit, fire investigator, second-due district chief, and a second-due medic unit. These units are not included in the ERF.

High Risk Wildland Fire Baseline Statements:

The District has insufficient data supporting the statistical analysis of High Risk Wildland Fire incidents. The District only had two incidents that met the requirements of a High Risk Wildland Fire from 2018 through 2022. The information from these incidents is included below even though the statistics do not meet the minimum frequency of at least 10 incidents to be considered statistically valid.

> For 90 percent of all high risk wildland fires, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, is 10:06. The first arriving unit is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending an appropriate hose line, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

For 90 percent of all high risk wildland fires, the total response time for the arrival of the ERF, staffed with nine to 12 firefighters is 20:32. The ERF is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, extending appropriate hose lines, providing either mobile attack or progressive hose lays, and extinguishing fire. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

High Risk Wildland 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	01:21	-	01:21	-	-	-	01:30	00:09
Turnout Time	1st Unit	Urban	03:12	-	03:12	-	-	-	01:20	01:52
Travel Time	1st Unit **Distribution**	Urban	07:10	-	07:10	-	-	-	04:30	02:40
	ERF **Concentration**	Urban	10:34	-	10:34	-	-	-	11:00	00:26
Total Response Time	1st Unit **Distribution**	Urban	10:06	-	10:06	-	-	-	07:20	02:46
		Num Incidents	2	-	00:00	-	-	-	-	
	ERF **Concentration**	Urban	20:32	-	20:32	-	-	-	13:50	06:42
		Num Incidents	2	-	00:00	-	-	-	-	

Table 40

The District is unable to fully assess the ERF Urban High Risk Wildland baseline response objectives because there were only two High Risk Wildland incidents that met the ERF requirements (entire ERF responding emergent).

Low Risk Hazardous Materials

Call Types: Carbon Monoxide

Low Risk Hazardous Materials Benchmark Statements:

> For 90 percent of all low risk hazardous material incidents, the total response time for the arrival of the first-due/ERF, staffed with three or four firefighters, shall be 7:20. The first arriving unit/ERF shall be capable of establishing command, sizing up the incident, conducting air monitoring, capable of a quick rescue if necessary, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, and calling for additional resources if needed. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The support functions for low risk hazardous materials incidents is provided by a safety and medical unit.

Low Risk Hazardous Materials Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for hazardous materials is as follows:

> For 90 percent of all low risk hazardous material incidents, the total response time for the arrival of the first-due/ERF, staffed with three or four firefighters, is 10:37. The first arriving unit/ERF is capable of establishing command, sizing up the incident, conducting air monitoring, capable of a quick rescue if necessary, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, and calling for additional resources if needed. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Low Risk Hazmat 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:53	02:00	01:31	02:27	04:06	03:36	01:30	**01:23**
Turnout Time	1st Unit	Urban	02:13	02:31	02:06	02:19	01:56	01:33	01:20	**00:53**
Travel Time	1st Unit **Distribution**	Urban	07:00	06:16	07:01	07:00	07:21	05:48	04:30	**02:30**
	ERF **Concentration**	Urban	07:00	06:16	07:01	07:00	07:21	05:48	04:30	**02:30**
Total Response Time	1st Unit **Distribution**	Urban	10:37	10:04	09:40	10:51	11:35	10:30	07:20	**03:17**
		Num Incidents	220	46	50	49	52	23	-	
	ERF **Concentration**	Urban	10:37	10:04	09:40	10:51	11:35	10:30	07:20	**03:17**
		Num Incidents	220	46	50	49	52	23	-	

Table 41

District Total Response Time, Urban 1st Unit baseline for low risk hazardous materials incident performance in 2022 decreased from 9:40 in 2021 to 10:04 in 2022. The Urban ERF baseline for low risk hazardous materials incident performance is the same as the 1st Unit baseline low risk hazardous materials incident performance because the ERF is one engine. The five-year for both 1st Unit and ERF Total Response Time, baseline for low risk hazardous materials 90th percentile performance is 10:37. This is 3:17 slower than the 7:20 benchmark.

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban low risk hazmat responses for alarm handling time 60% of the time, for turnout time 47% of the time, for travel time 59% of the time, and for total response time 54% of the time.

Moderate Risk Hazardous Materials

Call Types: Natural Gas or LPG Leak, Unknown Odor (nothing found), Flammable Liquid Spill, Combustible Liquid Spill, Radioactive Condition, Chemical Hazard (no spill), Flammable or Combustible Gas, Refrigeration Leak, or Bomb Removal.

Moderate Risk Hazardous Materials Benchmark Statements:

> For 90 percent of all moderate risk hazardous material incidents, the total response time for the arrival of the first-due/ERF, staffed with three or four firefighters, shall be 7:20. The first arriving unit/ERF shall be capable of establishing command, sizing up the incident, capable of a quick rescue if necessary, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, calling for additional resources if needed, isolating the site, and denying entry. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The response for moderate risk hazardous material incidents includes an additional engine that responds non-emergent to the scene. Because this unit responds non-emergent, it is not considered as part of the ERF for benchmarks or baselines. Commercial structures also receive an additional truck company to assist with forcible entry and remote access. This unit is also not is not considered part of the ERF for benchmarks or baselines. The support function for moderate risk hazardous materials incidents is provided by a safety and medical unit.

Moderate Risk Hazardous Materials Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for hazardous materials is as follows:

> For 90 percent of all moderate risk hazardous material incidents, the total response time for the arrival of the first-due/ERF, staffed with three or four firefighters, is 10:05. The first arriving unit/ERF is capable of establishing command, sizing up the incident, capable of a quick rescue if necessary, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, calling for additional resources if needed, isolating the site, and denying entry. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Moderate Risk Hazmat 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:55	02:30	02:33	02:26	03:38	02:54	01:30	**01:25**
Turnout Time	1st Unit	Urban	02:01	02:03	02:04	02:01	01:54	01:57	01:20	**00:41**
Travel Time	1st Unit **Distribution**	Urban	06:28	06:35	06:25	06:25	06:50	06:08	04:30	**01:58**
	ERF **Concentration**	Urban	06:28	06:35	06:25	06:25	06:50	06:08	04:30	**01:58**
Total Response Time	1st Unit **Distribution**	Urban	10:05	09:41	09:35	09:53	10:44	10:25	07:20	**02:45**
		Num Incidents	1,241	224	229	250	267	271	-	
	ERF **Concentration**	Urban	10:05	09:41	09:35	09:53	10:44	10:25	07:20	**02:45**
		Num Incidents	1,241	224	229	250	267	271	-	

Table 42

District Total Response Time, Urban 1st Unit baseline for moderate risk hazardous materials incident performance in 2022 decreased to 9:41 from 9:35 in 2021. The Urban ERF baseline for moderate risk hazardous materials incident performance is the same as the 1st Unit baseline moderate risk hazardous materials incident performance because the second engine responds non-emergent to the scene. The five-year for both 1st Unit and ERF Total Response Time baseline for moderate risk hazardous materials 90th percentile performance is 10:05. This is 2:45 slower than the 7:20 benchmark.

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban moderate risk hazmat responses for alarm handling time 53% of the time, for turnout time 52% of the time, for travel time 63% of the time, and for total response time 61% of the time.

High Risk Hazardous Materials

Call Types: Chemical Spill or Leak, Toxic Condition, and Biological Hazard.

High Risk Hazardous Materials Benchmark Statements:

> For 90 percent of all hazardous materials incidents, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, shall be 7:20. The first arriving shall be capable of establishing command, sizing up the incident, capable of a quick rescue if necessary, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, calling for resources as needed, isolating the site, and denying entry. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all hazardous materials, the total response time for the arrival of the ERF, staffed with 18 to 21 firefighters, shall be 28:50. This ERF shall be capable of establishing command, providing an initial incident safety officer, developing an incident action plan, surveying the incident, providing medical support to crews and victims, providing entry and back up teams to mitigate materials, providing a decontamination team, monitoring resources, and providing a research team. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The support functions for low risk hazardous materials incidents is provided by a safety and medical unit.

High Risk Hazardous Materials Baseline Statements:

The District has insufficient data supporting the statistical analysis of High Risk Hazardous Materials incidents. The District only had one incident that met the requirements of a High Risk Hazardous Materials with full ERF response from 2018 through 2022. The information from this single incident is included below even though the statistics do not meet the minimum frequency of at least 10 incidents to be considered statistically valid.

> For 90 percent of all high risk hazardous materials, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, is 10:44. The first arriving unit is capable of establishing command, sizing up the incident, capable of a quick rescue if necessary, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, calling for resources as needed, isolating the site, and denying entry. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

For 90 percent of all high risk hazardous materials, the total response time for the arrival of the ERF, staffed with 18 to 21 firefighters, is 24:46. This ERF is capable of establishing command, providing an initial incident safety officer, developing an incident action plan, surveying the incident, providing medical support to crews and victims, providing entry and back up teams to mitigate materials, providing a decontamination team, monitoring resources, and providing a research team. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

High Risk Hazmat 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:59	01:47	04:41	02:04	01:39	03:15	01:30	**01:29**
Turnout Time	1st Unit	Urban	01:56	01:49	01:47	01:49	03:37	01:48	01:20	**00:36**
Travel Time	1st Unit **Distribution**	Urban	07:44	05:56	05:21	11:38	04:16	03:19	04:30	**03:14**
	ERF **Concentration**	Urban	17:21	-	-	-	17:21	-	26:00	**08:39**
Total Response Time	1st Unit **Distribution**	Urban	10:44	08:39	11:21	10:09	09:32	06:40	07:20	**03:24**
		Num Incidents	18	6	4	5	2	5	-	
	ERF **Concentration**	Urban	24:46	-	-	-	24:46	-	28:50	**04:04**
		Num Incidents	1	-	-	-	1	-	-	

Table 43

The District is unable to fully assess the ERF Urban High Risk Hazardous Materials baseline response objectives because there was only one High Risk Hazardous Materials incident that met the ERF requirements (entire ERF responding emergent).

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban high risk hazmat responses for alarm handling time 36% of the time, for turnout time 41% of the time, for travel time 59% of the time, and for total response time 64% of the time.

Low Risk Rescue

Call Types: Elevator Rescue, Electrical Hazards (lines down), Extrication from Equipment, Vehicle Accident (no injury)

Low Risk Rescue Benchmark Statements:

> For 90 percent of all low risk rescues, the total response time for the arrival of the first-due/ERF unit, staffed with three or four firefighters, shall be 7:20. The first-due/ERF unit shall be capable of establishing command, sizing up to determine if additional resources are required, and rescuing the person without endangering response personnel. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.

Low Risk Rescue Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for technical rescue is as follows:

> For 90 percent of all low risk rescues, the total response time for the arrival of the first-due/ERF unit, staffed with three or four firefighters, is 10:36. The first-due/ERF unit shall be capable of establishing command, sizing up to determine if additional resources are required, and rescuing the person without endangering response personnel. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Low Risk Rescue 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:58	02:35	02:30	02:42	03:04	03:05	01:30	**01:28**
Turnout Time	1st Unit	Urban	01:46	01:36	01:47	01:46	01:55	01:38	01:20	**00:26**
Travel Time	1st Unit **Distribution**	Urban	06:40	06:54	06:55	06:37	06:30	06:31	04:30	**02:10**
	ERF **Concentration**	Urban	06:40	06:54	07:04	06:28	06:39	06:31	04:30	**02:10**
Total Response Time	1st Unit **Distribution**	Urban	10:36	08:58	11:06	09:57	10:26	09:37	07:20	**03:16**
		Num Incidents	178	29	57	35	26	31	-	
	ERF **Concentration**	Urban	10:36	08:58	11:11	09:57	10:29	09:37	07:20	**03:16**
		Num Incidents	178	29	57	35	26	31	-	

Table 44

District Total Response Time, Urban 1st Unit baseline for low risk rescue incidents improved from 11:06 in 2021 to 8:58 in 2022. The Urban ERF baseline for low risk rescue incident performance is the same as the 1st Unit baseline low risk rescue incident performance because the ERF is one engine. The five-year for both 1st Unit and ERF 90th percentile performance Total Response Time baseline for low risk rescue performance is 10:36. This is 3:16 slower than the 7:20 benchmark.

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due low risk rescue responses for alarm handling time 51% of the time, for turnout time 57% of the time, for travel time 60% of the time, and for total response time 59% of the time.

Moderate Risk Rescue

Call Types: Vehicle Extrication

Moderate Risk Benchmark Statements:

> For 90 percent of all moderate risk rescues, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, shall be 7:20. The first-due unit shall be capable of establishing command, sizing up to determine if a vehicle extrication response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all moderate risk rescues, the total response time for the arrival of the ERF, staffed with 10-11 firefighters shall be 10:50. The ERF for moderate risk rescues shall be capable of establishing command; providing an initial incident safety officer; developing an incident action plan; surveying the incident; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during extrication; and providing first responder medical support. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The support function for moderate risk rescues is provided by a safety and medical unit. An additional engine is added to limited access highway incidents for traffic safety. These units are not calculated in the ERF for moderate risk rescues.

Moderate Risk Rescues Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for technical rescue is as follows:

> For 90 percent of all moderate risk rescues, the total response time for the arrival of the first-due unit, staffed with three or four firefighters is 7:58. The first-due unit is capable of establishing command, sizing up to determine if a vehicle extrication response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all moderate risk rescues, the total response time for the arrival of the ERF, staffed with 10-11 firefighters is 16:07. This ERF for moderate risk rescues is capable

of establishing command; providing an initial incident safety officer; developing an incident action plan; surveying the incident; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during extrication; and providing first responder medical support. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Moderate Risk Rescue 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:10	00:22	01:29	01:16	02:06	02:44	01:30	**00:40**
Turnout Time	1st Unit	Urban	01:56	02:21	02:03	02:17	01:49	01:45	01:20	**00:36**
Travel Time	1st Unit **Distribution**	Urban	05:38	04:18	05:41	05:38	05:11	05:31	04:30	**01:08**
	ERF **Concentration**	Urban	11:26	04:56	06:50	11:24	09:32	12:51	08:00	**03:26**
Total Response Time	1st Unit **Distribution**	Urban	07:58	06:09	08:26	07:46	07:01	08:05	07:20	**00:38**
		Num Incidents	89	5	14	13	13	44		
	ERF **Concentration**	Urban	16:07	05:05	10:12	13:43	14:23	16:35	10:50	**05:17**
		Num Incidents	57	1	11	12	10	23		

Table 45

District Total Response Time, Urban 1st Unit baseline for moderate risk rescue incidents improved from 8:26 in 2021 to 6:09 in 2022. The five-year for 1st Unit 90th percentile performance Total Response Time baseline for moderate risk rescue performance is 7:58. This is 0:38 slower than the 7:20 benchmark.

The five-year for ERF 90th percentile performance Total Response Time baseline for moderate risk rescue performance is 16:07. This is 5:17 slower than the 10:50 benchmark.

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban moderate risk rescues for alarm handling time 80% of the time, for turnout time 55% of the time, for travel time 72% of the time, and for total response time 88% of the time.

The District meets the benchmark response objectives for all ERF urban moderate risk rescues for travel time 79% of the time and for total response time 67% of the time.

High Risk Technical Rescue

Call Types: Rope Rescue, Collapse Rescue, Confined Space Rescue, and Trench Rescue.

High Risk Technical Rescue Benchmark Statements:

> For 90 percent of all high risk technical rescues, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, shall be 7:20. The first-due unit shall be capable of establishing command, sizing up to determine if a technical rescue response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all high risk technical rescues, the total response time for the arrival of the ERF, staffed with 16-17 firefighters, shall be 18:50. The ERF for high risk technical rescues shall be capable of establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing first responder medical support. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The support functions for high risk technical rescues are provided by a safety and medical unit, Haz-Mat 1, and a medic unit. These units are not considered part of the ERF.

High Risk Technical Rescue Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continued to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for technical rescue is as follows:

> For 90 percent of all high risk technical rescues, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, is 19:24. The first-due unit is capable of establishing command, sizing up to determine if a technical rescue response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all high risk technical rescues, the total response time for the arrival of the ERF, staffed with 16-17 firefighters, is 27:20. The ERF for high risk technical rescues is capable of establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents; and providing

first responder medical support. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

High Risk Technical Rescue 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	04:35	03:40	-	03:23	01:10	05:02	01:30	**03:05**
Turnout Time	1st Unit	Urban	01:55	01:15	-	01:36	00:57	02:23	01:20	**00:35**
Travel Time	1st Unit **Distribution**	Urban	14:55	15:04	-	07:10	12:42	15:56	04:30	**10:25**
	ERF **Concentration**	Urban	20:21	22:07	-	08:46	12:33	17:32	16:00	**04:21**
Total Response Time	1st Unit **Distribution**	Urban	19:24	19:58	-	11:55	14:49	23:19	07:20	**12:04**
		Num Incidents	14	2	-	3	1	8	-	
	ERF **Concentration**	Urban	27:20	25:53	-	14:36	20:08	26:35	18:50	**08:30**
		Num Incidents	6	1	-	1	1	3	-	

Table 46

District Total Response Time, Urban 1st Unit baseline low frequency counts result in large fluctuations in data from individual calls. Nonetheless, the Total Response Time Urban 1st Unit 90th percentile performance baseline for high risk technical rescues is 19:24. This is 12:04 above the 7:20 benchmark.

The District is unable to fully assess the ERF Urban High Risk Technical Rescue response objectives because there were only six high risk technical rescue incidents that met the ERF requirements (entire ERF responding emergent).

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban high risk technical rescues responses for alarm handling time 14% of the time, for turnout time 64% of the time, for travel time 21% of the time, and for total response time 21% of the time.

The District meets the benchmark response objectives for all ERF urban high risk technical rescues responses for travel time 67% of the time and for total response time 50% of the time.

High Risk Water Rescue

Call Types: Swift Water Rescue, Dive Rescue, and Ice Rescue.

High Risk Water Rescue Benchmark Statements:

> For 90 percent of all high risk water rescues, the total response time for the arrival of the first-due unit, staffed with three or four firefighters, shall be 7:20. The first-due unit shall be capable of establishing command, sizing up to determine if a water rescue response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all high risk water rescues, the total response time for the arrival of the ERF, staffed with 17-19 firefighters shall be 18:50. The ERF for high risk water rescues shall be capable of establishing command, providing initial incident safety officer, developing an incident action plan, surveying the incident, providing an entry and back up team, and providing a rapid intervention team. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The support function for high risk water rescues is provided by a safety and medical unit.

High Risk Water Rescue Baseline Statements:

The District has insufficient data supporting the statistical analysis of High Risk Water Rescue incidents. The District only had seven incidents that met the requirements of a High Risk Water Rescue with full ERF response from 2018 through 2022. The information from these incidents is included below even though the statistics do not meet the minimum frequency of at least 10 incidents to be considered statistically valid.

> For 90 percent of all high risk water rescues, the total response time for the arrival of the first-due unit, staffed with three or four firefighters is 11:50. The first-due unit is capable of establishing command, sizing up to determine if a water rescue response is required, requesting additional resources, and providing basic life support to any victim without endangering response personnel. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> For 90 percent of all high risk water rescues, the total response time for the arrival of the ERF, staffed with 17-19 firefighters is 24:05. This ERF for high risk water rescues is capable of establishing command, providing an initial incident safety officer, developing an incident action plan, surveying the incident, providing an entry and back up team, and

providing a rapid intervention team. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

High Risk Water Rescue 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	06:12	09:14	01:15	04:58	04:15	05:05	01:30	**04:42**
Turnout Time	1st Unit	Urban	01:44	01:27	00:26	01:47	01:30	01:45	01:20	**00:24**
Travel Time	1st Unit **Distribution**	Urban	06:56	07:06	02:37	09:27	03:59	07:27	04:30	**02:26**
	ERF **Concentration**	Urban	18:06	19:43	02:37	16:35	10:52	10:41	16:00	**02:06**
Total Response Time	1st Unit **Distribution**	Urban	11:50	13:37	03:33	13:01	08:06	11:47	07:20	**04:30**
		Num Incidents	32	8	2	8	7	7	-	
	ERF **Concentration**	Urban	24:05	26:33	08:25	22:56	14:42	17:34	18:50	**05:15**
		Num Incidents	10	4	1	2	2	1	-	

Table 47

District Total Response Time, Urban 1st Unit baseline for high risk water rescues increased in 2022. Low frequency counts result in large fluctuations in data from individual calls. The Total Response Time Urban 1st Unit baseline high risk water rescue 90th percentile performance is 11:50. This is 4:30 above the 7:20 benchmark.

The District is unable to fully assess the ERF Urban High Risk Water Rescue baseline response objectives because there were only seven High Risk Water Rescue incidents that met the ERF requirements (entire ERF responding emergent).

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban high risk water rescues responses for alarm handling time 28% of the time, for turnout time 75% of the time, for travel time 59% of the time, and for total response time 53% of the time.

Low Risk Alarms

Call Types: All Alarms except for Water Flows, calls at Saint Anthony Hospital and Lutheran Hospital, and calls occurring in either the DFC or NREL Special Planning Zones.

Low Risk Alarms Benchmark Statements:

> For 90 percent of all low risk alarms, the total response time for the arrival of the first-due/ERF suppression unit, staffed with a minimum of three firefighters, shall be 6:54. The first-due/ERF unit shall be staffed with a minimum of three firefighters and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, and investigating the area to determine the source of the alarm. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The total ERF for low risk alarms is three or four personnel. Because of this the ERF shown in the table is the same as the first-due unit response.

Low Risk Alarms Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continues to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for low risk fires is as follows:

> For 90 percent of all low risk alarms, the total response time for the arrival of the first-due/ERF suppression unit, staffed with a minimum of three firefighters, is 9:37. The first-due/ERF unit is staffed with a minimum of three firefighters and is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, and investigating the area to determine the source of the alarm. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Low Risk Alarms 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:47	02:00	01:57	02:26	03:32	02:59	01:04	**01:43**
Turnout Time	1st Unit	Urban	02:07	02:13	02:14	02:09	02:02	01:54	01:20	**00:47**
Travel Time	1st Unit **Distribution**	Urban	06:02	06:11	05:53	05:58	06:17	05:53	04:30	**01:32**
	ERF **Concentration**	Urban	06:02	06:11	05:53	05:58	06:17	05:53	04:30	**01:32**
Total Response Time	1st Unit **Distribution**	Urban	09:37	09:20	08:59	09:24	10:36	09:35	06:54	**02:43**
		Num Incidents	12,055	2457	2477	2192	2243	2686	-	
	ERF **Concentration**	Urban	09:37	09:20	08:59	09:24	10:36	09:35	06:54	**02:43**
		Num Incidents	12,055	2457	2477	2192	2243	2686	-	

Table 48

Total Response Time, Urban 1st Unit baseline for low risk alarm performance decreased from 8:59 in 2021 to 9:20 in 2022. The five-year Total Response Time, Urban 1st Unit 90th percentile performance for low risk alarms is 9:37. This is 2:43 above the benchmark of 6:54.

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban low risk alarm responses for alarm handling time 65% of the time, for turnout time 49% of the time, for travel time 71% of the time, and for total response time 68% of the time.

Moderate Risk Alarms

Call Types: Water Flows, calls at Saint Anthony Hospital and Lutheran Hospital, and calls occurring in either the DFC or NREL Special Planning Zones.

Moderate Risk Alarms Benchmark Statements:

> For 90 percent of all moderate risk alarms, the total response time for the arrival of the first-due/ERF suppression unit, staffed with a minimum of three firefighters, shall be 6:54. The first-due/ERF unit shall be staffed with a minimum of three firefighters and shall be capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, and investigating the area to determine the source of the alarm. These operations shall be done in accordance with District SOPs while providing for the safety of responders and the general public.
>
> The response for moderate risk alarms includes an additional engine that responds non-emergent to the scene. The second unit is to support investigating alarm sources at large buildings and meets contractual requirements in special planning zones. Because this unit responds non-emergent, it is not considered as part of the ERF for benchmarks or baselines.

Moderate Risk Alarms Baseline Statements:

The District's **baseline** statements reflect actual performance during 2018 to 2022. The District expanded automatic aid in 2019 and continue to utilize mutual aid from neighboring fire districts to support its ERF complement of personnel. The District's actual baseline service level performance for low risk fires is as follows:

> For 90 percent of all moderate risk alarms, the total response time for the arrival of the first-due suppression unit, staffed with a minimum of three firefighters, is 9:44. The first-due unit is staffed with a minimum of three firefighters and is capable of establishing command, sizing up the incident, utilizing safe operational procedures outlined in the SOPs, developing an initial incident action plan, and investigating the area to determine the source of the alarm. These operations are done in accordance with District SOPs while providing for the safety of responders and the general public.

Moderate Risk Alarms 90th Percentile Times - Baseline Performance			2018-2022	2022	2021	2020	2019	2018	Benchmark	Delta
Alarm Handling	Pick-up to Dispatch	Urban	02:50	01:48	01:51	02:23	03:37	03:04	01:04	**01:46**
Turnout Time	1st Unit	Urban	02:07	02:10	02:21	01:56	01:56	02:02	01:20	**00:47**
Travel Time	1st Unit **Distribution**	Urban	05:56	06:00	06:00	05:40	05:30	05:50	04:30	**01:26**
	ERF **Concentration**	Urban	05:56	06:00	06:00	05:40	05:30	05:50	04:30	**01:26**
Total Response Time	1st Unit **Distribution**	Urban	09:44	08:45	09:42	09:25	10:26	09:55	06:54	**02:50**
		Num Incidents	481	114	103	78	77	109	-	
	ERF **Concentration**	Urban	09:44	08:45	09:42	09:25	10:26	09:55	06:54	**02:50**
		Num Incidents	481	114	103	78	77	109	-	

Table 49

Alarm Handling times, Urban 1st Unit baseline for moderate risk alarm performance improved from 1:51 in 2021 to 1:48 in 2022. Turnout Times have improved from 2:21 in 2021 to 2:10 in 2022.

The net result of the above differences was an improvement of the Total Response Time, Urban 1st Unit baseline for moderate risk alarm performance from 9:42 in 2021 to 8:45 in 2022. The five-year Total Response Time, Urban 1st Unit 90th percentile performance for moderate risk alarms is now 9:44. This is 2:50 above the benchmark of 6:54.

Based on five-year aggregate data, the District meets the benchmark response objectives for all first-due urban low risk alarm responses for alarm handling time 64% of the time, for turnout time 44% of the time, for travel time 70% of the time, and for total response time 65% of the time.

Station Performance

Each station is also monitored for overall performance of alarm handling, turnout time, travel time, and total response time. This calculation has no constraint on the incident type or the unit's emergent status, and is primarily intended to provide the ability to monitor station performance in near real time. Tables 50 through 55 (below) display this information for 2020-2022. 2020 was the first year the District introduced this functionality and information prior to 2020 is not available in the data base. These tables are available in real time on the District Dashboard, which can be accessed here: District Dashboard or through the QR Code shown at the right:

EMS Incidents

The goal for alarm handling is 1:30, for turnout is 1:00, for travel is 4:30, and for total response time is 7:00. Table 50 displays the 90th percentile for each station in these performance areas. Table 51 displays the percentage of the time that the station meets the goal for all responses (emergent and non-emergent).

Station	Alarm Processing 90%	Turnout 90%	Travel 90%	Response 90%
Station-01	02:06	01:56	06:43	09:27
Station-02	02:05	01:56	07:36	10:24
Station-03	02:02	01:50	06:43	09:27
Station-04	02:02	02:00	07:19	10:06
Station-05	02:04	01:56	07:44	10:31
Station-06	02:28	01:56	09:11	12:42
Station-07	02:03	02:06	07:10	09:54
Station-08	02:03	02:03	08:22	11:07
Station-09	02:12	01:59	11:06	13:53
Station-10	02:10	02:09	08:10	11:02
Station-11	02:05	02:00	10:36	13:19
Station-12	02:00	02:00	07:30	10:09
Station-13	02:10	01:53	08:24	11:01
Station-14	02:07	02:03	08:20	11:01
Station-15	02:17	02:09	11:15	13:43
Station-16	02:01	02:04	06:51	09:28
Station-17	01:56	02:02	07:41	10:21

Table 50

	Response Goal Met %			
Station	Alarm Processing %	Turnout %	Travel %	Total Response %
Station-01	68.91%	40.44%	67.89%	67.09%
Station-02	69.08%	39.00%	46.71%	48.68%
Station-03	72.34%	40.19%	63.93%	64.43%
Station-04	70.13%	42.16%	54.22%	54.74%
Station-05	66.92%	33.97%	62.14%	59.84%
Station-06	64.60%	40.51%	40.77%	37.34%
Station-07	70.29%	36.04%	62.81%	59.47%
Station-08	70.19%	41.78%	43.89%	45.44%
Station-09	72.26%	35.51%	25.08%	27.28%
Station-10	65.81%	37.17%	35.19%	34.61%
Station-11	73.41%	34.90%	18.54%	21.06%
Station-12	66.53%	41.49%	47.45%	49.63%
Station-13	69.59%	39.76%	41.20%	44.08%
Station-14	64.54%	36.93%	43.97%	45.43%
Station-15	56.00%	25.74%	33.24%	28.72%
Station-16	67.54%	29.35%	65.57%	64.93%
Station-17	65.85%	28.49%	56.97%	58.99%

Table 51

Structure Fire Incidents

The goal for alarm handling is 1:00, for turnout is 1:20, for travel is 4:30, and for total response time is 6:54. Table 52 displays the 90th percentile for each station in these performance areas. Table 53 displays the percentage of the time that the station meets the goal for all responses (emergent and non-emergent).

Station	Alarm Processing 90%	Turnout 90%	Travel 90%	Response 90%
Station-01	02:01	02:13	12:34	16:37
Station-02	02:12	02:04	10:44	13:24
Station-03	01:56	02:00	10:37	13:46
Station-04	02:17	02:20	09:49	12:42
Station-05	02:24	02:07	12:37	15:03
Station-06	02:00	01:51	15:58	17:44
Station-07	01:46	02:06	11:58	15:33
Station-08	02:09	02:08	10:13	13:04
Station-09	02:46	02:24	11:26	15:21
Station-10	01:55	02:05	09:02	11:55
Station-11	01:44	02:05	10:49	13:23
Station-12	02:09	02:29	11:39	14:18
Station-13	02:26	02:12	13:21	17:15
Station-14	01:55	02:32	13:36	17:01
Station-15	02:19	03:30	32:39	38:35
Station-16	01:55	02:08	12:55	19:23
Station-17	01:44	02:02	12:45	16:10

Table 52

	Response Goal Met %			
Station	Alarm Processing %	Turnout %	Travel %	Total Response %
Station-01	44.07%	52.42%	46.08%	45.24%
Station-02	26.09%	52.17%	44.72%	42.24%
Station-03	44.19%	54.88%	44.19%	41.86%
Station-04	35.09%	53.22%	32.16%	28.65%
Station-05	39.78%	47.31%	23.66%	21.51%
Station-06	28.13%	60.94%	17.19%	14.06%
Station-07	31.28%	52.67%	32.10%	36.21%
Station-08	22.77%	56.25%	35.71%	33.93%
Station-09	36.51%	39.68%	9.52%	14.29%
Station-10	51.60%	55.32%	35.64%	38.30%
Station-11	32.65%	46.94%	16.33%	20.41%
Station-12	32.96%	44.57%	20.97%	20.60%
Station-13	22.58%	52.42%	25.00%	19.35%
Station-14	36.56%	37.63%	33.33%	26.88%
Station-15	0.00%	50.79%	28.57%	19.05%
Station-16	46.62%	52.03%	45.27%	48.65%
Station-17	32.08%	60.38%	31.13%	35.85%

Table 53

All Other Incidents

The goal for alarm handling is 1:30, for turnout is 1:20, for travel is 4:30, and for total response time is 7:20. Table 54 displays the 90th percentile for each station in these performance areas. Table 55 displays the percentage of the time that the station meets the goal for all responses (emergent and non-emergent).

Station	Alarm Processing 90%	Turnout 90%	Travel 90%	Response 90%
Station-01	02:22	01:59	06:37	09:37
Station-02	02:16	02:03	07:04	10:06
Station-03	02:12	01:56	07:09	10:07
Station-04	02:23	02:07	07:14	10:33
Station-05	02:15	01:58	07:21	10:42
Station-06	02:38	02:05	08:04	11:18
Station-07	02:20	02:10	07:02	10:06
Station-08	02:20	02:10	07:47	10:47
Station-09	02:57	02:18	11:23	14:47
Station-10	02:23	02:17	08:13	11:26
Station-11	02:33	02:14	11:37	14:11
Station-12	02:22	02:11	08:14	11:23
Station-13	02:25	02:02	08:26	11:38
Station-14	02:41	02:15	08:05	11:22
Station-15	02:50	02:29	13:38	15:50
Station-16	02:13	02:10	07:13	09:51
Station-17	02:18	02:08	07:13	09:54

Table 54

	Response Goal Met %			
Station	Alarm Processing %	Turnout %	Travel %	Total Response %
Station-01	68.79%	61.37%	68.12%	72.11%
Station-02	70.40%	53.43%	57.83%	62.95%
Station-03	71.99%	59.82%	59.33%	66.18%
Station-04	69.71%	58.61%	50.15%	57.09%
Station-05	70.52%	54.12%	60.54%	69.18%
Station-06	64.71%	51.75%	53.06%	58.84%
Station-07	70.03%	52.41%	61.16%	63.42%
Station-08	70.00%	56.82%	51.21%	57.18%
Station-09	62.29%	51.85%	29.18%	38.05%
Station-10	70.20%	49.85%	32.64%	41.23%
Station-11	60.65%	49.74%	25.89%	36.63%
Station-12	64.34%	53.45%	43.57%	52.34%
Station-13	65.36%	49.37%	47.27%	54.35%
Station-14	55.83%	40.20%	54.50%	56.94%
Station-15	49.38%	49.54%	28.24%	40.74%
Station-16	60.16%	48.62%	59.04%	67.88%
Station-17	54.19%	47.99%	60.00%	69.14%

Table 55

Section 8 - Compliance Methodology

Compliance methodology requires that performance objectives and performance measures are evaluated, and efforts are made to reach or maintain the established levels. Maintenance of efforts refers to the resources and energy put forth to ensure any benefits derived from the SOC process are maintained. To ensure the District is meeting current service level objectives, continuous monitoring of service level baselines must be conducted on a regular basis.

Compliance Model

Compliance is best achieved through a systematic approach. The District has identified the following seven-step compliance model to guide annual performance assessment. The SOC SPT meets quarterly as a means to accomplish these steps.

Step 1 - Update Data (Accreditation Manager)

The accreditation manager will update the previous year's data in the SOC.

Step 2 - Review Performance Measures (Accreditation Manager and SOC SPT)

The SOC SPT will conduct a review of the performance measures.

Review and validate:

- Risk Assessment
- Standard of Cover
- Services level objectives/statements
- Performance objectives and measures

Step 3 - Evaluate Performance

Performance measures are applied to actual service provided:

- Activity and performance by unit
- Activity and performance by planning zone
- Overall performance by incident category
- Overall performance by special team

Step 4 - Develop Compliance Strategies

Determine issues and opportunities:

- Determine what needs to be done to close the gaps
- Determine if resources can be/should be reallocated
- Seek alternative methods to provide service at desired level
- Develop budget estimates as necessary
- Seek additional funding commitment as necessary

Step 5 - Communicate Expectations to Organization

Communicate expectations:

- Explain method of measuring compliance to personnel who are expected to perform the services
- Provide feedback mechanisms

Train personnel:

- Provide appropriate levels of training/direction for all affected personnel
- Modify (remediate) response processes, application systems, and technical infrastructure as necessary to comply

Step 6 - Revalidate Compliance

Review of performance with board of directors to ensure revalidation of SOC.

Determine whether independent validation and verification techniques will be used to measure performance.

Solicit external assistance as necessary.

Step 7 - Make Adjustments/Repeat Process

Review changes to ensure that service levels have been maintained or improved.

Develop and implement a review program to ensure ongoing compliance:

- Quarterly review and evaluation
- Five-year update of standards to ensure District is prepared for re-accreditation

Overall Evaluation and Recommendations

The purpose of this section is to provide an overall evaluation of the delivery system and outline recommendations for improving outcomes.

Some individual units are very close to meeting the benchmark for response. These responses will be monitored to ensure the benchmarks remain valid. If these units do meet or surpass the benchmark the SOC performance objectives will be adjusted to provide a reasonable goal for improvement.

The District recognizes opportunities for improvement do exist. The following recommendations are based on the performance objectives/measures developed to this point. The SOC SPT identified areas needing improvement throughout the process and discussed each in depth.

It is recognized that some of these recommendations will be difficult to achieve due to various economic, financial, and logistical limitations. The District is committed to reducing the gap between the baseline and benchmark performance, but it is recognized that improvement may not be achievable and some degradations in the baselines may occur. Improvements in process and turnout times are policy based in general and these improvements should reach a saturation point where no more improvement is possible. At this point the gap between baselines and benchmarks could increase as the number of incidents increase with no corresponding increase in resources. Another aspect to these recommendations may be a drawdown of service if the budget is reduced. This SOC is a tool to assist policy makers in these decisions.

Opportunities:

- The staffing model is based on four firefighter staffing, except when an engine is attached with another unit, when staffing can be reduced to three. The Report on Residential Fire Ground Field Experiments, National Institute of Standards and Technology (NIST), April 2010, indicated four firefighter staffing as a benchmark. More study is necessary to fully understand and quantify these staffing levels.
- Monitor process times and ensure new programs do not impact response times.
- Study the concept of creative and dynamic staffing solutions that enhance service levels, and employee health and wellness.
- Develop on-scene performance measures for all types of incidents through training and special operations.
- Study compassion fatigue, safety, and job satisfaction of employees in relation to workload.

- Implement programs designed to decrease turnout times. The following should be accomplished:

    - Update older stations to ensure quick access to bay areas from day areas
    - Reduce fire alarms
    - Develop statistics comparing turnout times at night versus day
    - Develop data on emergent versus non-emergent response times
    - Continue to educate operations personnel regarding the importance of turn out times

- Implement programs designed to decrease travel times. The following should be accomplished:

    - Increase use of traffic signal preemption devices wherever possible
    - Work with stakeholder agencies on traffic circulation, speed bumps, and other access issues to improve response times
    - Conduct validation studies of live routing within the CAD system

No Budget Impact:

- **Hazardous Materials Unit into District Three** – Presently the District has hazardous materials units at Stations 2 and 5 in District 1. This placement was based on the hazardous materials exposures at the Denver Federal Center and National Renewable Energy Lab. However, analysis revealed that historical incidents were scattered throughout the District. There are comparable hazardous materials exposures in the Station 14 area. A study needs to be conducted as to the optimal location.

If Revenues Increase:

- **Operational Changes**

    - Analyze distribution of stations and concentration of units at a strategic level
    - Examine staffing level of operational apparatus
    - Consider adding support officers for district chiefs
    - Increase workforce compensation
    - Research alternative work schedules

- **Administrative Changes**

    - Up-staff administrative support positions
    - Increase workforce compensation

If Revenues Decrease:

- **Operational Changes**

    - Analyze potential redeployment of apparatus coverage
    - Decrease/freeze pay
    - Reduce operational staff, or full-time equivalents by adjusting staffing levels
    - Analysis of operational programs for potential reductions

- **Administrative Changes**

    - Decrease/freeze pay
    - Reduce administrative staff
    - Analysis of administrative programs for potential reductions

- This document deals with operational issues only. It is understood by the SOC SPT that these reductions in staffing and units may be one of multiple reductions. They should not be considered as the only area where reductions may occur.

Appendix A

West Metro Fire Rescue
Administrative Procedure # 7007

Outlier Procedure

Review Cycle: 3-Year Reviewed: 1/1/2022

Scope: All Uniformed Employees

Author: Fire Chief

CFAI Reference: 2C.5

Policy

1. The District has identified the following procedure for identifying and removing outlierresponses and incidents in accreditation performance tables.

Procedure

1. Exclusionary Criteria:
   - 1.1 Remove non-West Metro incidents (any incident number not 12 characters inlength)
   - 1.2 Remove responses with apparatus delays (e.g., weather, traffic, turnout, etc.)
   - 1.3 Remove non-emergent responses
     - 1.3.1 Officers determine whether to respond emergent
     - 1.3.2 Officers select a tab in CAD that designates an emergent response
     - 1.3.3 Final determination of response is determined by the officer in theincident report
     - 1.3.4 The record is reconciled when the report is locked
     - 1.3.5 Non-emergent responses for chiefs are not excluded due to being a singleperson resource

1.4 Remove responses where an apparatus was canceled prior to arrival

1.5 The ninetieth percentile is then applied to the remaining incidents

1.5.1 Ninetieth percentile is calculated based on linear interpolation of alarm handling, turnout, travel, and total response times for 1st unit and incidents where ERF is met

2. Incident categorization (NFIRS codes) for accreditation performance tables:

2.1 EMS (320-329)

2.2 Structure Fire (100-123)

2.3 Wildfire (140-143 and 170-173) Note: The District does not have any risks related to NFIRS codes 171 or 172

2.4 Haz-Mat (410-431 and 451)

2.5 Water/Technical Rescue (353-365)

2.6 Vehicle Extrication (352)

2.7 Any NFIRS code not included in items one through six are excluded from the performance tables

Don Lombardi, Fire Chief

Previous AP #	Date of Change	Description of Change
None	1.1.2022	New Procedure

Appendix B

Station 1

6401 West 14th Avenue (map)
West Metro Fire Rescue Station 1 is located along what is known as the Colfax Corridor, one block south of West Colfax Avenue near one of Colorado's landmark restaurants, Casa Bonita.

Response Area:
Station 1 provides services to the northeast portion of Lakewood. It is bordered to the east by Sheridan Boulevard and extends north to 26th Avenue. This area includes the following neighborhoods:

- Glen Creighton
- Grand View Acres
- Kawanee Gardens
- Lakewood Country Club
- Lakewood Gardens
- Norwood

Apparatus and Personnel:

- ALS engine with minimum staffing of 3 firefighters including 1 paramedic
- 2 ALS medic units, each with at least 1 paramedic
- Safety and Medical Unit with 2 paramedics

Station 2

1545 Robb Street (map)
West Metro Fire Rescue Station 2 is located one block north of Colfax and two blocks east of Simms on Robb Street.

Response Area:
Company 2 responds to the West Colfax Corridor from Garrison Street on the east, to Denver West Boulevard on the west, between 2nd and 26th Avenue. The area is diverse with retail shopping centers, light industry, single-family/multi-family housing and highways.
Neighborhoods in Station 2's response area include:

- Quailridge
- Applewood Glen
- Idlewild

Station 2 is the first-due station for Caridian BCT Labs, a large medical equipment manufacturing facility, and a long portion of the West loop of the RTD Fast Tracks light rail system. There are five elementary schools in Station 2's response area.

Apparatus and Personnel:

- ALS Engine with minimum of 3 firefighters, including at least 1 paramedic
- Tower Truck with 4 personnel including at least 1 paramedic
- HazMat1, Hazardous Materials Unit cross staffed with firefighters from Engine 2 and Tower 2

Station 3

95 Garrison Street (map)
West Metro Fire Rescue Station 3 is located five blocks south of 6th Avenue and four blocks north of Alameda Avenue at 1st Avenue and Garrison Street.

Response Area:
Station 3's response consists of the following areas:

- Between Colfax Avenue on the north
- Mississippi Avenue on the south
- Wadsworth Boulevard on the east
- Quail Street on the west

It includes the neighborhoods of Lakewood Heights, Lakewood Acres, Lakewood Village, Glennon Heights, Sun Valley Estates, Villa West, Belmar Gardens, West Alameda Heights, and Bonvue.

Crew:
Several members of the U.S. Armed Forces have been assigned to Station 3. When a member is deployed, fellow crew members proudly wear a Service Star Pin on their uniform to honor them. Military Service Star banners are also displayed in the front office window of the station during each time of deployment.

Apparatus and personnel:

- ALS Engine with minimum of 3 firefighters including at least 1 paramedic
- 2 ALS medic units, each with at least 1 paramedic

Station 4

13155 West Alameda Parkway (map)
West Metro Fire Rescue Station 4 is located on Green Mountain, just north of Green Mountain High School. Station 4 sits on the hill approximately one mile west of Union Boulevard and serves all subdivisions in the Green Mountain area. The station houses Engine 4, Medic 4, and Brush 4.

Response Area:
Station 4's response area is bordered by:

- 6th Avenue to the north
- Kipling Parkway to the east
- Jewell Avenue to the south
- C470 to the west

Apparatus and personnel:

- ALS engine with minimum of 3 firefighters including at least 1 paramedic

- ALS medic unit with at least 1 paramedic
- Assistant chief for District 2 (Shift Supervisor)
- Brush Truck, cross staffed with firefighters from engine and medic units.

Station 5

14055 West 20th Avenue (map)
West Metro Station 5 is located on the corner of Eldridge Street and 20th Avenue in the Applewood neighborhood. Station 5 houses West Metro's Hazardous Materials Team.

Response Area:
The primary response area for Station 5 is bordered by:

- Clear Creek on the north
- Colfax Avenue on the south
- Union Street on the east
- Quaker Street on the west

Apparatus and Personnel:

- ALS Engine with minimum of 3 firefighters including 1 paramedic
- ALS Medic unit with at least 1 paramedic
- Hazmat Unit crossed staffed with firefighters from Engine 5 and Medic 5.

Station 5's response area includes the National Renewable Energy Campus in Golden, portions of the Coors Facility, the Denver West Complex and the Rolling Hills Country Club. Station 5's response area also contains a large wildland-urban interface.

Station 6

15100 West Sixth Avenue (map)
West Metro Fire Rescue Station 6 is located south of 6th Avenue on the 6th Avenue service road directly west of Indiana Street. Station 6 is across the street from the Jefferson County Fairgrounds.

Response Area:

- Station 6's response area includes:
- Colorado Mills Mall
- Red Rocks Community College
- Three major highways: I-70, C-470, and 6th Avenue
- Wildland-urban interface properties

Apparatus and personnel:

- ALS engine with minimum staffing of 3 firefighters including 1 paramedic
- Brush Truck, cross staffed with firefighters from Engine 6.

Station 6's response area borders the city of Golden and includes a dual response area with the Pleasant View Fire Department. This station responds under mutual aid agreements with the Pleasant View and Golden Fire departments.

Station 7

6315 Mississippi Avenue (map)
West Metro Fire Rescue Station 7 is located on Mississippi Avenue between Pierce and Harlan streets. Station 7 opened in 2008 and replaced Old Station 7, the former Bancroft Fire Department Station 1 and Headquarters originally built in 1943. Station 7 houses the ARM Car (Advanced Resource Medic), which utilizes a West Metro paramedic working alongside a physician assistant to reduce the number of transports to busy hospitals by providing in-home care.

Response Area:
Station 7's response area is bordered by:

- City of Denver to the east on
- Sheridan Boulevard
- 1st Avenue to the north
- Carr Street to the west
- Jewel Avenue to the south

Within this response area is a broad spectrum of single- and multi-family residences, businesses and retail centers.

Apparatus and Personnel:

- ALS engine staffed with minimum of 3 firefighters, including at least 1 paramedic
- ALS medic unit with at least 1 paramedic
- ARM Car (Advanced Resource Medic), with 1 West Metro paramedic alongside a Physician Assistant.

Station 8

9001 West Jewell Avenue (map)
West Metro Fire Rescue Station 8 is located on West Jewell Avenue, between Wadsworth Boulevard to the east and Kipling Parkway to the west. The station is home to the West Metro Dive Team.

Response Area:
Station 8's response area includes the communities of:

- Carmody Estates
- Cloverdale West
- Green Gables
- Heritage West
- Lochwood
- Palomino Park
- Sun Valley Estates

Apparatus and Personnel:

- ALS engine with minimum of 3 firefighters, including at least 1 paramedic
- Tower truck with 4 firefighters including 1 paramedic
- ALS medic unit with at least 1 paramedic
- Dive van with boat and trailer cross staffed with firefighters from Engine 8 and Tower 8.

Station 9

101 Red Rocks Business Drive (map)

West Metro Fire Rescue Station 9 is located at the mouth of Bear Creek Canyon, on the northeast corner of C-470 and Morrison Road, directly north of Bear Creek Lake Park. Station 9 protects a majority of Jefferson County's pristine historical and recreational sites. It is home to West Metro's Wildland Team.

Response Area:

As part of the District's highway response, Station 9 covers portions of C-470, Highway 285, and Colorado Highway 8. The area includes a number of unique geologic and cultural centers:

- Bandimere Speedway
- Bear Creek Lake Park
- Dinosaur Ridge
- Historic Town of Morrison
- Jefferson County Open Space
- Red Rocks Amphitheatre

Apparatus and Personnel:

- ALS Engine with minimum of 4 firefighters including at least 1 paramedic
- Brush Truck cross staffed with firefighters from Engine 9
- Wildland Type 3 Engine, often deployed to incidents out of the District
- 2 UTVs for access to difficult terrain for wildland fire and rescue calls

Station 10

3535 South Kipling Street (map)

West Metro Fire Rescue Station 10 is located at South Kipling Street and West Hampden Avenue/Highway 285 and is home to West Metro's Technical Rescue Team. The station is next door to the West Metro Fire Rescue Training Center and the headquarters for Colorado Task Force 1, Urban Search and Rescue, under the Federal Emergency Management Agency (FEMA).

Response Area:

The station's primary response area consists of:

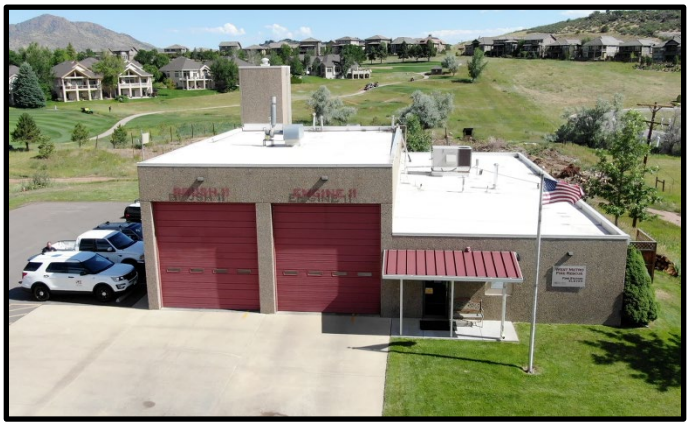
- Assisted-living facilities
- Single family and high-density residential
- Light-density commercial
- Numerous open spaces
- Wildland-urban interface areas along the Bear Creek drainage/open space

Apparatus and Personnel:

- Rescue truck/pumper with 4 firefighters, including at least 1 paramedic
- ALS medic unit with at least 1 paramedic
- Collapse truck cross staffed with Rescue 10 and Medic 10 firefighters
- Arson investigator
- Safety and Medical Unit with 1 paramedic

Station 11

15629 West Belleview Avenue (map)
West Metro Fire Rescue's Station 11 is located one mile west of C-470 on Belleview Avenue in Morrison. This wildland-urban interface station lies just off the ninth fairway of the Red Rocks Golf and Country Club. Animals such as the mule deer, elk, and red fox frequently visit the grounds.



Response Area:
Station 11's primary response area is C-470, Highway 285, and residential housing surrounded by open space and hiking trails. Primary response is provided to the local subdivisions of Willow Springs, Willow Brook, Friendly Hills, Foothills Green, and the south end of Morrison.

Apparatus and Personnel:

- ALS engine with minimum of 4 firefighters including at least 1 paramedic
- Type 3 Brush Truck cross staffed with firefighters from Engine 11

Station 12

9990 West Alamo Place (map)
West Metro Fire Rescue Station 12 is located north of Bowles Avenue at the southeast corner of Kipling and Alamo Place. Station 12 sits at one of the primary entrances to the Governor's Ranch Community and the Grant Ranch Development. It also provides service to the communities surrounding Southwest Plaza Mall.

Response Area:

- Station 12's primary response area is:
- Quincy Avenue to the north
- Coal Mine Avenue to the south
- Wadsworth Boulevard to the east
- Between Simms and Alkire to the west

Apparatus and Personnel:

- ALS engine with minimum of 3 firefighters, including at least 1 paramedic
- ALS medic with at least 1 paramedic.

Station 13

12613 West Indore Place (map)
West Metro Fire Rescue Station 13 is located one block north of the intersection of Shaffer Parkway and Ken Caryl Avenue.

Response Area:
Station 13 provides fire and emergency medical assistance for the Ken Caryl Ranch area and the C-470 corridor. The coverage area includes a great deal of wildland-urban interface.

Apparatus and Personnel:

- ALS engine with minimum of 3 firefighters, including at least 1 paramedic
- ALS medic unit with at least 1 paramedic
- Brush truck cross staffed with firefighters from Engine 13 and Medic 13

Station 14

10305 West Chatfield Avenue (map)
West Metro Fire Rescue Station 14 is in Ken Caryl Ranch near West Chatfield Avenue and South Kipling Street. It is home to West Metro's Technical Rescue Team.

Station 14 participates in many local neighborhood events throughout the year as well as regularly visiting schools and businesses, offering fire prevention and education to children and business leaders.

Response Area:
Company 14 responds to a large variety of 911 calls, including emergency medical, fire, and motor vehicle accidents on C-470 and the surrounding secondary roads. Firefighters are trained and prepared to respond to all technical rescues.

Apparatus and Personnel:

- Tower truck with minimum of 4 firefighters including at least 1 paramedic
- UTV and trailer, utilized for firefighters' access to difficult terrain.
- Air truck
- Assistant chief for District 3

Station 15

6220 North Roxborough Park Road (map)

West Metro Fire Rescue Station 15 is located at the southern end of Rampart Range Road in West Douglas County. It is the southern-most station in the West Metro Fire Protection District and is physically separated by several miles from the rest of the District.

Response Area:
Station 15's primary response area is the unique Roxborough community in west Douglas County. The Roxborough community is often seen as a microcosm of the state of Colorado featuring:

- Plains east of the hogback (mountains) with grassland and rolling hills
- Mountains west of the hogback with the foothills replete with steep terrain, forested areas, and beautiful red rock formations

Roxborough State Park is a mecca for local hikers, mountain bikers and nature enthusiasts.

Apparatus and Personnel:

- ALS engine equipped with 4-wheel drive and 3 firefighters and at least 1 paramedic
- ALS medic unit with at least 1 paramedic
- Brush truck cross staffed with Engine 15 and Medic 15 firefighters

Station 16

3880 Upham Street, Wheat Ridge (map)
West Metro Station 16 is located near 38th and Wadsworth next to Stevens Elementary and near Wheat Ridge Cyclery.

Response Area:
Station 16 houses an engine and an ambulance and provides service to the northeastern most portion of the District which includes areas of Wheat Ridge, Lakewood, Edgewater, Mountain View and Lakeside. Coverage borders Arvada Fire to the north along I-70 with Clear Creek as the dividing line and Denver Fire to the east along Sheridan. On the south, to 30th Avenue at Sheridan and to 22nd Avenue near Garrison Street. The response area includes Lutheran Medical Center, a revitalized 38th corridor between Wadsworth and Sheridan and borders the long-established Lakeside Amusement Park and the renewed Highlands neighborhood.

Apparatus and Personnel:

- ALS engine with minimum of 3 firefighters including 1 paramedic.
- ALS medic unit with at least 1 paramedic
- Assistant chief for District 1

Station 17

10901 West 38th Avenue, Wheat Ridge (map)

West Metro Station 17 is located on 38th Avenue in the Prospect Valley neighborhood and is home to the West Metro Swift Water Rescue Team.

Response Area
The primary response area for Station 17 is bordered by:

- Clear Creek on the north
- 26th Avenue on the south
- Garrison Street on the east
- Youngfield Street on the west

Station 17's response area includes Clear Creek, the Wheat Ridge Recreation Center, and the residential neighborhoods of Prospect Valley and Paramount Heights. The area also contains wildland-urban interface.

Apparatus and Personnel:

- ALS engine with minimum of 3 firefighters including 1 paramedic
- ALS medic unit with at least 1 paramedic
- Brush truck, cross staffed with firefighters from Engine 17
- Swift water rescue van, boat and trailer cross staffed with firefighters from Engine 17

Appendix C

EMS Incident Types (Situation Found) for determining EMS Risk Levels:

CAD Incident Type	Risk Category	CAD Incident Type	Risk Category
Medical 1	High	Delta Level Medical	Moderate
N-GM1	High	Charlie Level Medical	Moderate
Cardiac or Resp Arrest/Death	High	Sick Person(Specific Diagnosis)	Moderate
77D06	High	Traffic/Transportation Incidents	Moderate
77D04	High	Assault/Sex Assault/Stun Gun	Moderate
Stab/Gunshot/Penet Trauma	High	Psych/Behavior/Suicide Attempt	Moderate
Echo Level Medical	High	Falls	Moderate
Stroke (CVA)	High	N-M15	Moderate
77D05	High	Overdose/Poisoning (Ingestion)	Moderate
77D07	High	Unknown Problem (Man Down)	Moderate
N-GM2	High	Unconscious/Fainting (Near)	Moderate
77D08	High	Breathing Problems	Moderate
Choking	High	Traumatic Injuries (Specific)	Moderate
Drowning/Diving/SCUBA Accident	High	Hemorrhage/Lacerations	Moderate
Tech Rescue 1	High	Convulsions/Seizures	Moderate
2nd Alarm	High	Chest Pain (Non-Traumatic)	Moderate
Alpha Level Medical	Low	77D02	Moderate
Bravo Level Medical	Low	N-G4	Moderate
Omega Level Medical	Low	Diabetic Problems	Moderate
77B02	Low	N-M10	Moderate
N-G1	Low	77C02	Moderate
77B01	Low	Abdominal Pain/Problem	Moderate
Single Engine	Low	Back Pain (Non-Traumatic)	Moderate
Fire Basic 1	Low	Heart Problems/A.I.C.D	Moderate
N-M2	Low	Heat/Cold Exposure	Moderate
Citizen Assist/Service Call	Low	77C01	Moderate
Burns/Explosion	Low	Animal Bites/Attacks	Moderate
N-M1	Low	Allergies/Envenomation	Moderate
77B03	Low	N-M6	Moderate
Transfer/Inter-facility/Palliative	Low	Medical 3	Moderate
Blood Draw	Low	Pregnancy/Childbirth/Miscarriage	Moderate
Informational (Fire)	Low	77D03	Moderate
N-M13	Low	Medical 2	Moderate
N-M12	Low	Headache	Moderate
Fire Assist (1 unit)	Low	Eye Problems/Injuries	Moderate
Backcountry Rescue	Low	Alarms	Moderate

77B03IK	Low	78B01	Moderate
77O02	Low	Medic Arson 1	Moderate
Carbon Mon/Inhalation/HAZMAT	Low	N-G5	Moderate
Medical 6	Low	77D01	Moderate
77B01I	Low	77D02LT	Moderate
77O01	Low	78C02	Moderate
N-G6	Low	N-M5	Moderate
N-G3	Low	77D05I	Moderate
77A02	Low	77C01T	Moderate
77A01	Low	77D02I	Moderate
N-G38	Low	77D02HOP	Moderate
77B03LNT	Low	77C01I	Moderate
N-G24	Low	77D04HOP	Moderate
77B01N	Low	78D	Moderate
Hazmat 1	Low	Fuel Spill/Fuel Odor	Moderate
N-G2	Low	77D05MF	Moderate
Hazmat 2	Low	Electrical Hazard	Moderate
N-M9	Low	77C02N	Moderate
67B01	Low	77D03I	Moderate
77B01HOP	Low	Fire Basic 8	Moderate
MVA 1	Low	78C03	Moderate
77B01K	Low	Fire Basic 9	Moderate
77O01I	Low	N-G27	Moderate
77A02IK	Low	77C02I	Moderate
77B03HOP	Low	69D01E	Moderate
		N-G42	Moderate
		69D06	Moderate
		77C02T	Moderate
		69D03AO	Moderate
		N-G7	Moderate
		77D04IK	Moderate
		77D10	Moderate
		77D06HOP	Moderate
		77D08M	Moderate
		Aircraft Emergency	Moderate
		Fire Rescue 3	Moderate
		80C05	Moderate
		Extricate/Entrapped (No MVA)	Moderate
		Hazmat	Moderate
		Fire Basic 7	Moderate

West Metro Fire Protection District

Standard of Cover Signature Page

Adopted this 18th day of July, 2023.

Don Lombardi, Fire Chief