

# West Metro Fire Rescue

## Risk Assessment



**West Metro**  
**Fire Rescue**

2024

## Document Revalidation Log

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# Table of Contents

	Page
Community Risk Assessment.....	4
Structure Fire Risk Assessment.....	8
Emergency Medical Risk Assessment.....	12
Mutual and Automatic Aid.....	13
Special Events.....	16
Hazardous Materials Risk Assessment.....	17
Technical Rescue Risk Assessment.....	18
Water Rescue Risk Assessment .....	19
Wildfire Risk Assessment .....	20
WMFR Communities Risk 50 Hazard Ratings.....	21
Flood Risk .....	23
Supplemental Hazards .....	24
Active Threat.....	25
Hour of Day – Day of Week – Month of Call Study.....	26
Planning Zones.....	28
Critical Infrastructure and Key Resources.....	29
District Demographics.....	29
Station One Planning Zone .....	30
Station Two Planning Zone .....	34
Station Three Planning Zone.....	38
Denver Federal Center Special Planning Zone.....	42
Station Four Planning Zone.....	44
Station Five Planning Zone.....	48
National Renewable Energy Laboratory Special Planning Zone.....	51
Station Six Planning Zone.....	53

Station Seven Planning Zone .....	56
Station Eight Planning Zone .....	59
Station Nine Planning Zone.....	62
Station Ten Planning Zone .....	65
Station Eleven Planning Zone .....	70
Station Twelve Planning Zone.....	74
Station Thirteen Planning Zone .....	77
Station Fourteen Planning Zone .....	81
Meadowbrook Fairview Special Planning Zone.....	85
Station Fifteen Planning Zone.....	87
Denver Water Special Planning Zone.....	91
Station Sixteen Planning Zone .....	93
Station Seventeen Planning Zone .....	97
Open Space Special Planning Zone .....	101
Clear Creek Special Planning Zone.....	102
Table Mountain Special Planning Zone.....	104
Green Mountain Special Planning Zone .....	106
Bear Creek Lake Park Special Planning Zone .....	108
Hogback Special Planning Zone .....	110
Signature Page .....	112

## Community Risk Assessment

The West Metro Fire Protection District (District), also known as West Metro Fire Rescue (WMFR), Community Risk Assessment is an in-depth look at the community’s risks in terms of fire, EMS, and other emergencies. Figure 1 shows the total number of incidents per year and Table 1 shows a breakdown of incident types the District has experienced from 2019 to 2023.

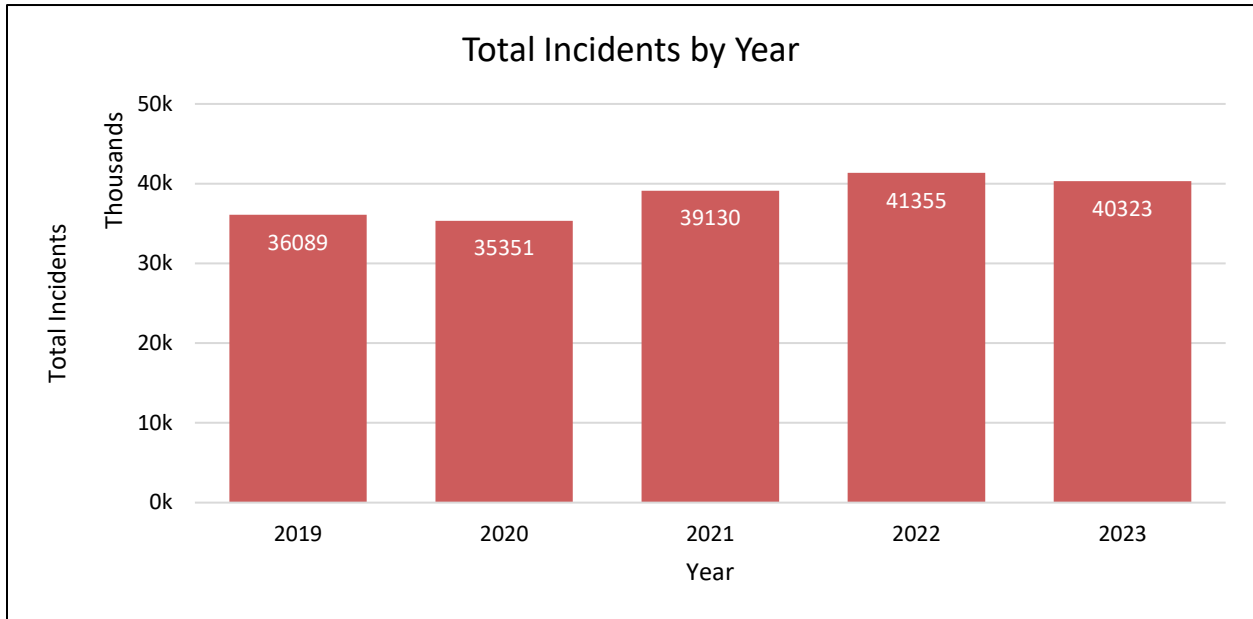


Figure 1

Five Year Incident Type Summary							
Year	Alarm	EMS	Fire	Public Assist	Special Ops	Other	Total
<b>2019</b>	3699	23652	478	2959	459	4840	<b>36087</b>
<b>2020</b>	3507	22830	629	2988	600	4915	<b>35469</b>
<b>2021</b>	3977	25280	648	3322	611	5601	<b>39439</b>
<b>2022</b>	4064	26527	525	3943	749	5547	<b>41355</b>
<b>2023</b>	3754	25850	430	4002	730	5557	<b>40323</b>
<b>Total</b>	<b>19001</b>	<b>124139</b>	<b>2710</b>	<b>17214</b>	<b>3149</b>	<b>26460</b>	<b>192673</b>
<b>Percent</b>	<b>9.86%</b>	<b>64.43%</b>	<b>1.41%</b>	<b>8.93%</b>	<b>1.63%</b>	<b>13.73%</b>	<b>100.00%</b>

Table 1

Figure 2 and Figure 3 provide a visual comparison of the frequency for each incident type in the past five years compared to 2023. Historical analysis is utilized to determine the most efficient deployment of resources, service level trends, and the need for contingent strategies to mitigate or manage community risk. The percentage of EMS calls in 2023 was 4.12% more than the five-year average from 2019 through 2023. Figure 2 shows incident types for the past five years and Figure 3 shows the same incident types for 2023.

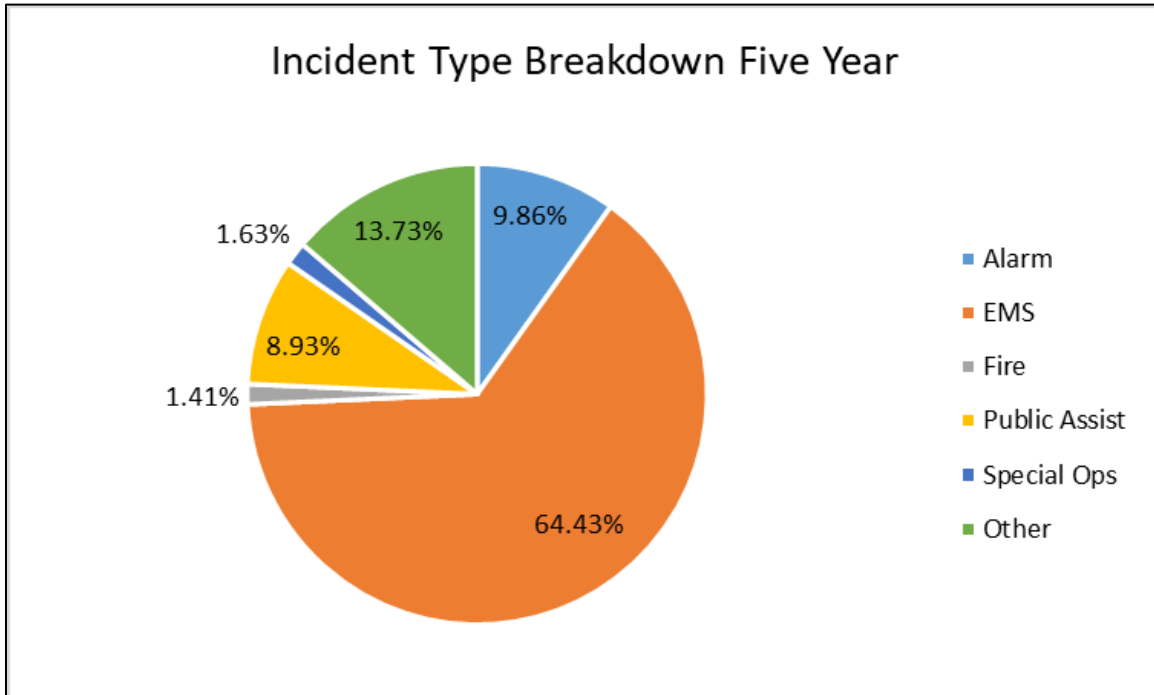


Figure 2

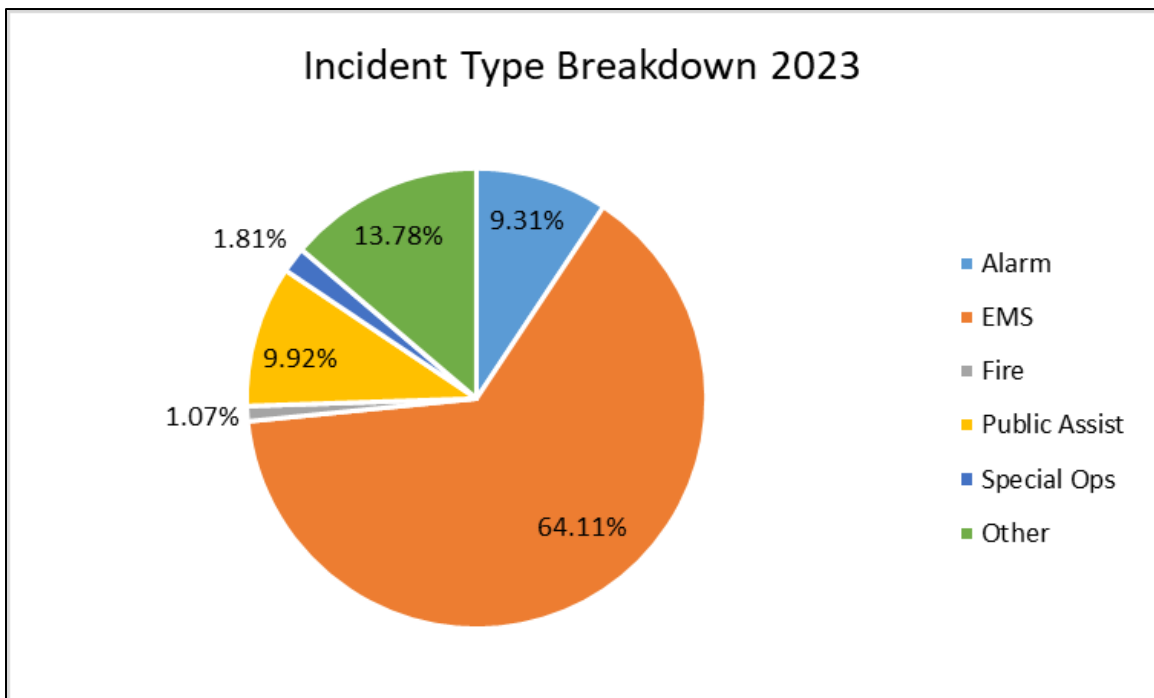


Figure 3

The factors that drive the community’s service needs were examined in a precise manner to determine the capabilities necessary to adequately address the risks that are present. The assessment of risk is critical to the determination of the number and placement of resources, and to mitigation efforts. Based upon the risk categories and the establishment of planning zones, the process can begin to build a system that will objectively determine the District’s capacity to provide service at the level the citizens expect.

An important part of the risk assessment is determining what the risks are as well as their likelihood and consequences. The District looked back over the past five years at the types of incidents and the number of times they occur. From this information the probability of an event was determined. Figure 4 is used to determine the distribution or concentration of the resources throughout the District to match the risk. The different quadrants require a different commitment of resources. Resources are distributed around the District (fire stations with individual engine companies) to intervene as individual stand-alone resources in low and moderate risk incidents. Additional resources (e.g., tower, rescue, brush, and medic units) are concentrated around the areas where the risk is higher or are in a position to complement individual engine companies in intervention. For instance, a single engine company can suppress a dumpster fire, but multiple resources are necessary to suppress a structure fire.

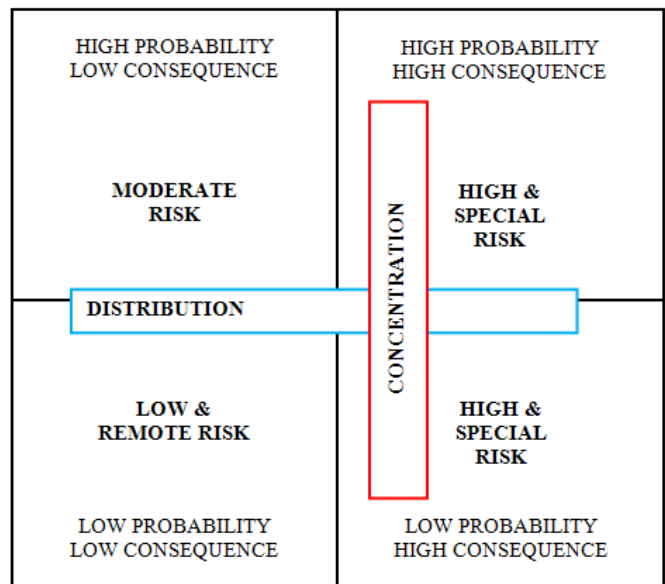


Figure 4

It is recognized that there are events beyond the scope of the incidents that occurred in the last five years. The District reviewed historical incidents, evaluated county/city disaster plans, and completed a comprehensive wildfire protection plan to ensure no possible event was overlooked. These events are evaluated in the Standard of Cover.

Each type of incident was also evaluated based on life safety (the amount of personnel and equipment required to rescue or protect the public and firefighters from life-threatening situations), economic impact (loss of properties, income or irreplaceable assets), and other impacts to the community (loss of historic buildings or community infrastructure). This evaluation determined the probability of the event. Table 2 is the result of this evaluation.

**Frequency -v- Risk 2019-2023 (Number of Incidents)**

Frequency -v- Risk 2019-2023 (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	31,078	Moderate Risk EMS	311 320-324	73,984	High Risk EMS	311 320-324	6,322
	Alarms	700-730 733-740 743-799	17,399	Unknown odor or Haz Mat investigation; no Haz Mat found	650 652 671	856	Multi-Family Structure Fire	111	201
	Outside smoke investigation	651 653	1,199	Natural gas or LPG leak	412	929			
	Carbon monoxide incident	424	638	Electrical hazard, short circuit, overheated motor, ballast, arcing	440-443 445	761			
	Outside rubbish, trash, or waste fire	151	563	Alarms in: DFC & NREL St. Anthony Hospital Lutheran Hospital	731-732 741-742 (Water Flows)	565			
	Elevator rescue	353	506	Structure fire involving an enclosed building	111	401			
	Passenger vehicle fire, other than motor home	131-135 138	289	Gasoline or other flammable liquid spill	411	210			
	Dumpster or other outside trash receptacle fire	154	261						
	Electrical hazard, lines down	370-372 444	251						
	Outside rubbish fire, not otherwise classified	150	160						
Low Frequency	Grass fire	143	148	Brush, or brush and grass mixture fire	142	80	Commercial Structure Fire	111	47
	Natural vegetation fire, not otherwise classified	140-141	140	Fire in a structure other than a building	112	79	Water or ice related rescue	360-365	42
	Cooking fire, confined to container	113	112	Vehicle Extrication	352	59	High angle rescue	356	4
	Chimney or flue fire, confined to chimney or flue	114	13	Oil or other combustible liquid spill	413	26	Chemical spill or leak	422	35
	Self-propelled recreational vehicle fire	136	5	Other hazardous condition or radioactive	400 430 431	26	Nursing/Assisted Living Fires	111	11
	Attempted burning or illegal action other	480-482	27	Chemical hazard (no spill or leak)	421	25	Toxic condition, other	420	8
	Vehicle Accident (no injury), other accident	460 463	16	Flamm/comb gas or liquid condition, other	410	25	Biological hazard, confirmed or suspected	451	4
	Recreational vehicle non-self-propelled fire	137	14	Refrigeration leak	423	8	Brush/Grass Fire > 100 acres	142	2
	Extrication of victims from equipment	357	5	Explosive, bomb removal (for bomb scare, use 721)	471	1	Confined space rescue	355	2
							Multi-Alarm Road or Freight Fire	132	1
							Mass Casualty Incidents	Any	1

Table 2



Table 3 illustrates all of the incidents to which the District has responded in the last five years:

Five Year Incident Type by Station																
Station	Alarm	Alarm %	EMS	EMS %	Fire	Fire %	Public Assist	Public Assist %	Hazmat	Hazmat %	Rescue	Rescue %	Other	Other %	Total	Total %
Station-01	2535	12.77%	21309	16.98%	675	21.99%	2307	14.26%	209	10.55%	113	14.91%	6117	23.57%	33265	17.21%
Station-02	1794	9.04%	10400	8.29%	256	8.34%	1366	8.44%	162	8.18%	82	10.82%	1887	7.27%	15947	8.25%
Station-03	1621	8.16%	10512	8.38%	210	6.84%	1430	8.84%	136	6.87%	72	9.50%	2148	8.28%	16129	8.34%
Station-04	1357	6.83%	8185	6.52%	167	5.44%	1005	6.21%	171	8.63%	91	12.01%	1216	4.68%	12192	6.31%
Station-05	622	3.13%	3604	2.87%	94	3.06%	441	2.73%	55	2.78%	37	4.88%	756	2.91%	5609	2.90%
Station-06	868	4.37%	2762	2.20%	86	2.80%	238	1.47%	58	2.93%	23	3.03%	548	2.11%	4583	2.37%
Station-07	1900	9.57%	11132	8.87%	250	8.15%	1441	8.91%	134	6.76%	68	8.97%	1697	6.54%	16622	8.60%
Station-08	1234	6.22%	9279	7.39%	194	6.32%	1238	7.65%	128	6.46%	38	5.01%	1197	4.61%	13308	6.89%
Station-09	297	1.50%	2675	2.13%	84	2.74%	184	1.14%	53	2.68%	28	3.69%	712	2.74%	4033	2.09%
Station-10	1933	9.74%	10044	8.00%	195	6.35%	1366	8.44%	124	6.26%	66	8.71%	1258	4.85%	14986	7.75%
Station-11	215	1.08%	1622	1.29%	53	1.73%	183	1.13%	52	2.62%	9	1.19%	305	1.18%	2439	1.26%
Station-12	1515	7.63%	8763	6.98%	175	5.70%	1143	7.07%	173	8.73%	25	3.30%	1503	5.79%	13297	6.88%
Station-13	894	4.50%	3394	2.70%	92	3.00%	416	2.57%	66	3.33%	19	2.51%	653	2.52%	5534	2.86%
Station-14	873	4.40%	3429	2.73%	79	2.57%	510	3.15%	116	5.86%	15	1.98%	761	2.93%	5783	2.99%
Station-15	268	1.35%	1390	1.11%	58	1.89%	155	0.96%	72	3.63%	10	1.32%	440	1.70%	2393	1.24%
Station-16	1417	7.14%	12540	9.99%	255	8.31%	1985	12.27%	196	9.89%	42	5.54%	3491	13.45%	19926	10.31%
Station-17	509	2.56%	4388	3.50%	134	4.37%	733	4.53%	74	3.74%	15	1.98%	991	3.82%	6844	3.54%
Station Undefined	3	0.02%	57	0.05%	12	0.39%	35	0.22%	2	0.10%	5	0.66%	276	1.06%	390	0.20%
<b>Total</b>	<b>19855</b>	<b>100.00%</b>	<b>125485</b>	<b>100.00%</b>	<b>3069</b>	<b>100.00%</b>	<b>16176</b>	<b>100.00%</b>	<b>1981</b>	<b>100.00%</b>	<b>758</b>	<b>100.00%</b>	<b>25956</b>	<b>100.00%</b>	<b>193280</b>	<b>100.00%</b>

Table 3

## Structure Fire Risk Assessment

The District’s structure fire risk is a diverse and complex component of the Standard of Cover. The District is a suburb of the Denver Metropolitan area. There is no traditional city center; however, Lakewood has developed an open-air shopping district in the Belmar neighborhood and Wheat Ridge has comparable plans to develop the Ridge at 38 Cultural District (described as a community hub with a small-town feel). Generally, West Metro’s exposures are distributed throughout the District in different cities, towns, metropolitan centers, communities, developments, and open spaces. The fire district overlays other local governments, providing a “spread-out” nature of structure fire risks.

One consequence of the spread-out nature of the District is a growth pattern, over time, that moves from Denver to the west and southwest. This places older communities along the northeast and newer communities along the west and southwest portions of the District. This is reflected in higher incident numbers in structure fires and EMS incidents in the northeastern sections. These communities tend to have older structures and low socioeconomic areas.

In 2018, the District implemented the use of MobileEyes® fire protection software. MobileEyes provides a hazard assessment risk profile, which builds a numerical value for each commercial occupancy. Table 4 illustrates the assessment values used. The scoring is based on water supply, construction type, occupancy classification, building height, building size, occupancy load, sprinklers, fire alarm system, and onsite hazardous materials.

Occupancies are divided into high hazard, moderate hazard, and low hazard. The hazard assessment tool is utilized during the permitting process, capturing any new construction or occupancy changes throughout the District. The high-hazard occupancies will be inspected each year. Moderate hazard occupancies will be inspected every second year. Low-hazard occupancies will be inspected every third year. The majority of occupancies fall into the moderate category. The District has designated, through the Life Safety Division, three exceptions to the above criteria: the Denver Federal Center (contractual requirement), the National Renewable Energy Lab (increased hazardous materials permitting requirement and contract requirement), and schools. Each is inspected annually by a certified inspector regardless of the hazard assessment tool score applied to the occupancy. Table 4 outlines the hazard rating system from MobileEyes.

Category Description	Hazard Description	Hazard Points
Water Supply	Hydrants are available within 1,000 feet	0
Water Supply	Hydrants are not available within 1,000 feet	10
Predominant Construction Type	Type I - Fire Resistive	0
Predominant Construction Type	Type II - Non-Combustible	1
Predominant Construction Type	Type III - Ordinary	2
Predominant Construction Type	Type IV - Heavy Timber	3
Predominant Construction Type	Type V - Wood Frame	4
Occupancy Classification	Assembly	6
Occupancy Classification	Business	4
Occupancy Classification	Factory Industrial	10
Occupancy Classification	High Hazard	20
Occupancy Classification	Institutional	8
Occupancy Classification	Mercantile	4
Occupancy Classification	Residential	6
Occupancy Classification	Storage/Miscellaneous	2
Number of Above-Grade Floors	1-2 floors above grade	0
Number of Above-Grade Floors	3-6 floors above grade	2
Number of Above-Grade Floors	More than 6 floors above grade	3
Presence of Below-Grade Floors	There are no floors below grade	0
Presence of Below-Grade Floors	There is at least 1 floor below grade	3
Total Square Footage	1-7,500 square feet	0
Total Square Footage	7,501-15,000 square feet	2
Total Square Footage	15,001-25,000 square feet	3
Total Square Footage	25,001-40,000 square feet	4
Total Square Footage	More than 40,000 square feet	6
Occupancy Load	0-10 people	1
Occupancy Load	11-50 people	2
Occupancy Load	51-100 people	3
Occupancy Load	101-300 people	4
Occupancy Load	301-2,000 people	5
Occupancy Load	2,001-10,000 people	7
Occupancy Load	More than 10,000 people	10
Automatic Sprinkler Systems	Fully sprinklered	0
Automatic Sprinkler Systems	Partially sprinklered	5
Automatic Sprinkler Systems	Non-sprinklered	10

Fire Alarm Systems	A monitored fire alarm system is installed	0
Fire Alarm Systems	A local fire alarm system is installed	3
Fire Alarm Systems	No fire alarm system is installed	5
Hazardous Materials	No hazardous materials are present	0
Hazardous Materials	Hazardous materials are present	10

Table 4

Table 5 illustrates, with heat map formatting, the types of fires the District has responded to in the previous five years. These characterize the types of incidents the District can expect in the future and are a reflection of risk exposure. Structure fires involving an enclosed building are the most common types of fires and these incidents are reflective of the services the District provides.

Fire Incidents Heatmap by Planning Zone 2019-2023																		
Incident Type   Station	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Authorized controlled burning (631)	9	3	3	5	1	2	2	5			1	2		1		6	2	42
Brush or brush-and-grass mixture fire (142)	2	6	5	6	3	1	5	2	1	3			1	1	2	2	2	42
Building fire (111)	54	17	34	21	15	5	29	16	4	23	9	31	11	8	8	25	11	321
Camper or recreational vehicle (RV) fire (137)		3	1	1				2		1	1	1						10
Chimney or flue fire, confined to chimney or flue (114)			3	1			1	1			1		1					8
Cooking fire, confined to container (113)	13	6	1	5		2	5	3	1	7		1	3	3	2	8	2	62
Cultivated vegetation, crop fire, other (170)	2						1											3
Dumpster or other outside trash receptacle fire (154)	59	19	6	7	2	4	9	10		13	1	4	2	4	1	15	4	160
Fire in mobile home used as fixed residence (121)	5																	5
Fire in mobile prop. used as a fixed struc., other (120)	1																	1
Fire in motor home, camper, recreational vehicle (122)	1								1									2
Fire, other (100)	8	7	2	1		1	2	1		1		1				1	1	26
Fires in structure other than in a building (112)	14	1	2	4			6		2	2		3	2	2	1	5	4	48
Forest, woods or wildland fire (141)						1			4		2		1	1	3			12
Fuel burner/boiler malfunction, fire confined (116)	1			2		1										1		5
Grass fire (143)	10	9	3	8	4	2	6	1	7	7			8	2	2	3	3	75
Mobile property (vehicle) fire, other (130)	2	1		2			1					1						7
Natural vegetation fire, other (140)	9	9	7	12	2	1	6	8	1	9	2	5	2	1	2	4	4	84
Off-road vehicle or heavy equipment fire (138)									1		1			1				3
Outside equipment fire (162)	3	5	3	1				4				3	2			3	2	26



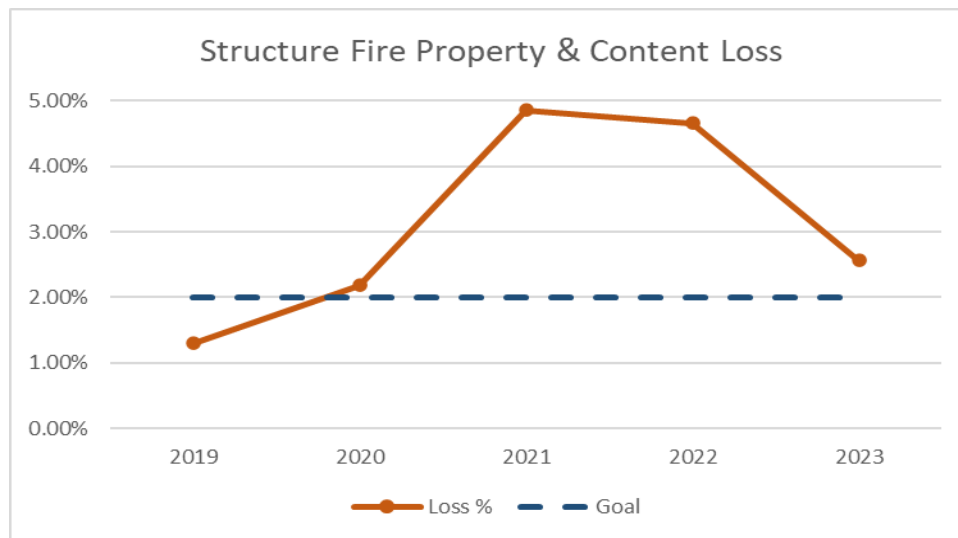


Figure 5

### Emergency Medical Risk Assessment

From 2019 to 2023, emergency medical services (EMS) incidents were 64.43% of all responses. The District is committed to a minimum standard of advanced life support (ALS) on all first in apparatus. The District has successfully delivered this ALS response model providing the highest level of prehospital care in the shortest amount of time, believing that this model best serves our community. To facilitate ALS care, the District maintains a minimum of 239 paramedics and 14 medic units.

The majority of EMS incidents are in the northeast portions of the District. This area has the highest concentration of nursing facilities, oldest demographics, and neighborhoods with the lowest socioeconomic status in the District. All medic units are minimally staffed with two dual-role firefighters; one of which must be a paramedic.

The statistics shown in Table 7, below, represent the District’s EMS responses for 2019 to 2023. 69.67% of patients encountered were transported via District medic units. In 2018, the District initiated an Advanced Resource Medic (ARM) program that pairs an advanced practice paramedic with a physician assistant or nurse practitioner. Initially, the ARM was only available during normal business hours. This program was expanded to 24/7 coverage as of January 1, 2021. The mid-level provider (e.g., nurse practitioner or physician assistant) is assigned to the unit from 0800-1800 each day and is available via telehealth after business hours. The goal of the ARM program is to reduce emergency room visits by initiating care outside the hospital environment.

EMS Incidents 2019 - 2023	2019	*2020	2021	2022	2023
Total EMS Incidents	23,652	22,830	25,280	26,527	25,850
Patient Transports	16,446	15,894	17,555	18,726	18,653
% Transports	69.53%	69.62%	66.44%	70.60%	72.16%
Emergent Transports	1,244	1,436	1,706	2,388	3,014
% Transports Emergent	7.56%	9.03%	9.72%	9.03%	11.66%

Table 7

A hospital alert occurs when a paramedic notifies a receiving hospital that a patient needs specialized services, such as when the patient is having a stroke or heart attack. Table 8 shows the pre-hospital alerts from 2019 through 2023.

<b>EMS PRE-HOSPITAL ALERTS</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
Sepsis Notification	59	70	141	320	521
STEMI (ST Elevation Myocardial Infarction) Alert	58	79	105	101	72
Stroke Alert	114	234	251	342	359
Trauma Alert	51	69	80	101	98
<b>Total Alerts</b>	<b>282</b>	<b>452</b>	<b>577</b>	<b>858</b>	<b>1,050</b>

Table 8

For cardiac arrest patients, ROSC refers to “return of spontaneous circulation.” Early CPR, early access to the 911 system, and rapid advanced life support all improve the probability of ROSC occurring. The Cardiac Arrest Registry to Enhance Survival (CARES) data helps communities measure performance and identify how to improve cardiac arrest survival rates. Table 9 shows the cardiac arrest statistics from July 29, 2019, through 2023.

<b>CARDIAC ARREST RETURN OF SPONTANEOUS CIRCULATION</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>
No Return of Spontaneous Circulation	162	193	193	282	251
Yes, Prior to ED Arrival Only	48	60	88	86	84
Yes, at Arrival at the ED	32	7	8	10	5
Yes, Sustained for 20 Consecutive Minutes	8	11	13	9	7
<b>Total Arrests</b>	<b>250</b>	<b>271</b>	<b>302</b>	<b>387</b>	<b>347</b>

Table 9

The highest EMS risk is a mass casualty incident (MCI). An MCI is defined as an EMS event where the demand for care exceeds the number of resources available. The designation of an MCI results in an additional (beyond the initial response) five medic units, two engines, a district chief, and a safety and medical (SaM) officer dispatched to the incident. In 2019, one MCI on Interstate 70 involved 27 vehicles and resulted in 4 deaths. Other past events, such as riots and a severe thunderstorm during a concert at Red Rocks Amphitheater, illustrate the possibility of future catastrophic MCI events within the District.

## Mutual Aid

Mutual aid EMS incidents accounted for 696 EMS transports from 2019 through 2023. The City and County of Denver (Denver Health) accounted for the majority of requests prior to 2019 because the District had a mutual aid agreement with the city of Denver to assist Denver Health in covering the western edge of the City and County of Denver. This agreement was modified in

mid-2018 limiting the amount of mutual aid provided. Table 10 provides a breakdown of EMS mutual aid transports provided to outside agencies.

<b>EMS Transports Mutual Aid Given 2019 - 2023</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Total</b>
Arvada	12	0	0	7	8	<b>27</b>
Denver Health (functional change in 2019)	18	3	14	4	2	<b>41</b>
Fairmount	0	0	2	0	0	<b>2</b>
Golden	19	7	7	0	0	<b>33</b>
Inter-Canyon	9	0	1	0	0	<b>10</b>
Other	1	0	7	1	1	<b>10</b>
Pleasant View	2	6	6	1	1	<b>16</b>
South Metro	22	0	0	8	15	<b>45</b>
<b>Total</b>	<b>83</b>	<b>16</b>	<b>37</b>	<b>21</b>	<b>27</b>	<b>184</b>

Table 10

## Automatic Aid

The District entered into two automatic aid agreements in 2019. The first, in January, with South Metro Fire Rescue (South Metro), and the second, in July, with the Arvada Fire Protection District (Arvada). The goal of these agreements is to provide more consistent emergency response coverage by dispatching the closest appropriate unit regardless of the location (or agency) from which the unit is responding. The agreement with South Metro remains in place as originally written while the agreement with Arvada was revised in 2021 due to a large disparity in District automatic aid provided versus automatic aid received.

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 (a special planning zone). Units responding into West Metro’s area and vice versa are dispatched by station location as the District currently lacks a direct CAD to CAD connection with South Metro.

Arvada and West Metro operated under a full automatic aid agreement until December of 2021 when the agreement was modified in order to limit automatic aid to critical EMS calls, structure fires, and wildland fires only. The agreement was amended in order to keep District resources in their respective response areas. The District has realized a substantial reduction in automatic aid given due to this change. The District and Arvada utilize automatic vehicle locator (AVL) information to dispatch the closest available resource because of a shared CAD system and common communication center.

Table 11 compares the automatic aid given versus automatic aid received for the District between both Arvada and South Metro. Table 12 compares the number of times when

automatic aid incidents resulted in patient transports by District resources. Only three years' data is provided because the agreements were not in place prior to 2019.

<b>Automatic Aid 2019-2022</b>	<b>Given</b>	<b>Received</b>
Arvada Fire Protection District	1,934	1,163
South Metro Fire Rescue	1,604	769

Table 11

<b>EMS Transports - Auto Aid Given</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Total</b>
Arvada Fire Protection District	89	133	688	13	6	929
South Metro Fire Rescue	190	82	231	104	93	700
<b>Total</b>	<b>279</b>	<b>215</b>	<b>919</b>	<b>117</b>	<b>99</b>	<b>1,629</b>

Table 12



## Special Events

Historically, the District had many special events scheduled each year at Red Rocks Amphitheater and throughout the District. Red Rocks Amphitheater hosted 179 events in 2019 with a capacity of 9,500 spectators at each event. Mile High Nationals is a drag racing event at Bandimere Speedway and can draw as many as 50,000 people. The speedway also hosts multiple smaller events each year. Thunder Valley is a motocross track that hosts the annual Thunder Valley Nationals, which can draw over 10,000 spectators. Other special events include rodeos, community fairs, and athletic events, all staffed with dedicated special events team personnel utilizing utility terrain vehicles and/or medic units to provide rapid care.

The District saw a drastic reduction in special event frequency in 2020 for two key reasons. First, the District did not renew the Red Rocks Amphitheater coverage contract for 2020. This resulted in only one Red Rocks event being covered in 2020. Second, COVID-19 resulted in all but one special event being canceled. The combined outcome was the District only covering two special events in 2020 and one in 2021 - compared to 190 in 2019. Because the Red Rocks contract is now covered by a third party, the District is expecting to cover less than 10 special events each year moving forward.

## Hazardous Materials Risk Assessment

The potential for a hazardous materials release includes illegal dumping, intentional release, terrorist acts, facility releases, and transportation accidents. The illegal dumping, intentional release, and terrorist acts are examples of incidents that can occur anywhere in the District. A facility release and a transportation accident can be anticipated based on known locations and the types of materials in these exposures.

There are eight general hazardous materials facility areas of concern: The Denver Federal Center (DFC), National Renewable Energy Lab (NREL), Terumo Lab, Foothills Water Treatment Plant, Industrial Laboratories, Shaffer Parkway/Bradford Road Industrial Park, Suburban Propane, and Johns Manville research and development facility. Of these eight areas, the DFC and NREL have the highest exposures. The DFC has the highest potential for a catastrophic release based on the materials on site (federal research facilities and a nuclear reactor) with the potential to affect surrounding exposures (residential; a hospital; and numerous commercial occupancies including hotels, restaurants, schools, and office buildings) on all four sides of the facility.

There are additional hazardous materials exposures scattered throughout the District including, hospitals, high schools, water treatment plants, correctional facilities, paint/hardware stores, big box home improvement stores, swimming pools, and gasoline stations/car repair facilities. There are 270 facilities that have reported SARA Title III and are monitored by the District to ensure compliance.

The majority of hazardous materials incidents are natural gas leaks. There are numerous natural gas pipelines running through the District. Table 13 shows the occurrence of hazardous materials incidents throughout the District.

Hazardous Materials Incidents by Planning Zone																		
Incident Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Biological hazard, confirmed or suspected (451)	0	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4
Carbon monoxide incident (424)	65	44	44	64	14	17	49	66	12	56	11	52	20	42	18	81	22	677
Chemical hazard (no spill or leak) (421)	2	3	3	2	4	1	2	3	0	1	0	1	1	2	1	0	1	27
Chemical spill or leak (422)	1	4	4	3	3	1	1	0	1	3	0	3	4	2	1	6	0	37
Combustible/flammable gas/liquid condition, other (410)	1	2	3	2	0	1	2	4	1	2	0	1	0	2	2	2	1	26
Gas leak (natural gas or LPG) (412)	116	68	71	88	30	21	63	49	26	50	30	113	35	76	54	101	34	1025
Gasoline or other flammable liquid spill (411)	22	29	19	18	8	4	21	12	6	11	3	14	12	8	3	16	15	221
Oil or other combustible liquid spill (413)	3	4	1	3	0	0	1	2	0	3	1	2	2	1	0	2	3	28
Refrigeration leak (423)	1	0	0	3	0	0	0	0	1	0	0	0	1	0	0	2	1	9
Toxic condition, other (420)	1	3	0	1	0	0	0	0	1	0	0	0	0	2	1	0	0	9
<b>Total for Planning Zone</b>	<b>212</b>	<b>158</b>	<b>146</b>	<b>184</b>	<b>59</b>	<b>45</b>	<b>139</b>	<b>137</b>	<b>48</b>	<b>126</b>	<b>45</b>	<b>187</b>	<b>75</b>	<b>135</b>	<b>80</b>	<b>210</b>	<b>77</b>	<b>2063</b>
<b>Percentage</b>	<b>10.28%</b>	<b>7.66%</b>	<b>7.08%</b>	<b>8.92%</b>	<b>2.86%</b>	<b>2.18%</b>	<b>6.74%</b>	<b>6.64%</b>	<b>2.33%</b>	<b>6.11%</b>	<b>2.18%</b>	<b>9.06%</b>	<b>3.64%</b>	<b>6.54%</b>	<b>3.88%</b>	<b>10.18%</b>	<b>3.73%</b>	<b>100.00%</b>

Table 13

Hazardous materials are routinely transported throughout the District on several highways such as I-70, C-470, US Highway 285, and US Highway 6. I-70, C-470, and US Highway 285 are major transportation routes and are designated hazardous materials routes. US Highway 6 is a major route into the Denver city center. Hazardous materials may be transported on any road while being transported to local businesses.

The District transfers clean-up to the appropriate authority having jurisdiction (AHJ) when appropriate and manages hazardous material spills for areas where the District is the AHJ.

## Technical Rescue Risk Assessment

The District is comprised of many diverse technical rescue exposures. These exposures include rope high/low angle rescues, communication tower rescues, passenger and commercial vehicle extrications, long distance litter carries, confined space rescues, structure collapse rescues, trench/below grade rescues, and light rail rescues.

The District includes several recreational areas such as Red Rocks Park and Ken-Caryl Valley, which have large rock formations and mountainous terrain. This requires the District to employ mountain rescue techniques when rescuing injured parties from this environment. The District averages approximately six high-angle rescues per year with the majority in the Red Rocks Park area. Areas such as Green Mountain, the Hogback, Ken Caryl Valley, Willow Springs, and Bear Creek Lake Park are popular outdoor recreation areas resulting in numerous ‘backcountry’ rescues each year.

The western edge of the District abuts the foothills of the Rocky Mountains. There are three canyons that terminate along this border: Bear Creek, Turkey Creek, and Waterton Canyon. Each has steep canyon walls and roadways running through them. Through these foothills are many trail systems that attract hikers and mountain bikers, which increase the chances of falls and injuries on non-vehicle-accessible trails.

The District includes roadways that are above grade, such as US Highway 285 which runs through Turkey Creek Canyon. The road climbs quickly and has steep grades that fall off the roadway into the bottom of the canyon. This area is known for vehicles sliding off the road down into the canyon, necessitating vehicle extrication and technical rescue techniques.

The majority of technical rescue incidents are vehicle extrications. Extrications occur throughout the District on any type of roadway in both passenger and commercial vehicles. Vehicle extrications are analyzed separately in the District Standards of Cover.

Additional hazards include confined space incidents in storm sewers and industrial areas; structural collapse due to tornado, wind, snow, vehicle impact, or during construction; pre-cast concrete tilt-up wall failure; trench rescue; and heavy machinery incidents. Table 14 shows the occurrence of technical rescue incidents throughout the District.

Technical Rescue Incidents by Planning Zone																		
Incident Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Confined space rescue (355)	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
Extrication of victim(s) from building/structure (351)	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Extrication of victim(s) from machinery (357)	1	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	5
Extrication of victim(s) from vehicle (352)	7	7	9	2	0	1	4	9	3	6	1	5	2	4	1	3	2	66
Extrication, rescue, other (350)	6	4	2	4	0	2	4	1	3	2	0	2	4	3	3	5	0	45
High-angle rescue (356)	1	0	0	0	1	1	0	0	3	5	2	0	0	0	0	0	1	14
Removal of victim(s) from stalled elevator (353)	113	69	44	73	33	18	43	10	5	42	2	18	11	3	4	32	8	528
Trench/below-grade rescue (354)	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
<b>Total for Planning zone</b>	<b>128</b>	<b>82</b>	<b>55</b>	<b>81</b>	<b>34</b>	<b>22</b>	<b>52</b>	<b>21</b>	<b>14</b>	<b>57</b>	<b>5</b>	<b>25</b>	<b>17</b>	<b>10</b>	<b>8</b>	<b>40</b>	<b>11</b>	<b>662</b>
<b>Percentage</b>	<b>19.34%</b>	<b>12.39%</b>	<b>8.31%</b>	<b>12.24%</b>	<b>5.14%</b>	<b>3.32%</b>	<b>7.85%</b>	<b>3.17%</b>	<b>2.11%</b>	<b>8.61%</b>	<b>0.76%</b>	<b>3.78%</b>	<b>2.57%</b>	<b>1.51%</b>	<b>1.21%</b>	<b>6.04%</b>	<b>1.66%</b>	<b>100.00%</b>

Table 14

## Water Rescue Risk Assessment

The District has many ponds, lakes, streams, and retention ponds/drainages. Each body of water is prone to ice rescue and drowning. There are three lakes in Bear Creek Lake Park that are used for recreation and attract swimming, fishing (belly boats), kayaking, paddle boarding, and other lightweight water recreation.

Swift water rescue is a threat during the spring run-off in the Bear Creek, Clear Creek, and Waterton Canyon areas. Bear Creek is a small creek that can flow strongly during the spring months. Waterton Canyon is the drainage for the South Platte River. During the spring run-off, South Platte waters are generally controlled to keep upstream reservoirs full. However, the river can run fairly strong all year long. Other creeks may flow strongly during wet weather. September 2013 saw record flooding in the District and throughout the northern part of the state.

The District was an agricultural area prior to the construction of homes and businesses. During this period, many ditches were dug to move water into ponds for watering crops. These systems remain largely intact. They are maintained and can flow water periodically. This increases the exposure to drowning. Table 15 shows the occurrence of water rescue incidents throughout the District.

Technical Water Rescue Incidents by Planning Zone																		
Incident Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Ice rescue (362)	0	0	2	1	0	0	2	4	0	1	1	0	0	1	1	0	0	13
Swift water rescue (363)	0	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	2	6
Swimming/recreational water areas rescue (361)	0	0	0	1	0	0	0	1	5	1	0	0	2	7	0	0	1	18
Water & ice-related rescue, other (360)	1	0	1	0	0	0	1	10	3	1	0	0	1	1	0	1	0	20
Watercraft rescue (365)	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0	0	0	6
<b>Grand Total</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>16</b>	<b>11</b>	<b>3</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>13</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>63</b>
<b>Percentage</b>	<b>1.59%</b>	<b>1.59%</b>	<b>4.76%</b>	<b>3.17%</b>	<b>0.00%</b>	<b>0.00%</b>	<b>4.76%</b>	<b>25.40%</b>	<b>17.46%</b>	<b>4.76%</b>	<b>1.59%</b>	<b>0.00%</b>	<b>4.76%</b>	<b>20.63%</b>	<b>3.17%</b>	<b>1.59%</b>	<b>4.76%</b>	<b>100.00%</b>

Table 15

## Wildfire Risk Assessment

The threat of wildfire is an ongoing concern to the members and citizens of the District. The District and surrounding jurisdictions are historically prone to wildfires. Since 2012, Colorado has experienced numerous catastrophic wildfires with ever-increasing destructiveness. The most destructive fire in Colorado history, the Marshall Fire in Boulder County, on December 30, 2021, destroyed 1,084 homes and burned more than 6,000 acres in less than 24 hours. This fire occurred three days after the Oak Fire (in District Planning Zone 13) that burned 152 acres; forcing the evacuation of an apartment complex and the initiation of the evacuation of Ken Caryl Valley.

The forests and shrublands of the Colorado Front Range are products of a mixed fire regime. Fire return intervals vary from less than 15 to over 40 years (over 100 years in some forests of this region) with fire intensity being similarly variable from low-intensity surface fires to crown fires. Because of development into the wildland-urban interface, extended drought periods, and extreme weather events, the Front Range has experienced four of the five most destructive fires in Colorado's history. These fires have occurred in areas with very similar characteristics and risks found within District boundaries.

Dried grass and weeds are prevalent throughout the District and are a serious fuel concern during spring, late summer, and fall months. These flashy fuels are highly flammable and cause fire to spread rapidly. Firebrands carried by the wind from a distant wildfire could ignite a spot fire in any community. Recent historical fires show that typical non-combustible and fire-resistant commercial properties are not exempt.

Natural factors that are present in the District include:

- The District is located along the Front Range urban corridor of Colorado, which has many of the same weather characteristics of typical "high desert" communities. These characteristics include low rainfall amounts with prolonged drought conditions, dramatic diurnal temperature changes, low relative humidity, and dramatic weather pattern changes in any given 24-hour period.
- Weather events such as severe thunderstorms, microbursts, high winds, and abnormally high cloud-to-ground lightning strike events are common throughout a typical year. Fuel modeling varies widely from natural grasses, oak brush, ponderosa pine, douglas fir, pinion, and juniper stands.
- Fuel "continuity" in many of the District's open spaces readily lends itself to rapid-fire growth and spread. Of particular concern are areas with ladder fuel continuity (surface to aerial fuel models). These fires typically start in grass models, transfer to brush models, and finally spread to tree models. Once a wildfire has spread to aerial fuels the potential for rapidly spreading and catastrophic fires is greatly increased.

The District has a District-specific Community Wildfire Protection Plan (CWPP) that was updated in May 2021. There are two distinct assessment areas of wildfire risk in the District: multiple green belts throughout the District with the majority in the Station 4 and 10 Planning Zones and

wildfire urban interface communities and open space areas along the western and southern edge of the District. These areas are distributed throughout Station Planning Zones 4, 5, 6, 9, 11, 13, 15, and 17. In order to more clearly identify areas with unique risk profiles and poor access, the District has developed four special planning zones covering urban interface areas. These special planning zones are South Table Mountain, Clear Creek, Green Mountain, Bear Creek Lake Park, and Hogback. Table 16 lists the community risk ratings and scores from the District’s CWPP.

<b>West Metro Fire Rescue Communities Risk 50 Hazard Ratings</b>		
<b>Community Name</b>	<b>Score</b>	<b>Adjective Rating</b>
Clear Creek Corridor - North	22	Moderate
Clear Creek Corridor – South	28	High
South Table Mountain	28	High
Green Mountain Park	28	High
Green Mountain Ravines	25	High
North Morrison/Red Rocks	23	Moderate
Morrison Town Center	35	Very High
South Morrison	31	Very High
Willow Springs/North Ranch	33	Very High
Ken Caryl Valley	19	Moderate
Roxborough Ravena	35	Very High
Roxborough Village	16	Moderate

Rating Categories: Low < 15; Moderate 15-23; High 24-29; Very High > 29.

Table 16

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 Roxborough homeowner’s association was able to secure grants in order to develop a CWPP separately but complimentary to the Douglas County Plan. 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. The document specifically outlines public outreach, building improvements, defensible space, access & egress, and shaded fuel breaks as recommended actions to take to help mitigate wildfire risk.

Ken Caryl Ranch has a wildfire mitigation plan and a Firewise Committee but does not have a community-specific CWPP. Willow Springs and Morrison do not currently have active committees dedicated to wildfire preparedness and also lack community-specific CWPPs.

In order to assist the public, cities, towns, communities, developments, and organizations in planning, 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.

Because the District has seen an increase in the severity of wildfire incidents within the District, a full-time wildland coordinator position was established in 2021. This position reports to the division chief of special operations and was put in place to enhance wildfire mitigation, community engagement, deployment management, training, and response oversight.

Wildland Fire Incidents 2019-2023	2019	2020	2021	2022	2023	Total	Percent
Brush or brush-and-grass mixture fire (142)	20	32	22	37	27	138	32.94%
Cultivated vegetation, crop fire, other (170)	2	6	2	4	6	20	4.77%
Forest, woods or wildland fire (141)	8	24	21	22	12	87	20.76%
Grass fire (143)	32	52	43	28	15	170	40.57%
Natural vegetation fire, other (140)	0	0	1	1	2	4	0.95%
<b>Total</b>	<b>62</b>	<b>114</b>	<b>89</b>	<b>92</b>	<b>62</b>	<b>419</b>	<b>100.00%</b>

Table 17

Table 17 reflects the number of wildland incidents, 2019-2023. Figure 6 illustrates that the fires within the District are not just a summer phenomenon. The Murphy Gulch fire was the largest wildfire within the District in recent history, burning 3,300 acres along the western edge of Ken-Caryl Ranch in September 1978. Other significant wildfires were the Green Mountain Fire in August 2008 (consumed 363 acres damaging two homes), the Rooney Fire in December 1996 (consumed 200 acres), the Bear Creek Fire (consumed 535 acres) in February 2021, and the Oak Fire (consumed 153 acres) in December 2021.

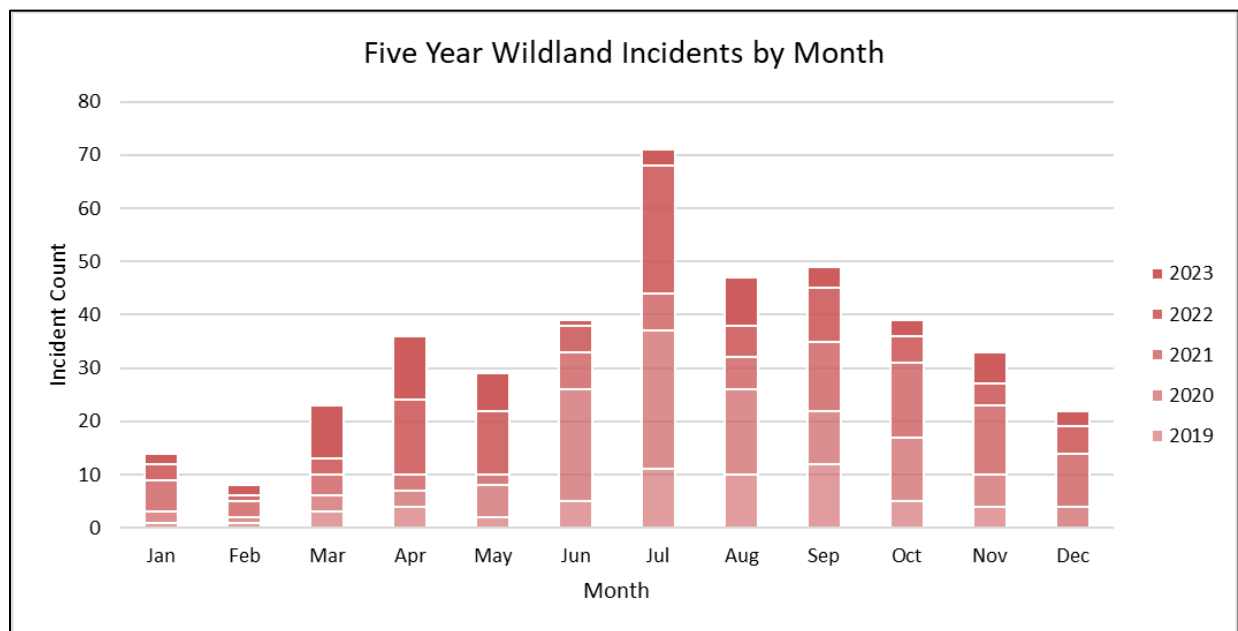


Figure 6

Table 18 shows the wildland incidents that have occurred in each station planning zone from 2017 through 2021. Special planning zone incidents are listed below the special planning zone sections of this document.

Wildland Fire Incidents by Planning Zone																		
Incident Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Total
Brush or brush-and-grass mixture fire (142)	9	12	8	8	3	2	8	4	3	8	0	1	2	3	6	5	5	87
Cultivated vegetation, crop fire, other (170)	2	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	4
Forest, woods or wildland fire (141)	0	0	0	0	0	1	0	0	7	1	2	0	1	2	5	0	1	20
Grass fire (143)	17	15	8	12	7	9	14	3	19	18	1	10	11	5	6	10	5	170
Natural vegetation fire, other (140)	16	9	11	17	3	4	13	11	1	14	3	8	5	3	3	10	7	138
<b>Grand Total</b>	<b>44</b>	<b>36</b>	<b>27</b>	<b>37</b>	<b>13</b>	<b>16</b>	<b>36</b>	<b>18</b>	<b>30</b>	<b>41</b>	<b>6</b>	<b>19</b>	<b>19</b>	<b>13</b>	<b>21</b>	<b>25</b>	<b>18</b>	<b>419</b>
<b>Percentage</b>	<b>10.50%</b>	<b>8.59%</b>	<b>6.44%</b>	<b>8.83%</b>	<b>3.10%</b>	<b>3.82%</b>	<b>8.59%</b>	<b>4.30%</b>	<b>7.16%</b>	<b>9.79%</b>	<b>1.43%</b>	<b>4.53%</b>	<b>4.53%</b>	<b>3.10%</b>	<b>5.01%</b>	<b>5.97%</b>	<b>4.30%</b>	<b>100.00%</b>

Table 18

## Flood Risk

The District has four geographical areas of flood risk: The South Platte River, Bear Creek, Clear Creek, and the numerous irrigation ditches and drainages prevalent throughout the District. The District is at risk from floods due to heavy precipitation, large amounts of snowmelt, and weather events such as thunderstorms or stationary fronts. In 2013, the Northern Front Range of Colorado experienced a stationary front that dumped over 17 inches of rain in under seven days. The event caused significant flooding, destroyed buildings, isolated communities, and killed three people. The search effort required five national FEMA urban search and rescue teams to complete.

### South Platte:

The South Platte River runs through the northern portion of the Station 15 Planning Zone. The basin is a large watershed with multiple tributaries reaching the continental divide in the west. There are multiple flood control/storage reservoirs within the river system. The closest upstream flood control dam is the Strontia Springs Reservoir Dam, located six miles up Waterton Canyon. The District provides emergency services to the Dam under a contract with Denver Water. This is the only stream system in the District with upstream flood control. The primary risk to the District is delayed access to the Station 15 Planning Zone (from other District resources) should the bridge at Waterton Canyon Road and the South Platter River become impassable.

### Bear Creek:

The Bear Creek basin is a small watershed starting in the mountains to the west of Evergreen, Colorado. There is no upstream flood control. The primary flood control Dam is the earthen dam in Bear Creek Lake Park. The dam provides flood control to the areas east of the dam (as it did in 2013) but provides no protection for any areas upstream. The town of Morrison is exposed to flooding from Bear Creek. Models show the town could be difficult to access and many areas, including the town center, could become inundated during a flood.

### Clear Creek:

The Clear Creek basin is a moderately sized watershed that extends from the continental divide in the west. The creek is the northern border for a portion of the District's boundary. There is no flood control structure upstream from the District. Flood maps show that many homes and businesses could become inundated during a flood event.



## Supplemental Hazards

### Transportation

- **Light Rail Mass Transit** – Eight miles of light rail runs through the District from the east to the west. It crosses into the District along 13<sup>th</sup> Avenue using grade-separated crossings at Sheridan, Wadsworth, and Kipling Avenues. The areas in between the thoroughfares are adjacent to residential areas with multiple at-grade intersections. After the rail lines cross Kipling they turn south into the Denver Federal Center, crossing 6<sup>th</sup> Avenue by flyover. The rail line continues to parallel 6<sup>th</sup> Avenue west out of the District eventually ending at the Jefferson County Administration building in Golden.
- **Roadways** – There are multiple arterial roadways throughout the District and 29.85 miles of limited access highway. As the volume of traffic increases, the chances of multiple-vehicle auto accidents, including numerous victims, also increase. Accidents involving multiple vehicle events are fairly common in all areas of the District.

### Severe Weather and Natural Disasters

- **Tornadoes** – Colorado averages 49.5 tornadoes annually. A tornado touched down in the Lakewood area in 1981 causing damage to multiple homes and businesses. Tornadoes are a common threat along Colorado's Eastern Plains, including in the District. Eastern Jefferson County and Douglas County are rated as a moderate hazard by the state of Colorado's Emergency Plan.
- **Thunderstorm/Hail** – Flash flooding and hail are fairly common within the District. The District averages a property-damaging severe thunderstorm every other year. These storms bring hail that can damage homes, vehicles, and businesses. In May 2017, a hailstorm caused significant damage across areas of Lakewood, Wheat Ridge, and Golden. This storm forced business closures for several months and caused over \$2 billion in damages – Colorado's most expensive hailstorm on record. District resources were stretched to the limit during the storm.
- **Wind Events** – Chinook winds are very common, occurring in the fall. The average year can have up to ten events in a single fall/winter. These storms can increase wildfire danger and damage structures.
- **Heavy Snow** – Heavy snowstorms are a common problem. In March 2003, a storm dumped over four feet of snow in 48 hours. The foothills to the west received as much as six feet of snow. These storms can paralyze the District, knocking down trees and power lines, collapsing structures, and blocking transportation reducing the ability to respond to incidents and transport patients to the hospitals. The western planning zones tend to be impacted harder due to their remoteness and higher elevation.

## Active Threat

The Federal Bureau of Investigations (FBI) lists 333 separate active shooter incidents across the United States with 2,851 casualties from 2000 through 2019. 135 of these incidents resulted in three or more killings in a single incident. Nationally, there were 40 active shooter incidents in 2020, which is a 33% increase from 2019 and a 100% increase compared to 2016. The District is not immune to this threat.

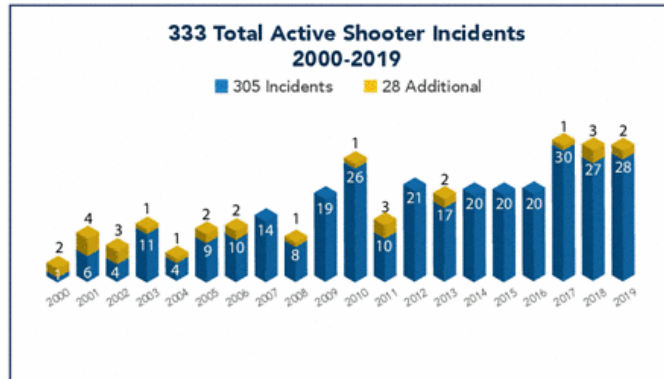


Table 19

In the past 20 years, Colorado has experienced 13 active shooter incidents, the seventh highest among all 50 States and the District of Columbia. The FBI reports that businesses (both open and closed to pedestrian traffic), open spaces, and schools account for the greatest number of active shooter incidents across the country. The District has multiple locations meeting these criteria not only within the District but also spread throughout the response areas of the District’s automatic and mutual aid partners.

The District has experienced a number of active threat incidents. These range from shootings in a supermarket, schools, and the Columbine High School Massacre. Columbine High School is just outside of District boundaries and multiple District resources were involved in the response. This incident, as well as many others, along with an ever-increasing frequency of incidents, have altered tactics, training, equipment, and how the District responds to active threat incidents both inside District boundaries and during automatic or mutual aid responses.

There are ten separate local law enforcement agencies operating within District boundaries as well as the Federal Protective Service, which is the policing agency for the Denver Federal Center. Active shooter incidents also result in response and coordination with multiple Federal/State agencies. Because of the diverse group of law enforcement representation, the District may need to coordinate active threat incident management (unified command) with multiple jurisdictions. These include but are not limited to:

Lakewood Police Department	Morrison Police Department
Jefferson County Sheriff’s Office	Mountain View Police Department
Douglas County Sheriff’s Office	Arvada Police Department
Wheat Ridge Police Department	Federal Protective Service
Edgewater Police Department	Federal Bureau of Prisons
Lakeside Police Department	Federal Bureau of Investigations
Colorado State Patrol	Colorado Bureau of Investigations

## Hour of Day – Day of Week – Month of Call Study

This section provides three charts on the time incidents occur based on hour of day, day of week, and month of call. This provides information for planning future staffing and resource needs. The Incidents by Hour of Day chart, Figure 7, provides information on what portions of the day are impacted by the workload of responding to incidents. As shown, the slowest times are from 2300 hours to 0700 hours. The District has provided resources to respond to the highest number of incidents during the hours of 0800 to 2200 hours.

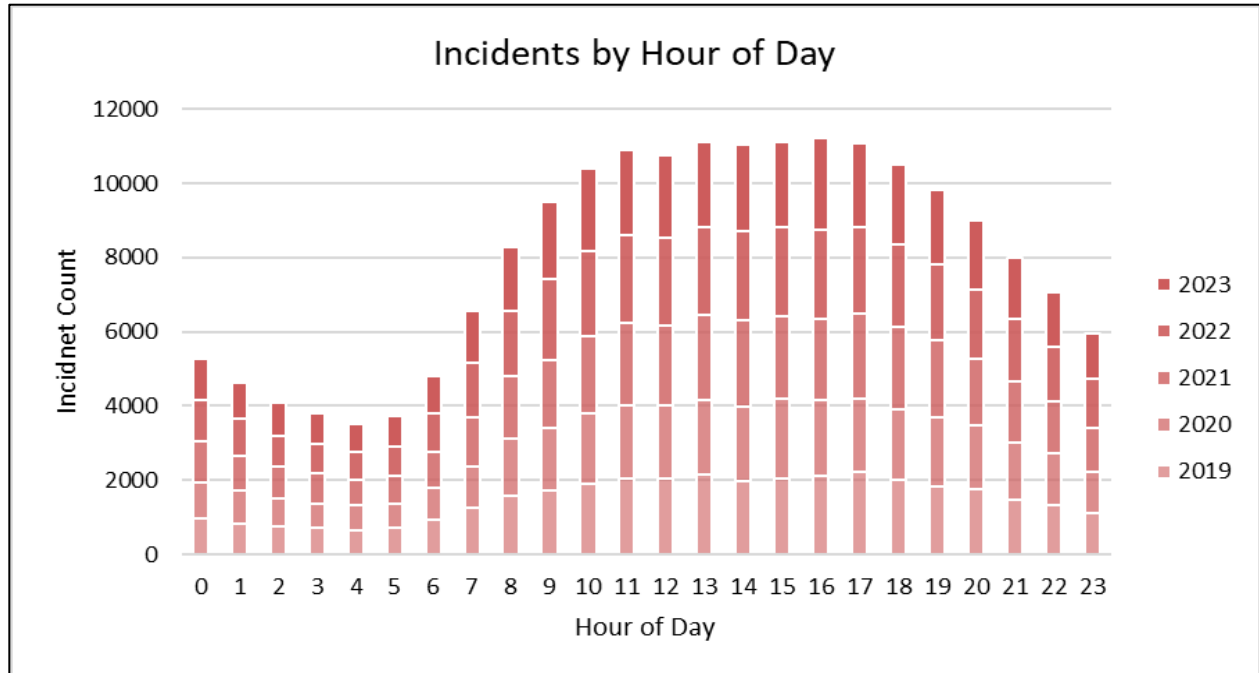


Figure 7

Figure 8, below, shows that call volume is relatively constant regardless of the day of the week. An insignificant increase is noted on Mondays and Fridays with a small decrease on Sundays.

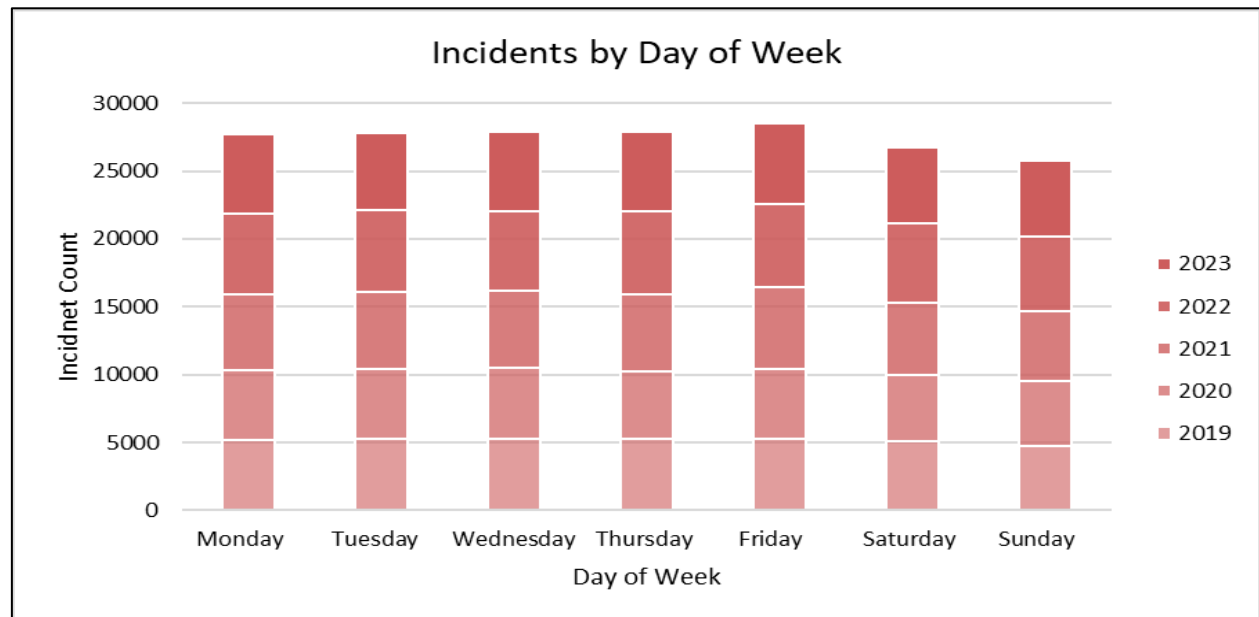


Figure 8

The incident volume by month for 2023 is relatively consistent with prior years. The District realized a large reduction of EMS incidents in April and May of 2020 during the first wave of the COVID-19 pandemic; however, Figure 9, below, shows a return to a normal pattern of incident frequency compared to previous years. July, August, and December have historically been the busiest months of the year for District responses with February accounting for the lowest number of incidents.

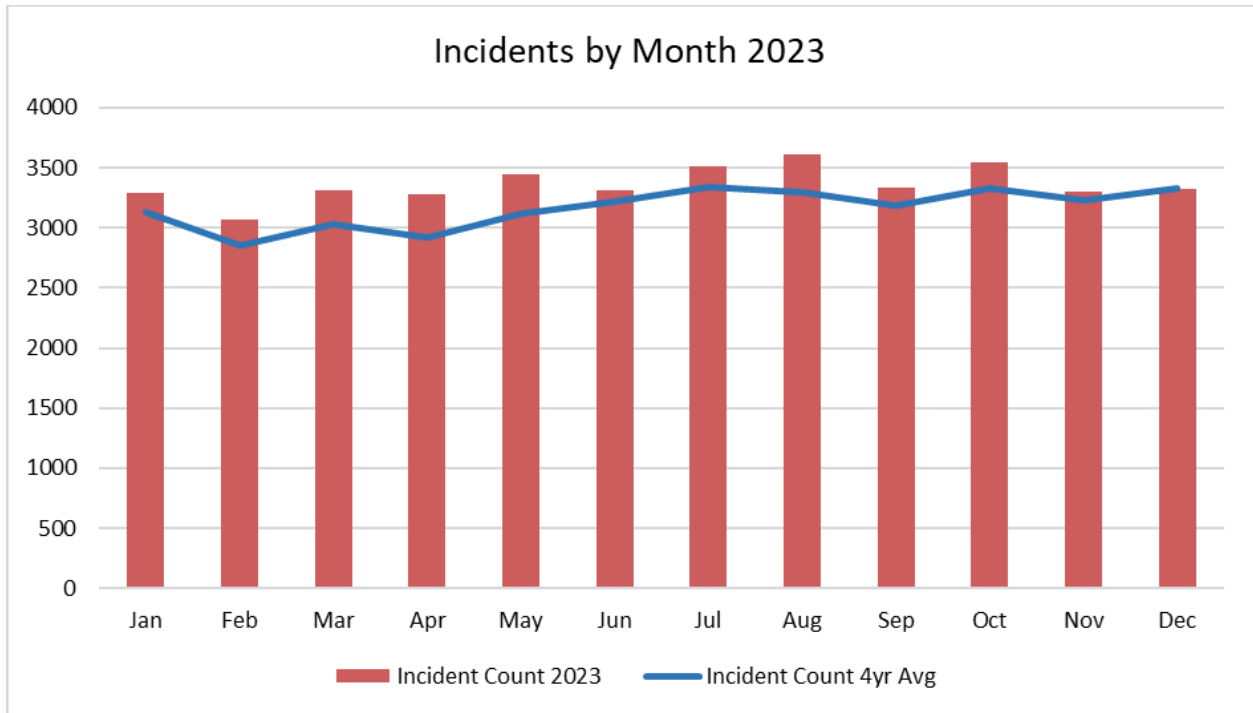


Figure 9

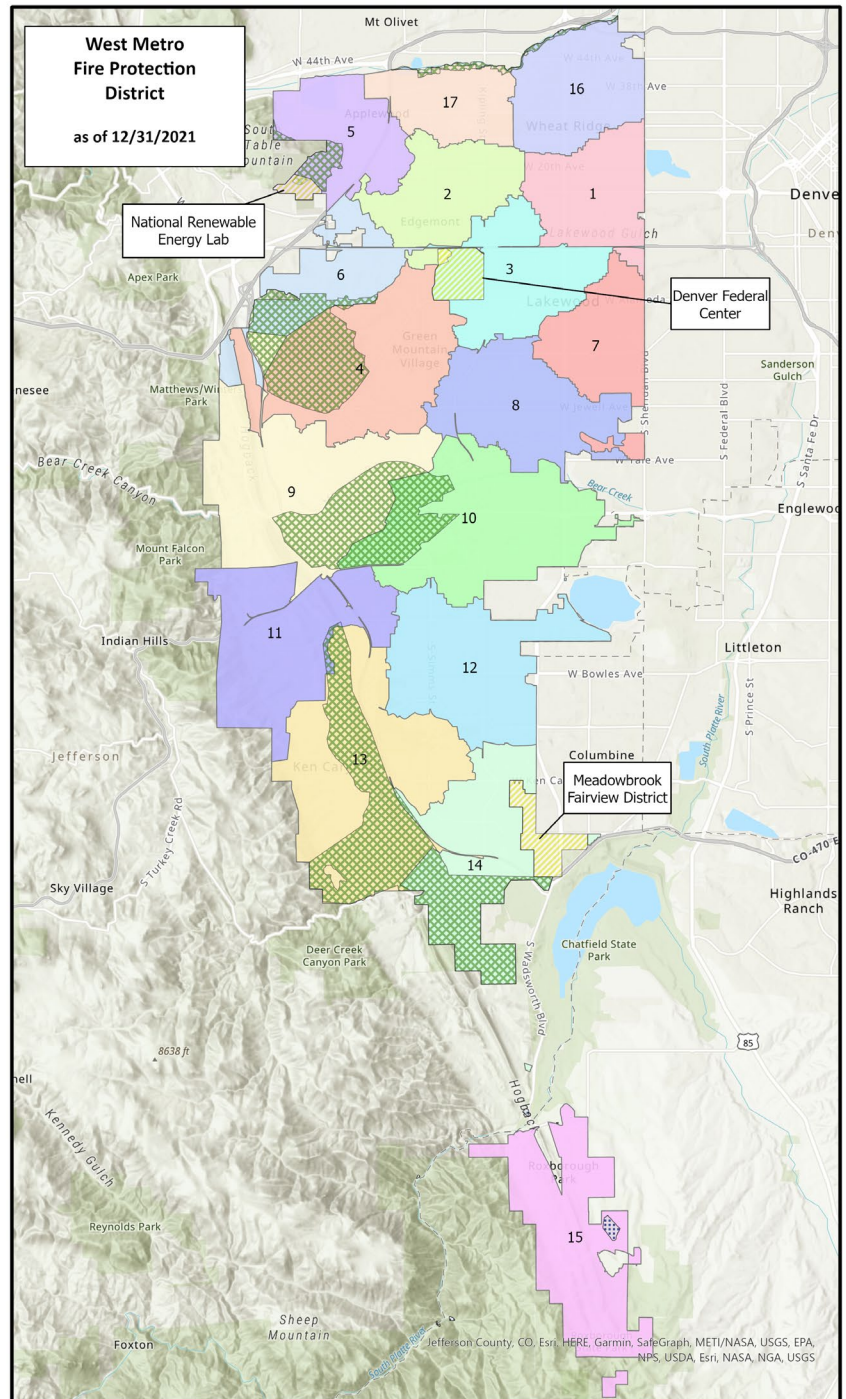
## Planning Zones

The District uses two types of planning zones for performance and risk analysis. These include geographic station planning zones based on response areas and special planning zones for either contract-covered areas or special risks. There are 17 station planning zones and nine special planning zones throughout the District.

The 17 station planning zones are shown below and include planning zone maps, demographics, risk profiles, critical infrastructure and key resources, high-risk occupancy counts, response history, and the general characteristics of each zone. Special planning zones are only represented by maps, response history, and general characteristics due to security reasons, low incident volumes, and unique characteristics.

The Denver Federal Center (DFC) and National Renewable Energy Laboratory (NREL) Special Planning Zones are within station planning zone boundaries and are presented at the end of the zone each resides within (i.e., the DFC Planning Zone is listed after Station Planning Zone 3). The Fairview-Meadowbrook Zone is presented directly following Station Planning Zone 14 and the Denver Water Planning follows Station Planning Zone 15. Each of these four special planning zones is based on a District contractual obligation.

The remaining five special planning zone descriptions (South Table Mountain, Clear Creek, Green Mountain, Bear Creek Lake Park, and Hogback) are grouped as 'open space planning zones' and are presented following the Station Planning Zone 17. These zones represent open space or recreational areas with little to no development, limited access, low historical volumes, and unique risk profiles.

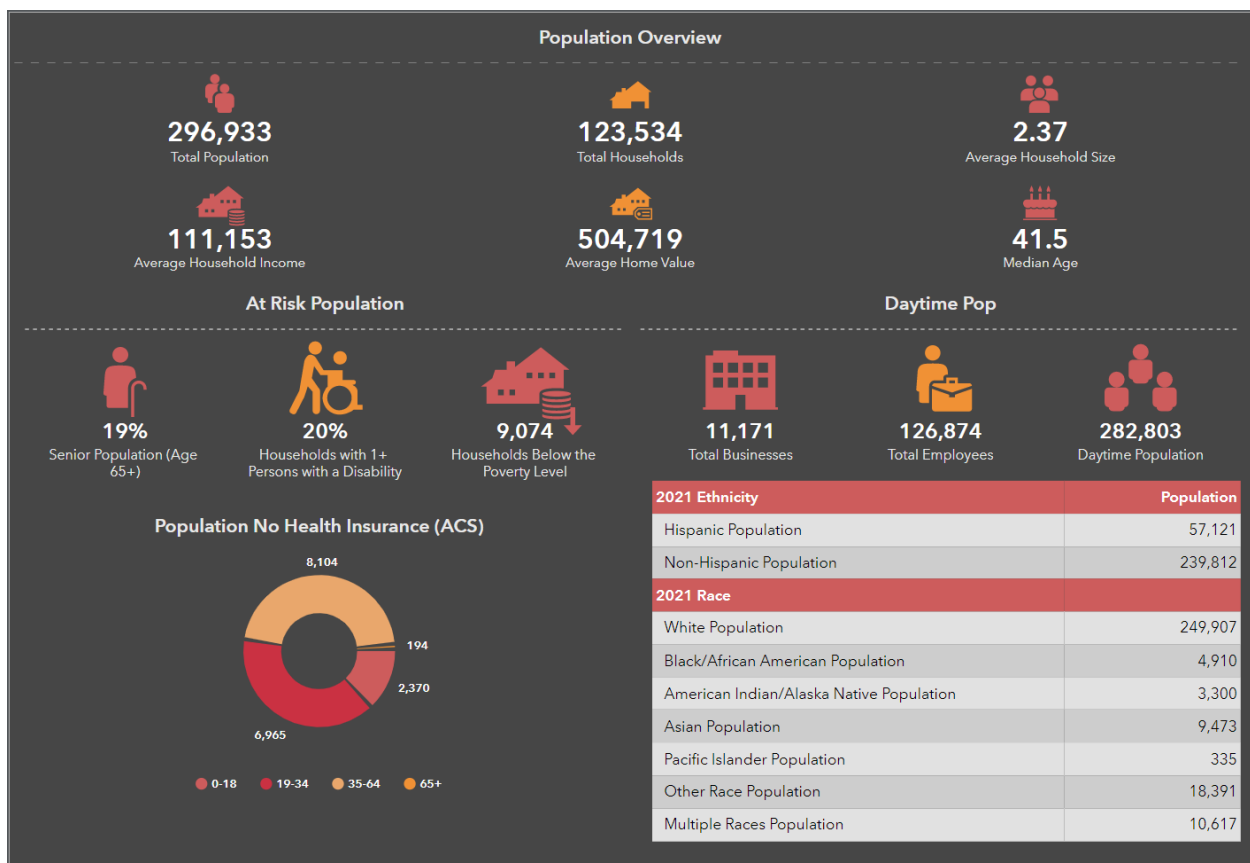


## Critical Infrastructure and Key Resources

The District identifies critical infrastructure and key resources (CIKR) within each station planning zone. Each of the 17 station planning zones shows CIKR resources geolocated on the station planning zone map and listed in a table below each map. The criteria for these items are identified based on the sixteen sectors identified by the Cybersecurity and Infrastructure Security Agency (CISA) with input from each fire captain assigned to the station within the station planning zone and data obtained from the Life Safety Division occupancy database.

## Demographics

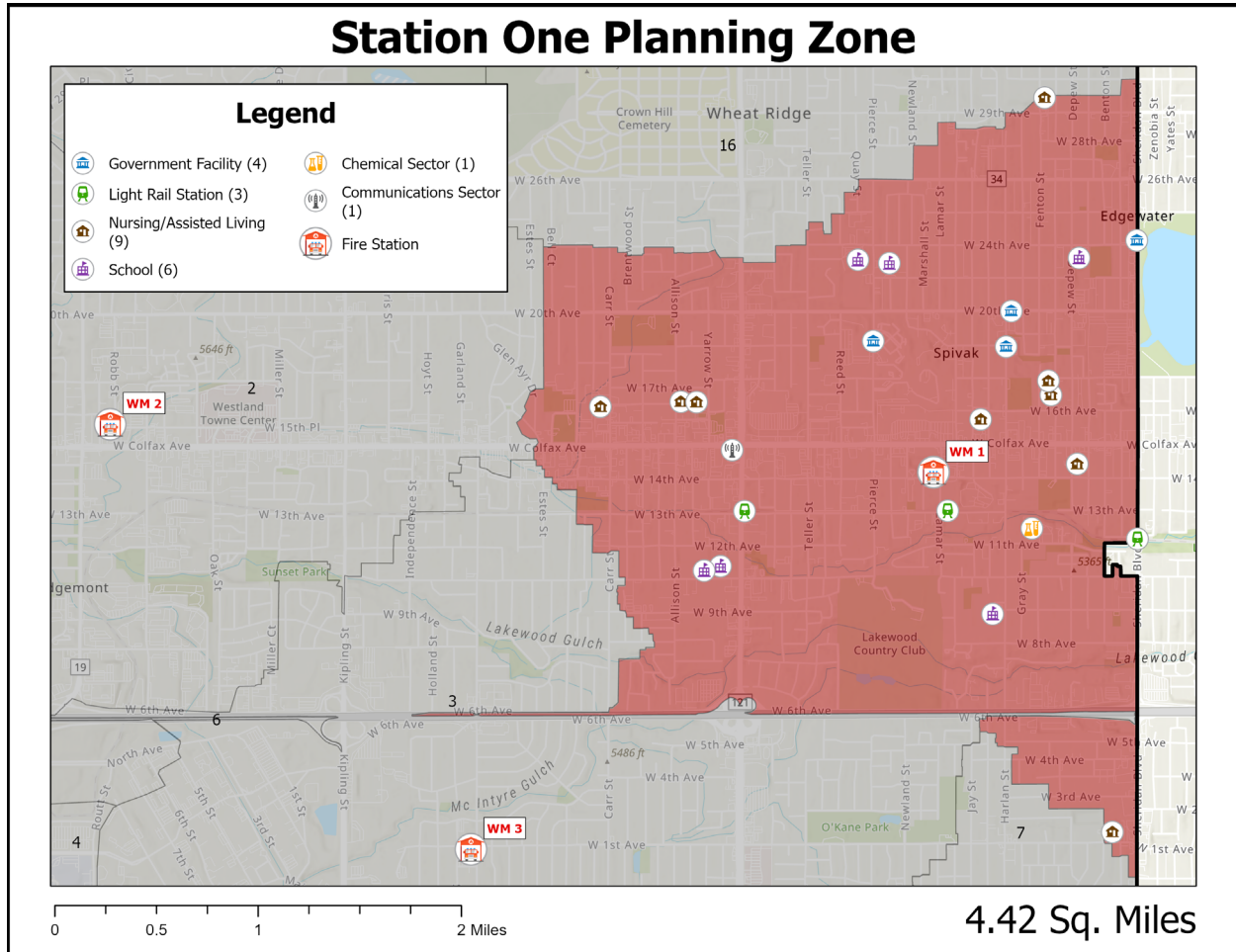
Each of the 17 station planning zones includes a demographic profile. These infographics can be compared to other station planning zones and the District’s profile. Each infographic provides a population overview, ethnicity & race, health insurance access, at-risk populations, total businesses, and population shift. Below is the infographic representing the entire District:



# Station One Planning Zone

## Description:

This planning zone is exclusively in the first in area of Station 1. There are no unique features that would exclude any area within this zone. The zone is an urban setting with a density of 2,000+ persons per square mile. This station planning zone has the highest number of incidents. There is a mix of commercial buildings, mostly along major streets that include the Colfax corridor, Sheridan, and Wadsworth. There is a small area of light industrial/propane storage within the zone with no additional response needs.



## Critical Infrastructure and Key Resources:

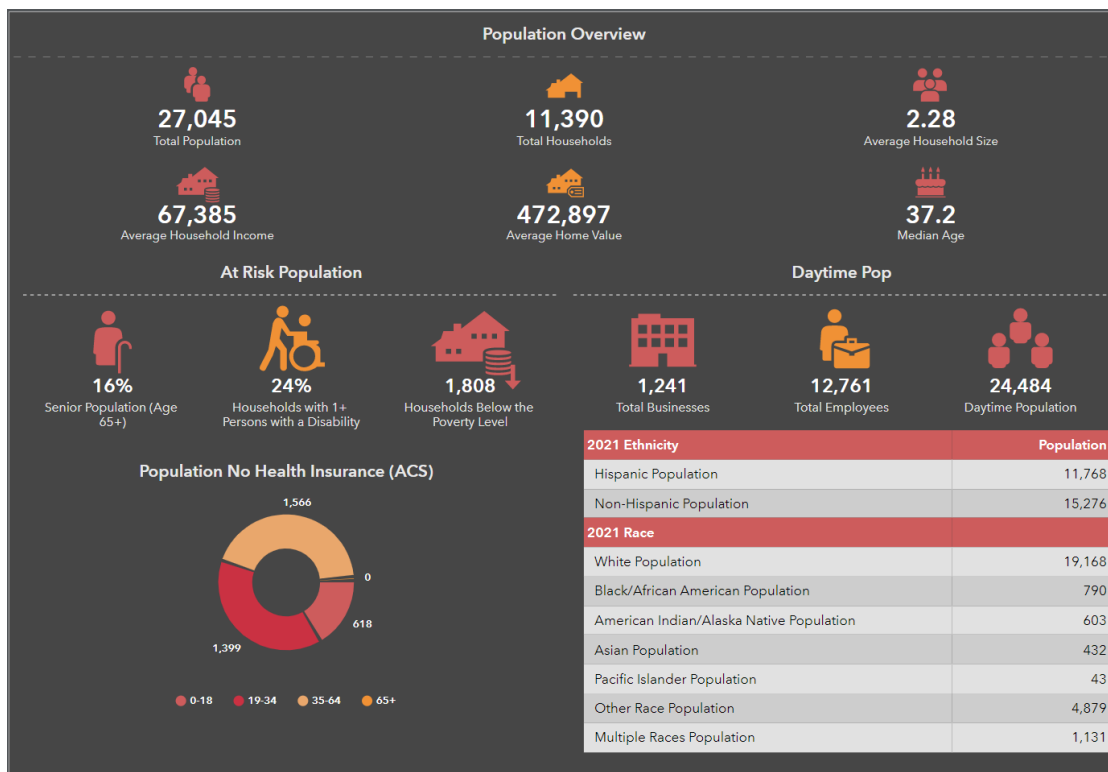
Name	Address
City of Edgewater Public Works	5990 West 20 <sup>th</sup> Avenue
City of Edgewater	1810 Harlan Street
Colorado Department of Revenue	1881 Pierce Street
Century Link / Central switch office	1465 Wadsworth Boulevard
Suburban Propane	5715 West 11 <sup>th</sup> Avenue
City Hall	2401 Sheridan Boulevard
Sheridan Station	13 <sup>th</sup> and Sheridan Boulevard
Lamar Station	13 <sup>th</sup> and Lamar Street

Wadsworth Station	13 <sup>th</sup> and Wadsworth Boulevard
Molholm Elementary School	6000 West 9 <sup>th</sup> Avenue
Jefferson County Open Secondary	7655 West 10 <sup>th</sup> Avenue
Edgewater Elementary School	5570 West 24 <sup>th</sup> Avenue
Lumberg Elementary School	6705 West 22 <sup>nd</sup> Avenue
Jefferson County Open Elementary School	7655 West 10 <sup>th</sup> Avenue
Jefferson Junior/Senior High School	2305 Pierce Street
Allison Care Center	1660 Allison Street
Sierra Rehabilitation and Care Community	1432 Depew Street
Harmony Pointe Nursing Center	1655 Yarrow Street
Western Hills Health Care Center	1625 Carr Street
Westlake Care Community	1655 Eaton Street
Cambridge Care Center	1685 Eaton Street
Wheatridge Manor Care Center	2920 Fenton Street
Bethany Nursing & Rehab Center	5301 West First Avenue
Cedars Healthcare Center	1599 Ingalls Street

### Special Risks:

- Casa Bonita – Restaurant assembly exposure
- El Chaparral - 5255 West 6<sup>th</sup> Avenue (nightclub)
- V-Forge Manufacturing - 5567 West 6<sup>th</sup> Avenue
- Colorado Sewer (bow string truss) - 6000 West 13<sup>th</sup> Avenue
- Light Rail – bisects the station planning zone at 13<sup>th</sup> Avenue

### Planning Zone Risk Profile and Demographics:





## **Risk Analysis:**

Station 1 is the busiest station in the District. This call load is caused by the socioeconomic condition of the area. The buildings are generally older, and a substantial portion of the area is subsidized housing. Station 1's first in covers the city of Edgewater, parts of the city of Lakewood, and a small portion of the city of Wheat Ridge. The first due area expanded in 2016, with the merger of the Wheat Ridge Fire Protection District and West Metro Fire Protection District.

Suburban Propane is a tank farm in the middle of a residential/commercial area.

Casa Bonita is a tourist destination restaurant and can fill to capacity (1,100) every evening during the summer months. The occupancy was a large box-type department store that was converted to a restaurant. Additional hazards for occupants and firefighters include a diving pool and big box-type construction.

The light rail, which was completed in 2013, runs along 13<sup>th</sup> Avenue bisecting this planning zone. The major north/south arterials (Sheridan and Wadsworth) have flyovers, but non-major arterials (Harlan, Pierce, and Carr) do not, which impacts response times. Accidents involving these trains can lead to complex auto extrications and increase the need for additional resources. The light rail line has caused a marked increase in new building construction and population density along the transportation corridor.

Rocky Mountain College of Art and Design is an old research complex consisting of 18 historical buildings, some constructed over 100 years ago. This complex is connected by a series of tunnels that were used for central heating (boiler plant). These buildings are generally non-sprinklered and are in different levels of maintenance.

Within this planning zone are multiple assisted living and nursing care facilities (see CIKR list). The Colfax Avenue corridor is a commercial strip that extends through the District (east to west). This corridor has multiple vacant buildings or struggling businesses that pose an increased fire risk.

## **Water Supply:**

This planning zone is serviced by Consolidated Mutual Water Company, the city of Lakewood Utility, the city of Edgewater utility, and the city of Wheat Ridge utility. There are two private water systems (JCRS Shopping Center and Rocky Mountain College of Art and Design) that are not maintained by the water utilities. There are three areas of concern for water supply, the two aforementioned private water systems and Morse Park (bounded by 26<sup>th</sup> Avenue on the north, Wadsworth Street on the east, 20<sup>th</sup> Avenue on the south and Kipling Street on the west). The private systems have reduced fire flow for the exposures (24-inch water main is located on the south side of Colfax, requiring extended hose lays). The Morse Park area has hydrants farther than 1,000 feet apart, with adequate residential fire flow. This planning zone shares Morse Park with Planning Zone 2. There is a large area south of 10<sup>th</sup> Avenue and west of Wadsworth Boulevard with very limited hydrant coverage. The remainder of the planning zone has adequate water supply.

**Response History:**

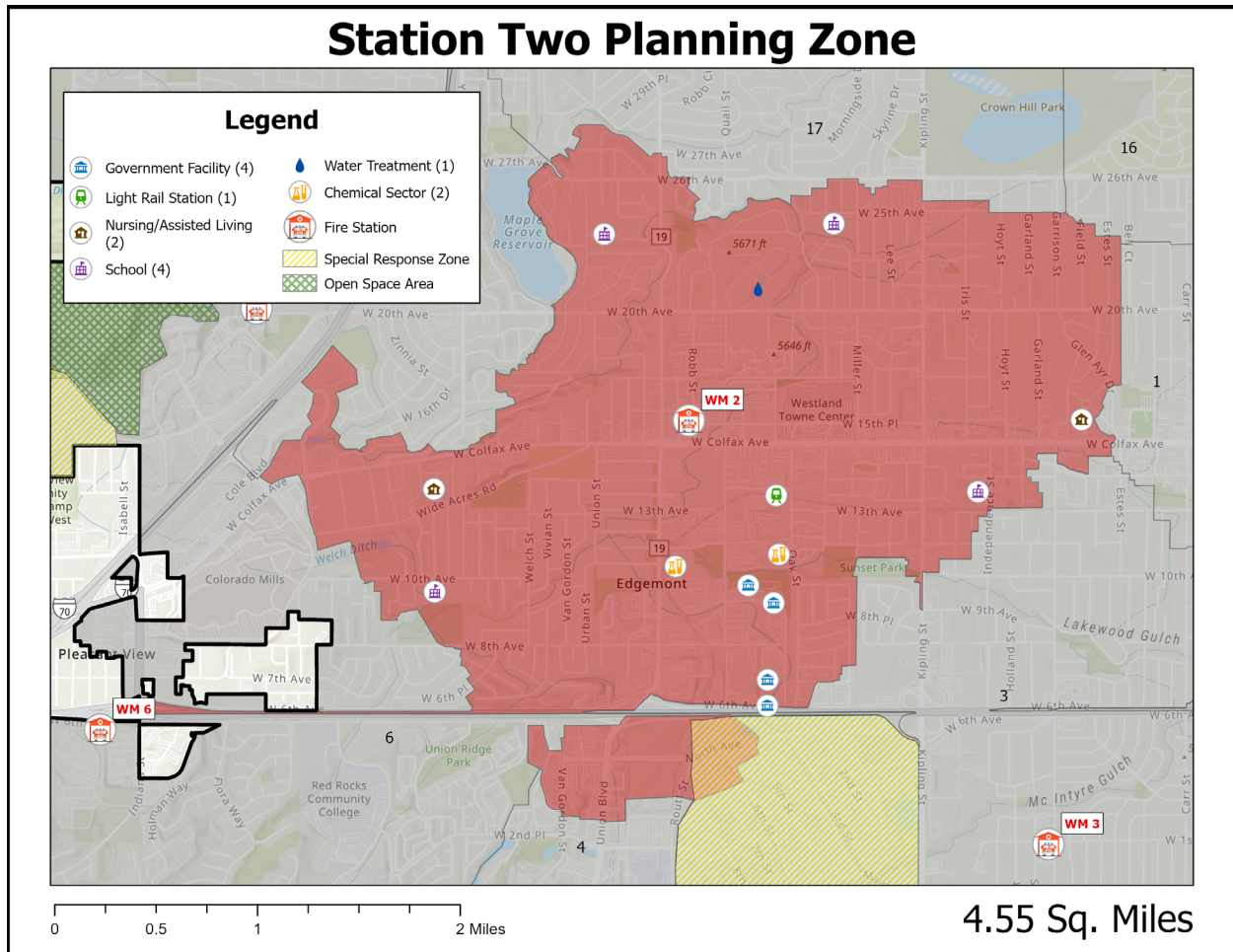
Station-1																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E1	2019	449	12.89%	104	2.99%	2002	57.48%	259	7.44%	16	0.46%	55	1.58%	598	17.17%	3483
E1	2020	396	11.70%	140	4.13%	1996	58.95%	242	7.15%	15	0.44%	38	1.12%	559	16.51%	3386
E1	2021	507	13.15%	203	5.26%	2088	54.15%	268	6.95%	23	0.60%	43	1.12%	724	18.78%	3856
E1	2022	508	11.20%	194	4.28%	2326	51.30%	438	9.66%	31	0.68%	45	0.99%	992	21.88%	4534
E1	2023	456	10.74%	175	4.12%	2116	49.85%	482	11.35%	37	0.87%	46	1.08%	933	21.98%	4245
E1	Total	2316	11.87%	816	4.18%	10528	53.98%	1689	8.66%	122	0.63%	227	1.16%	3806	19.51%	19504
M1	2019	35	1.16%	44	1.46%	2280	75.42%	134	4.43%	5	0.17%	4	0.13%	521	17.23%	3023
M1	2020	32	1.12%	29	1.02%	2242	78.50%	86	3.01%	2	0.07%	1	0.04%	464	16.25%	2856
M1	2021	33	1.05%	39	1.24%	2365	75.17%	99	3.15%	2	0.06%	2	0.06%	606	19.26%	3146
M1	2022	34	0.93%	48	1.32%	2685	73.72%	164	4.50%	2	0.05%	2	0.05%	707	19.41%	3642
M1	2023	22	0.67%	39	1.19%	2243	68.57%	243	7.43%	1	0.03%	2	0.06%	721	22.04%	3271
M1	Total	156	0.98%	199	1.25%	11815	74.13%	726	4.56%	12	0.08%	11	0.07%	3019	18.94%	15938
M11	2019	43	1.43%	38	1.26%	2343	77.79%	118	3.92%	5	0.17%	2	0.07%	463	15.37%	3012
M11	2020	41	1.45%	23	0.81%	2284	80.76%	81	2.86%	2	0.07%	3	0.11%	394	13.93%	2828
M11	2021	32	1.02%	40	1.27%	2415	76.79%	96	3.05%	3	0.10%	2	0.06%	557	17.71%	3145
M11	2022	29	0.81%	42	1.18%	2621	73.48%	166	4.65%	1	0.03%	3	0.08%	705	19.76%	3567
M11	2023	24	0.74%	43	1.33%	2287	70.89%	219	6.79%	1	0.03%	3	0.09%	649	20.12%	3226
M11	Total	169	1.07%	186	1.18%	11950	75.74%	680	4.31%	12	0.08%	13	0.08%	2768	17.54%	15778
SAM1	2019	64	1.90%	106	3.14%	2374	70.42%	155	4.60%	11	0.33%	14	0.42%	647	19.19%	3371
SAM1	2020	60	1.58%	85	2.24%	2847	75.06%	165	4.35%	9	0.24%	5	0.13%	622	16.40%	3793
SAM1	2021	45	1.15%	85	2.17%	2806	71.75%	155	3.96%	8	0.20%	7	0.18%	805	20.58%	3911
SAM1	2022	50	1.15%	101	2.33%	2923	67.51%	328	7.58%	5	0.12%	8	0.18%	915	21.13%	4330
SAM1	2023	50	1.25%	94	2.34%	2641	65.78%	331	8.24%	2	0.05%	6	0.15%	891	22.19%	4015
SAM1	Total	269	1.39%	471	2.43%	13591	69.98%	1134	5.84%	35	0.18%	40	0.21%	3880	19.98%	19420
St -1	Total	2910	4.12%	1672	2.37%	47884	67.79%	4229	5.99%	181	0.26%	291	0.41%	13473	19.07%	70640

Occupancy Classification: Station 1 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	136
Educational (200 series)	36
Health Care, Detention, Correction (300 series)	68
Residential (400 series)	112
Mercantile, Business (500 series)	660
Industrial, Utility (600 series)	8
Manufacturing (700 series)	18
Storage (800 series)	22
Outside, Special Property (900 series)	2

# Station Two Planning Zone

## Description:

This planning zone is exclusively in the first in area of Station 2. There are no unique features that would exclude any area within this zone. The zone is an urban setting with a density of 2,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include the Colfax corridor and Kipling and Simms.



## Critical Infrastructure and Key Resources:

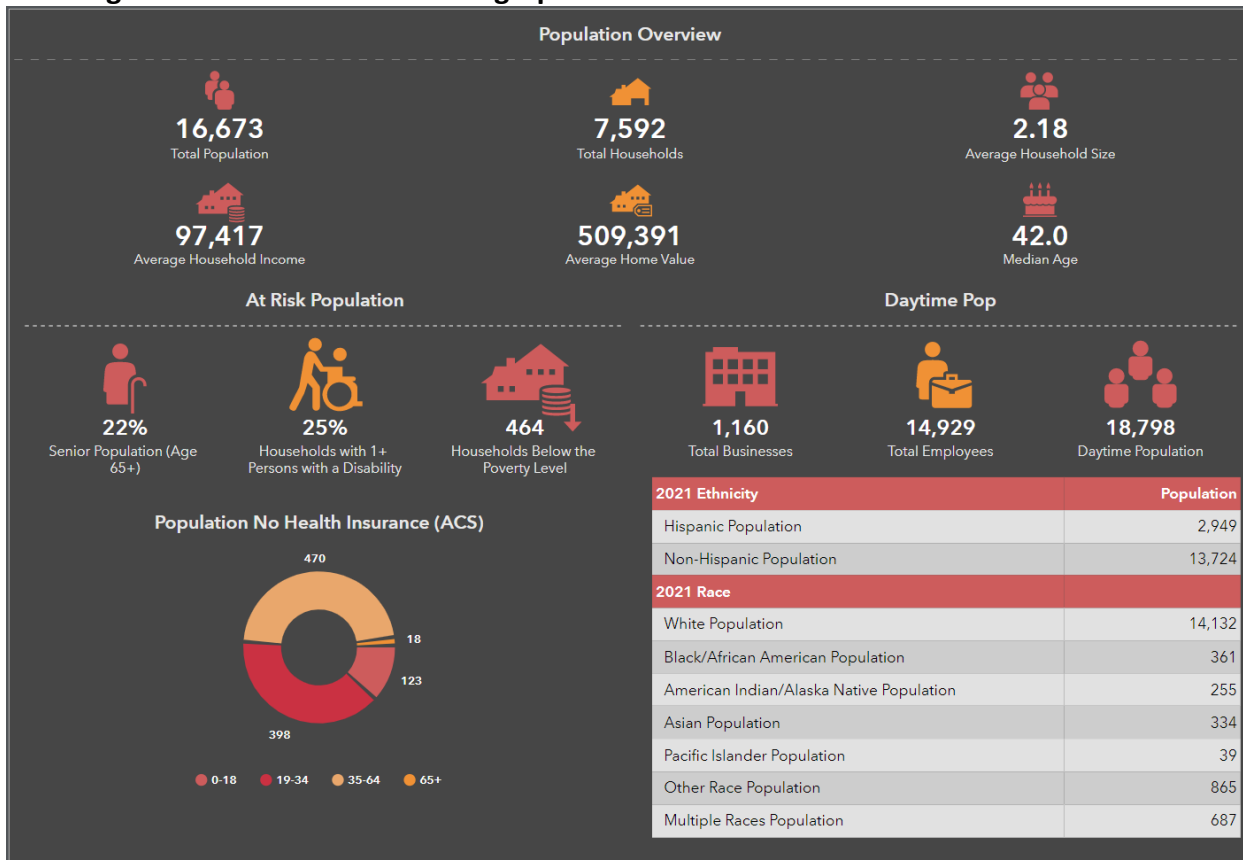
Name	Address
Jefferson County Juvenile Assessment Center	11011 West 6 <sup>th</sup> Avenue
Lakewood City Shops	1050 Quail Street
Jefferson County Public Health Department	645 Parfet Street
Lakewood Street Department	850 Parfet Street
Terumo BCT	10810 West Collins Avenue
Terumo BCT	1211 Quail Street
Oak Street Station	1420 Oak Street
Vivian Elementary School	10500 West 25 <sup>th</sup> Avenue
Welchester Elementary School	13000 West 10 <sup>th</sup> Avenue
Eiber Elementary School	1385 Independence Street

Stober Elementary School	2300 Urban Street
Moffat Water Treatment Plant	10901 West 20 <sup>th</sup> Avenue

### Special Risks:

Ridgemoor Apartment Homes – 693 Urban Court  
 Jeffco Schools Building 8 - 809 Quail Street

### Planning Zone Risk Profile and Demographics:



### Risk Analysis:

The majority of this planning zone is residential with scattered commercial occupancies.

The Union Corridor has multiple large commercial exposures; however, the southern portion of the Union Corridor is in Planning Zone 4. There are many federal agencies leasing commercial buildings or office space on the west side of the Denver Federal Center (e.g., National Park Service, U.S. Forest Service, U.S. Fish and Wildlife, U.S. Department of Transportation, Veterans Administration, etc.). These federal agencies pose little exposed risk, with the exception of an active threat or terrorist attack.

The major exposures are Terumo BCT, the Moffat Water Treatment Plant, and multiple assisted/nursing facilities in the planning zone. There are several multi-family residential structures scattered throughout along with multiple multi-family senior living facilities.

Terumo BCT is a medical equipment manufacturer specializing in blood management, blood safety, and cell therapy. Both company headquarters and manufacturing facilities are located within this planning zone. Terumo BCT is a primary employer with over 400 employees. The company also operates a medical-grade sterilization plant at the facility, which is a hazardous material exposure risk for the District.

The Moffat Water Treatment Plant is a major facility operated by Denver Water that supplies water to the western areas of the Denver Metro area.

The zone is bisected by a light rail line running east to west along 13<sup>th</sup> Avenue until reaching Quail then the line veers south to cross 6<sup>th</sup> Avenue into the Denver Federal Center. The line then crosses Simms Street and parallels 6<sup>th</sup> Avenue into Golden. The line has flyovers on Kipling and 6<sup>th</sup> Avenue. Simms/Union Street is the major north/south arterial that is impacted by the rail line. This is problematic due to the commercial exposures along Union south of 6<sup>th</sup> Avenue.

The Colfax Avenue corridor is a commercial strip that extends through the District (east to west). This corridor has multiple vacant buildings or struggling businesses that pose an increased fire risk.

#### **Water Supply:**

This planning zone is serviced by Consolidated Mutual Water Company, High View Water District, Green Mountain Water & Sanitation District, and Pleasant View Metro District. There is one area of concern for water supply. Morse Park (bounded by 26<sup>th</sup> Avenue on the north, Wadsworth Street on the east, 20<sup>th</sup> Avenue on the south, and Kipling Street on the west) has hydrants farther than 1,000 feet apart, with adequate residential fire flow. This planning zone shares Morse Park with Planning Zone 1. The remainder of the planning zone has adequate water supply.

**Response History:**

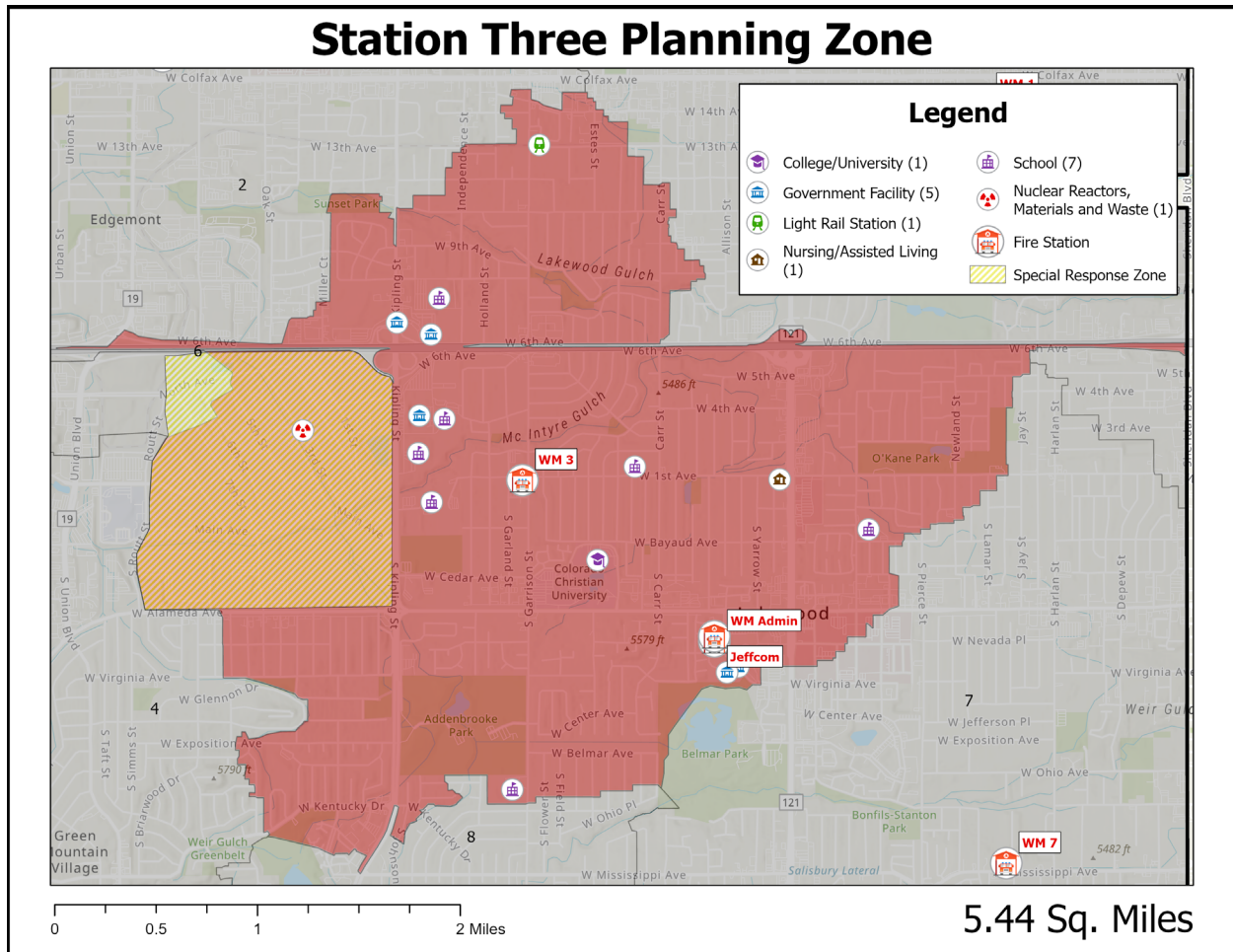
Station-2																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
AJHZ1	2019	0	0.00%	1	8.33%	0	0.00%	0	0.00%	0	0.00%	8	66.67%	3	25.00%	12
AJHZ1	2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2	66.67%	1	33.33%	3
AJHZ1	2021	0	0.00%	2	25.00%	1	12.50%	0	0.00%	0	0.00%	3	37.50%	2	25.00%	8
AJHZ1	2022	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	100.00%	0	0.00%	1
AJHZ1	2023	0	0.00%	3	25.00%	0	0.00%	1	8.33%	0	0.00%	5	41.67%	3	25.00%	12
AJHZ1	Total	0	0.00%	6	16.67%	1	2.78%	1	2.78%	0	0.00%	19	52.78%	9	25.00%	36
E2	2019	322	11.54%	112	4.01%	1673	59.96%	193	6.92%	15	0.54%	44	1.58%	431	15.45%	2790
E2	2020	343	11.65%	76	2.58%	1897	64.44%	247	8.39%	9	0.31%	30	1.02%	342	11.62%	2944
E2	2021	351	11.21%	116	3.70%	1932	61.69%	273	8.72%	20	0.64%	31	0.99%	409	13.06%	3132
E2	2022	356	10.77%	119	3.60%	2014	60.96%	316	9.56%	14	0.42%	31	0.94%	454	13.74%	3304
E2	2023	335	10.08%	111	3.34%	2045	61.56%	325	9.78%	16	0.48%	37	1.11%	453	13.64%	3322
E2	Total	1707	11.02%	534	3.45%	9561	61.72%	1354	8.74%	74	0.48%	173	1.12%	2089	13.48%	15492
TW2	2019	89	8.42%	108	10.22%	453	42.86%	90	8.51%	12	1.14%	55	5.20%	250	23.65%	1057
TW2	2020	87	10.77%	77	9.53%	430	53.22%	64	7.92%	10	1.24%	16	1.98%	124	15.35%	808
TW2	2021	115	10.24%	103	9.17%	571	50.85%	92	8.19%	10	0.89%	17	1.51%	215	19.15%	1123
TW2	2022	115	9.91%	108	9.30%	596	51.34%	110	9.47%	8	0.69%	12	1.03%	212	18.26%	1161
TW2	2023	99	9.09%	107	9.83%	580	53.26%	101	9.27%	14	1.29%	12	1.10%	176	16.16%	1089
TW2	Total	505	9.64%	503	9.60%	2630	50.21%	457	8.72%	54	1.03%	112	2.14%	977	18.65%	5238
St -2	Total	2212	10.65%	1043	5.02%	12192	58.71%	1812	8.73%	128	0.62%	304	1.46%	3075	14.81%	20766

Occupancy Classification: Station 2 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	81
Educational (200 series)	12
Health Care, Detention, Correction (300 series)	31
Residential (400 series)	41
Mercantile, Business (500 series)	331
Industrial, Utility (600 series)	7
Manufacturing (700 series)	9
Storage (800 series)	27
Outside, Special Property (900 series)	3

# Station Three Planning Zone

## Description:

This planning zone is in the first in area of Station 3. There is one unique feature within the planning zone, the Denver Federal Center (DFC). The Station 3 Planning Zone is an urban setting with a density of 2,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include 6<sup>th</sup> Avenue, Wadsworth, Kipling, and Garrison.



## Critical Infrastructure and Key Resources:

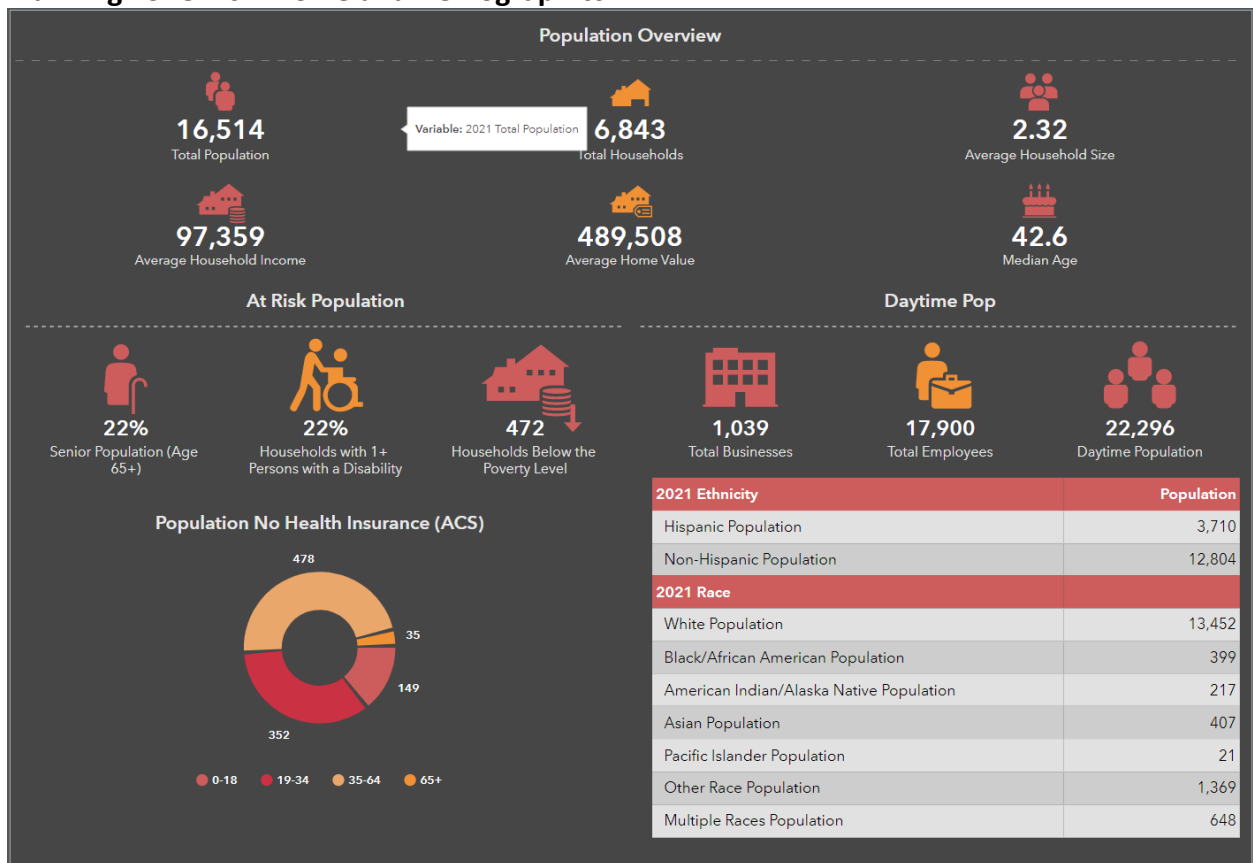
Name	Address
Denver Federal Center (see planning zone below)	101 Kipling Parkway
Colorado Christian University	8787 West Alameda Avenue
City of Lakewood	480 South Allison Parkway
Lakewood Police Department	445 South Allison Parkway
Colorado State Patrol	700 Kipling Street
Dale Tooley Building	690 Kipling Street
West Metro Fire Rescue Administration	433 South Allison Parkway
Jeffco Stadium	500 Kipling Street
Jeffcom911	433 South Allison Parkway
Garrison Station	13 <sup>th</sup> Avenue and Garrison Street

Miller Special Education	200 Kipling Street
Creighton Middle School	75 Independence Street
Belmar Elementary School	885 South Garrison Street
South Lakewood Elementary School	8425 West 1 <sup>st</sup> Avenue
Rose Stein International Elementary	80 South Teller Street
Dennison Elementary School	401 Independence Street
Lakewood High School	9700 West 8 <sup>th</sup> Avenue
Ashley Manor Yukon	80 Yukon Street

**Special Risks:**

- RTD Light Rail with at-grade crossings
- Belmar – poor access and mixed-use properties

**Planning Zone Risk Profile and Demographics:**



**Risk Analysis:**

This planning zone is generally made up of residential structures with some commercial along the arterials (Garrison, Kipling, and Wadsworth Avenues). Station 3 is second due to station Planning Zones 1, 2, 4, 7, and 8, impacting Station 3’s response numbers.

The major exposures are in the Denver Federal Center (see Denver Federal Center Special Planning Zone below) and the Colorado Christian University (CCU) campus.



The CCU campus houses a population of 1500 college students in a densely developed area, which limits access. Campus residency follows a normal academic year with much of the staff operating throughout the summer and winter as well. CCU has consolidated a number of facilities to the Lakewood campus causing a consistent pattern of growth and development at this location.

**Water Supply:**

This planning zone is serviced by the Consolidated Mutual Water Company, Bonvue Water & Sanitation District, and the Green Mountain Water & Sanitation District. The DFC water system is maintained and owned by the federal government. There is adequate fire flow and hydrant availability for all exposures. One residential area within the first in area of Station 3 has limited hydrant availability. The area is from Garrison Street to Carr Street and 7<sup>th</sup> Avenue to 12<sup>th</sup> Avenue.

**Response History:**

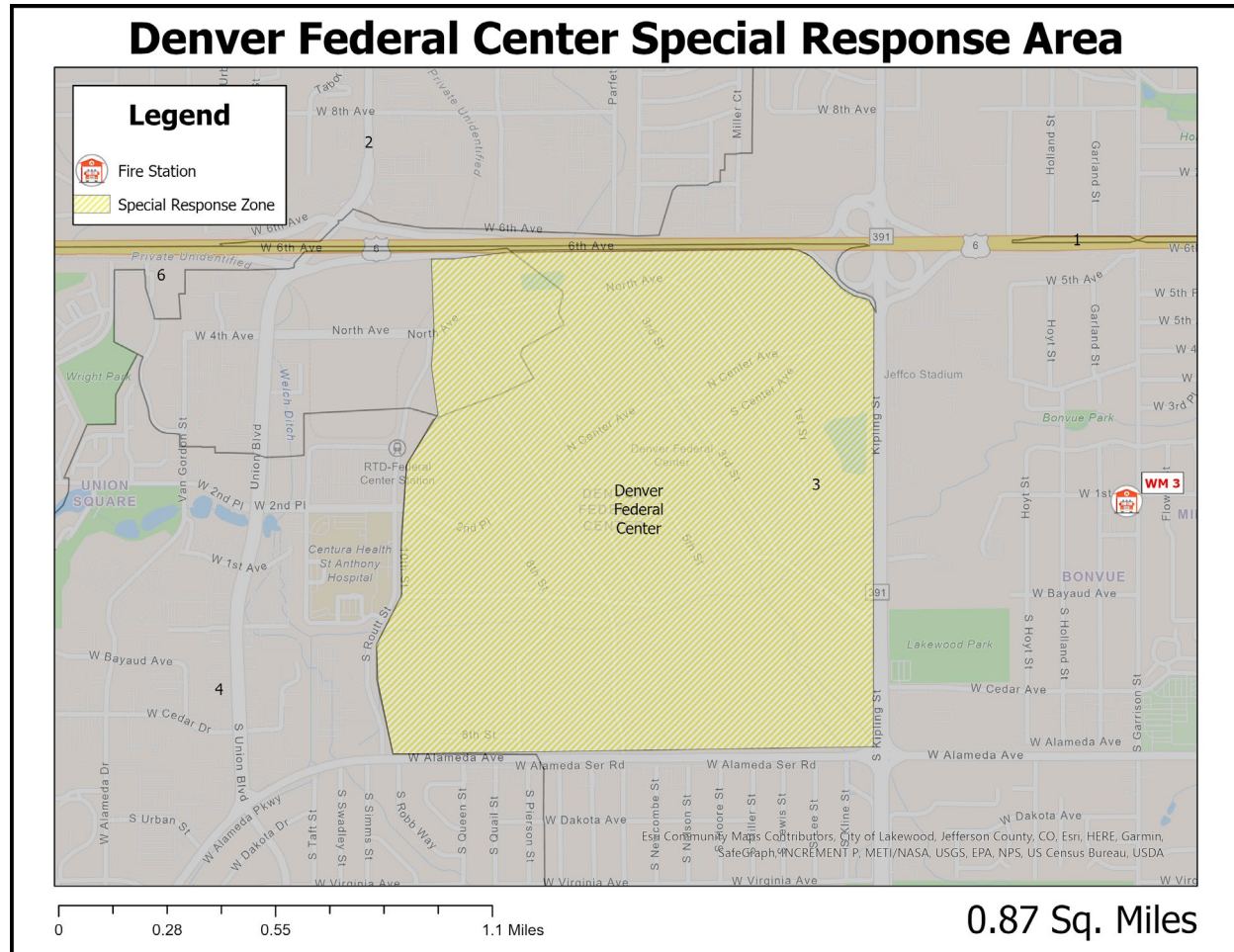
Station-3																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E3	2019	301	9.09%	104	3.14%	2067	62.39%	260	7.85%	18	0.54%	44	1.33%	519	15.67%	3313
E3	2020	354	11.00%	108	3.36%	2015	62.62%	274	8.51%	12	0.37%	32	0.99%	423	13.14%	3218
E3	2021	395	10.55%	126	3.36%	2255	60.21%	375	10.01%	14	0.37%	31	0.83%	549	14.66%	3745
E3	2022	397	10.00%	141	3.55%	2393	60.26%	367	9.24%	17	0.43%	46	1.16%	610	15.36%	3971
E3	2023	379	9.94%	123	3.23%	2338	61.32%	386	10.12%	15	0.39%	38	1.00%	534	14.00%	3813
E3	Total	1826	10.11%	602	3.33%	11068	61.28%	1662	9.20%	76	0.42%	191	1.06%	2635	14.59%	18060
M2	2019	28	1.52%	31	1.69%	1503	81.82%	79	4.30%	6	0.33%	1	0.05%	189	10.29%	1837
M2	2020	36	1.43%	32	1.27%	2133	84.51%	79	3.13%	3	0.12%	2	0.08%	239	9.47%	2524
M2	2021	39	1.33%	36	1.23%	2363	80.59%	119	4.06%	9	0.31%	0	0.00%	366	12.48%	2932
M2	2022	50	1.58%	42	1.33%	2590	81.81%	128	4.04%	3	0.09%	3	0.09%	350	11.05%	3166
M2	2023	29	1.05%	44	1.59%	2196	79.36%	166	6.00%	1	0.04%	5	0.18%	326	11.78%	2767
M2	Total	182	1.38%	185	1.40%	10785	81.54%	571	4.32%	22	0.17%	11	0.08%	1470	11.11%	13226
M3	2019	41	1.28%	54	1.69%	2603	81.47%	137	4.29%	10	0.31%	6	0.19%	344	10.77%	3195
M3	2020	40	1.60%	31	1.24%	2096	83.91%	71	2.84%	5	0.20%	2	0.08%	253	10.13%	2498
M3	2021	43	1.45%	39	1.31%	2395	80.69%	118	3.98%	5	0.17%	2	0.07%	366	12.33%	2968
M3	2022	46	1.46%	52	1.65%	2556	81.14%	112	3.56%	3	0.10%	1	0.03%	380	12.06%	3150
M3	2023	33	1.17%	39	1.38%	2243	79.45%	179	6.34%	2	0.07%	3	0.11%	324	11.48%	2823
M3	Total	203	1.39%	215	1.47%	11893	81.27%	617	4.22%	25	0.17%	14	0.10%	1667	11.39%	14634
St -3	Total	2211	4.81%	1002	2.18%	33746	73.49%	2850	6.21%	123	0.27%	216	0.47%	5772	12.57%	45920

Occupancy Classification: Station 3 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	72
Educational (200 series)	23
Health Care, Detention, Correction (300 series)	32
Residential (400 series)	39
Mercantile, Business (500 series)	242
Industrial, Utility (600 series)	5
Manufacturing (700 series)	0
Storage (800 series)	6
Outside, Special Property (900 series)	3

# Denver Federal Center Special Planning Zone

## Description:

The Denver Federal Center (DFC) is a federal reserve and is not included in the District but is fully surrounded by the District. The complex is operated by the General Services Administration and supports tenants from more than 25 Federal Agencies. The facility has over 50 active buildings approximately four million square feet of rentable space. The District provides emergency services under contract but due to federal jurisdiction, there are limits to the Life Safety Division's ability to apply fire codes.



## Special Risks:

- DFC Building 15 (reactor)
- DFC Building 17
- DFC Building 20 (hazardous materials)
- DFC Building 25 (hazardous materials)
- DFC Building 53 (hazardous materials)
- DFC Building 95 (hazardous materials)

## Risk Analysis:

The land was developed during World War II and was originally constructed as a munitions plant. During peak production, the plant employed 22,000 people. The munitions plant closed in 1945 and the facility transitioned into an office complex, ultimately becoming the DFC. The western portion of the facility was redeveloped in the early 2000s to include a hospital and regional transportation district transit hub. A portion of the land, the northwest corner, remains undeveloped.

The DFC is a secure facility with limited access and 24-hour security. It houses offices, storage areas, industrial processes, and research facilities for multiple federal agencies. One unique feature on site is a small nuclear reactor used for geological research.

The majority of buildings in this planning zone are old and have a scattering of fire protection and monitoring systems. All buildings are inspected by the District on an annual basis; however, due to jurisdiction, compliance is achieved through consensus and cooperation as opposed to strict code compliance. Surrounding this facility are schools, commercial occupancies, a hospital, medical buildings, and residential neighborhoods. The daytime population is approximately 10,000 and the nighttime population is limited to security personnel.

Because there are no full-time residents, demographics are not included in this planning zone. CIKR assets are excluded for security reasons.

## Water Supply:

The DFC operates its own water system, which is supplied through Denver Water. Because of continued maintenance concerns, the DFC water system was replaced in 2010 and 2011. The District flow tests but does not conduct maintenance on DFC hydrants.

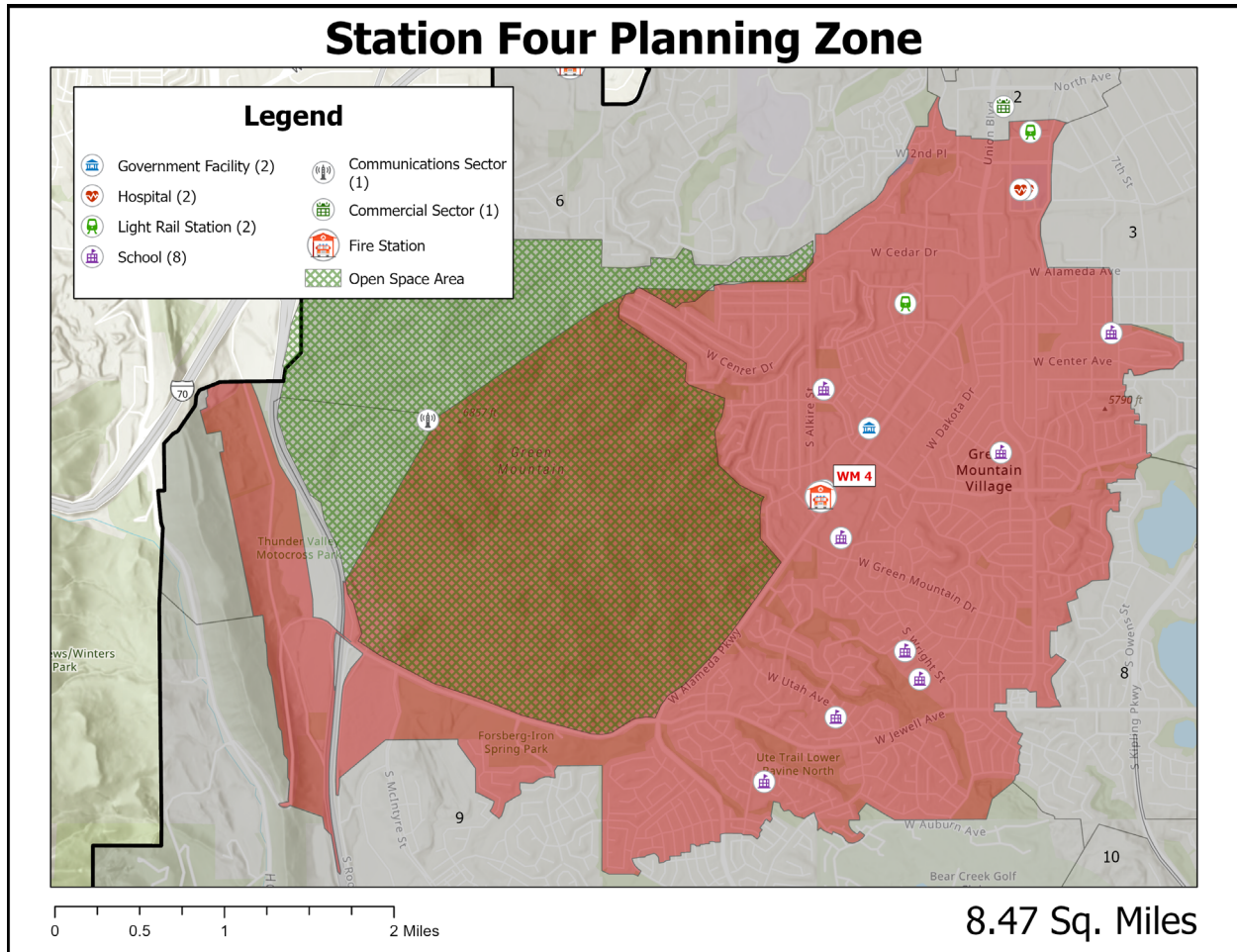
## Response History:

Denver Federal Center															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	8	22.86%	0	0.00%	18	51.43%	1	2.86%	1	2.86%	1	2.86%	6	17.14%	35
2020	13	43.33%	0	0.00%	13	43.33%	1	3.33%	0	0.00%	1	3.33%	2	6.67%	30
2021	15	44.12%	0	0.00%	15	44.12%	0	0.00%	1	2.94%	1	2.94%	2	5.88%	34
2022	11	39.29%	1	3.57%	11	39.29%	2	7.14%	0	0.00%	1	3.57%	2	7.14%	28
2023	7	29.17%	1	4.17%	13	54.17%	2	8.33%	0	0.00%	0	0.00%	1	4.17%	24
<b>Total</b>	<b>54</b>	<b>35.76%</b>	<b>2</b>	<b>1.32%</b>	<b>70</b>	<b>46.36%</b>	<b>6</b>	<b>3.97%</b>	<b>2</b>	<b>1.32%</b>	<b>4</b>	<b>2.65%</b>	<b>13</b>	<b>8.61%</b>	<b>151</b>

## Station Four Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 4. The planning zone consists of a variety of risks including a large portion of Green Mountain Park (open space), multi-family residences, a commercial corridor, and a medical campus. The Green Mountain Special Planning Zone overlays a large portion of this planning zone. The Station 4 Planning Zone is an urban setting with a density of 2,000+ persons per square mile. There are multiple gullies throughout the area with a grass/brush fuel model.



### Critical Infrastructure and Key Resources:

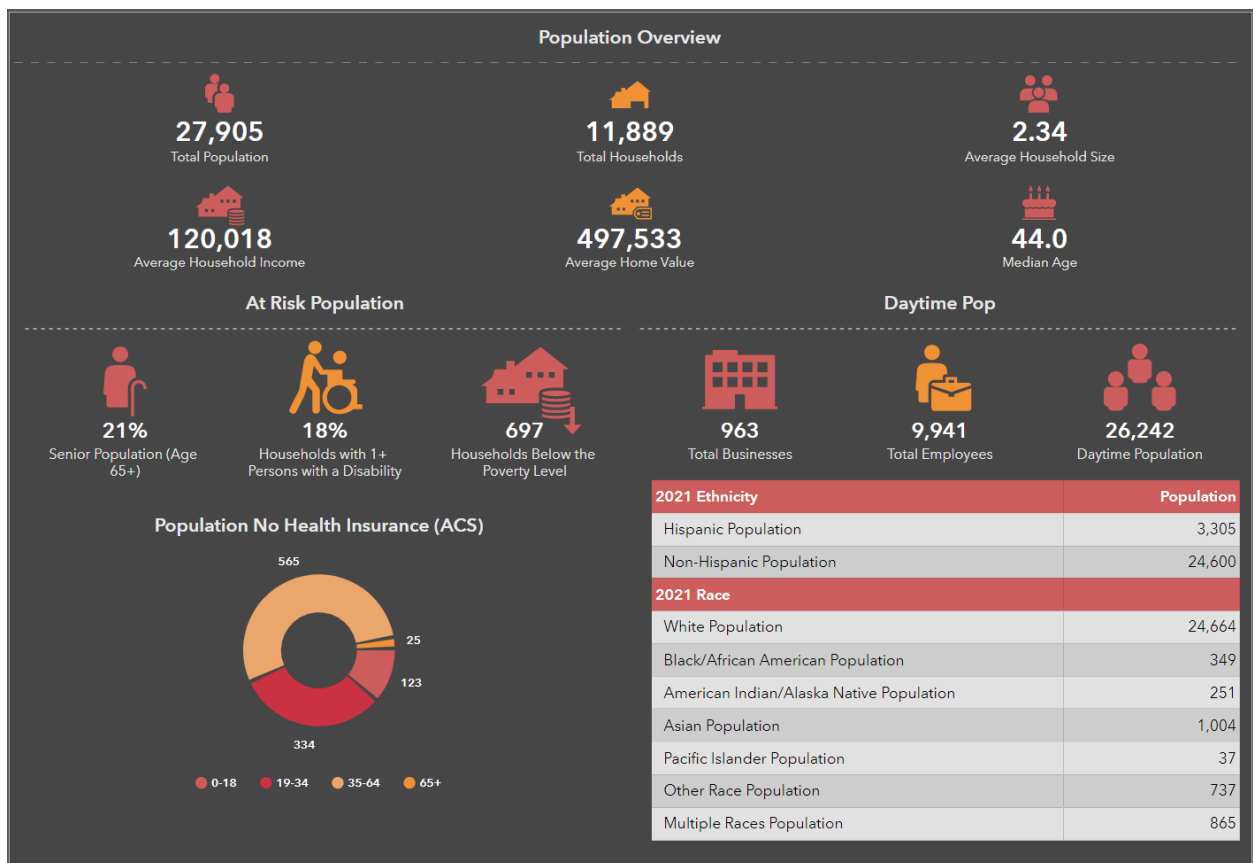
Name	Address
Saint Anthony Hospital	11600 West 2 <sup>nd</sup> Place
Ortho Colorado Hospital at Saint Anthony	11650 West 2 <sup>nd</sup> Place
Lakewood Social Security Office	13151 West Alameda Parkway
National Park Service	12795 West Alameda Parkway
Federal Center Station	11601 West 2 <sup>nd</sup> Place
Green Mountain Radio Tower	1000 South Rooney Road
Sheraton Denver West	360 Union Boulevard
Department of Transportation	12300 West Dakota Avenue

Rooney Ranch Elementary School	2200 South Coors Street
Glennon Heights Elementary School	11025 West Glennon Drive
Devinny Elementary School	1725 South Wright Street
Green Mountain High School	13175 West Green Mountain Drive
Dunstan Middle School	1855 South Wright Street
Foothills Elementary School	13165 West Ohio Avenue
Hutchinson Elementary School	12900 West Utah Avenue
Green Mountain Elementary School	12250 West Kentucky Drive
Denver Water - Green Mountain Pump Station	9380 West Jewell Avenue

**Special Risks:**

- Union Tower - 165 South Union – large office occupancy
- Union Square - 198 Union Boulevard – large office occupancy
- Bristlecone Shooting Range – 12105 West Cedar Drive
- Ravines and other drainages – see Green Mountain Special Planning Zone
- Green Mountain Recreation Center – 13198 West Green Mountain Drive

**Planning Zone Risk Profile and Demographics:**



**Risk Analysis:**

Station 4 has numerous multi-family structures of which many are considered high-risk. The District has experienced numerous multiple-alarm structure fires in these complexes. The Union

Corridor consists of a large variety of commercial and government buildings of which several are classified as high rises. There are many federal agencies leasing commercial buildings or office space on the west side of the Denver Federal Center (e.g., Veteran’s Administration, Department of Transportation, and Federal Highway Administration). These federal agencies pose little exposed risk, with the exception of an active threat or terrorist attack. The western portions of the Denver Federal Center are also in the planning zone.

Saint Anthony Hospital and Ortho Colorado Hospital are both located in this zone with a number of medical campus buildings located in the same area.

Multiple drainages and Green Mountain Open Space are bordered by residential occupancies. These pose a wildfire threat to the adjacent structures and residents living in this area.

The Green Mountain Special Planning Zone is covered later in this document.

**Water Supply:**

This planning zone is serviced by the Green Mountain Water & Sanitation and Mount Carbon Water & Sanitation Districts. Hydrant spacing and available fire flow are adequate for the exposures.

**Response History:**

Station-4																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
BC2	2019	32	4.05%	154	19.49%	361	45.70%	44	5.57%	18	2.28%	10	1.27%	171	21.65%	790
BC2	2020	30	4.21%	135	18.96%	367	51.54%	31	4.35%	18	2.53%	5	0.70%	126	17.70%	712
BC2	2021	33	4.18%	161	20.41%	409	51.84%	23	2.92%	8	1.01%	4	0.51%	151	19.14%	789
BC2	2022	40	4.83%	158	19.06%	392	47.29%	40	4.83%	12	1.45%	3	0.36%	184	22.20%	829
BC2	2023	18	2.67%	129	19.17%	338	50.22%	48	7.13%	6	0.89%	7	1.04%	127	18.87%	673
BC2	<b>Total</b>	<b>153</b>	<b>4.03%</b>	<b>737</b>	<b>19.43%</b>	<b>1867</b>	<b>49.22%</b>	<b>186</b>	<b>4.90%</b>	<b>62</b>	<b>1.63%</b>	<b>29</b>	<b>0.76%</b>	<b>759</b>	<b>20.01%</b>	<b>3793</b>
E4	2019	258	11.28%	68	2.97%	1474	64.45%	206	9.01%	11	0.48%	26	1.14%	244	10.67%	2287
E4	2020	245	11.40%	62	2.89%	1383	64.36%	186	8.66%	15	0.70%	31	1.44%	227	10.56%	2149
E4	2021	282	11.27%	58	2.32%	1624	64.91%	189	7.55%	14	0.56%	33	1.32%	302	12.07%	2502
E4	2022	253	9.74%	82	3.16%	1682	64.74%	200	7.70%	20	0.77%	54	2.08%	307	11.82%	2598
E4	2023	273	10.39%	75	2.85%	1714	65.22%	225	8.56%	23	0.88%	50	1.90%	268	10.20%	2628
E4	<b>Total</b>	<b>1311</b>	<b>10.78%</b>	<b>345</b>	<b>2.84%</b>	<b>7877</b>	<b>64.76%</b>	<b>1006</b>	<b>8.27%</b>	<b>83</b>	<b>0.68%</b>	<b>194</b>	<b>1.59%</b>	<b>1348</b>	<b>11.08%</b>	<b>12164</b>
M4	2019	39	1.60%	27	1.10%	2045	83.67%	132	5.40%	7	0.29%	4	0.16%	190	7.77%	2444
M4	2020	34	1.67%	24	1.18%	1773	87.08%	61	3.00%	5	0.25%	3	0.15%	136	6.68%	2036
M4	2021	52	2.14%	31	1.28%	2052	84.51%	62	2.55%	3	0.12%	2	0.08%	226	9.31%	2428
M4	2022	39	1.52%	24	0.94%	2220	86.52%	67	2.61%	5	0.19%	2	0.08%	209	8.14%	2566
M4	2023	22	0.92%	24	1.01%	2026	84.88%	115	4.82%	4	0.17%	4	0.17%	192	8.04%	2387
M4	<b>Total</b>	<b>186</b>	<b>1.57%</b>	<b>130</b>	<b>1.10%</b>	<b>10116</b>	<b>85.29%</b>	<b>437</b>	<b>3.68%</b>	<b>24</b>	<b>0.20%</b>	<b>15</b>	<b>0.13%</b>	<b>953</b>	<b>8.03%</b>	<b>11861</b>
BR4	2019	0	0.00%	11	52.38%	2	9.52%	1	4.76%	0	0.00%	0	0.00%	7	33.33%	21
BR4	2020	0	0.00%	16	59.26%	5	18.52%	3	11.11%	0	0.00%	0	0.00%	3	11.11%	27
BR4	2021	0	0.00%	10	43.48%	3	13.04%	0	0.00%	0	0.00%	0	0.00%	10	43.48%	23
BR4	2022	0	0.00%	18	69.23%	1	3.85%	1	3.85%	0	0.00%	0	0.00%	6	23.08%	26
BR4	2023	0	0.00%	10	58.82%	2	11.76%	1	5.88%	0	0.00%	0	0.00%	4	23.53%	17
BR4	<b>Total</b>	<b>0</b>	<b>0.00%</b>	<b>65</b>	<b>57.02%</b>	<b>13</b>	<b>11.40%</b>	<b>6</b>	<b>5.26%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>30</b>	<b>26.32%</b>	<b>114</b>
St -4	<b>Total</b>	<b>1497</b>	<b>6.20%</b>	<b>540</b>	<b>2.24%</b>	<b>18006</b>	<b>74.59%</b>	<b>1449</b>	<b>6.00%</b>	<b>107</b>	<b>0.44%</b>	<b>209</b>	<b>0.87%</b>	<b>2331</b>	<b>9.66%</b>	<b>24139</b>

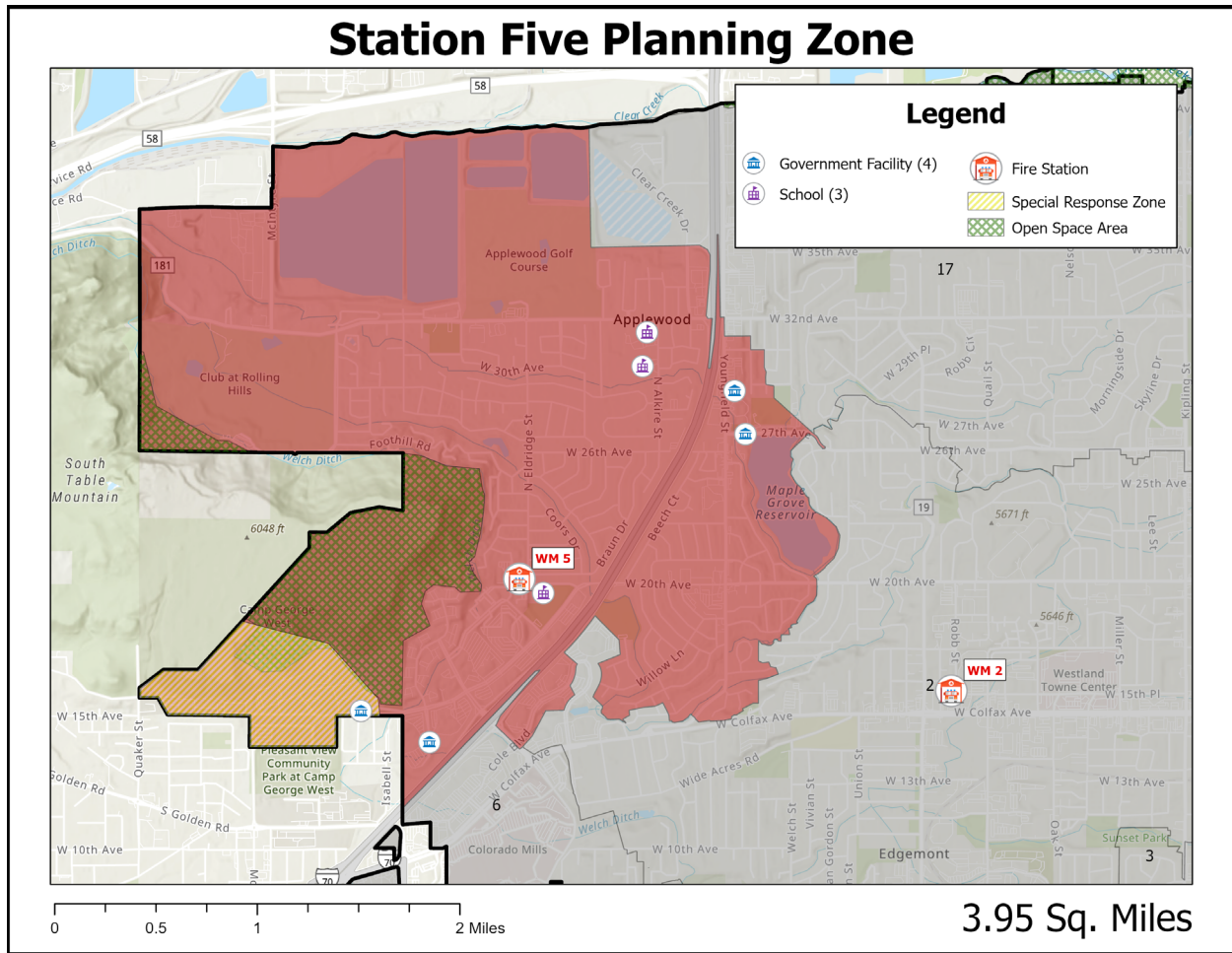
Occupancy Classification: Station 4 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	67
Educational (200 series)	11
Health Care, Detention, Correction (300 series)	20
Residential (400 series)	54
Mercantile, Business (500 series)	210
Industrial, Utility (600 series)	3
Manufacturing (700 series)	13
Storage (800 series)	7
Outside, Special Property (900 series)	2



# Station Five Planning Zone

## Description:

This planning zone is exclusively in the first in area of Station 5. The National Renewable Energy Lab (NREL) is a unique feature within the planning zone. The Station 5 Planning Zone is an urban setting with a density of 2,000+ persons per square mile. There is a mix of commercial buildings, mostly in the Denver West area of the planning zone. The western border of the planning zone consists of open space.



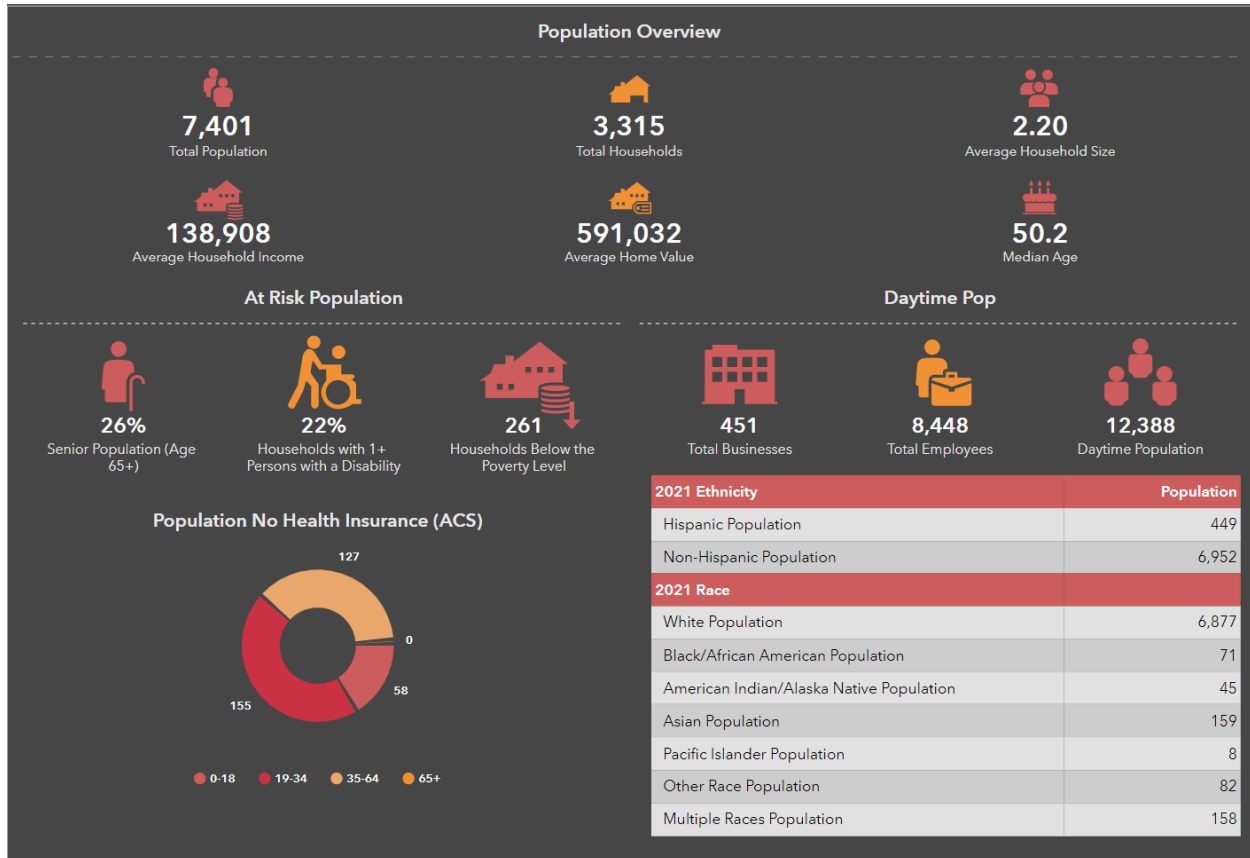
## Critical Infrastructure and Key Resources:

Name	Address
Consolidated Mutual Water Company	12700 West 27 <sup>th</sup> Avenue
Jefferson County Public Schools (JCPS)	1829 Denver West Drive
National Renewable Energy Laboratory (see planning zone below)	15003 Denver West Parkway
Bureau of Land Management	2850 Youngfield Street
Maple Grove Elementary School	3085 Alkire Street
Manning Options School	13200 West 32 <sup>nd</sup> Place

## Special Risks:

- Table Mountain – see the Table Mountain Special Planning Zone
- Molson Coors Brewery Water Treatment Plant - 17755 West 32<sup>nd</sup> Avenue

## Planning Zone Risk Profile and Demographics:



## Risk Analysis:

The Molson Coors Brewery is northwest of this planning zone and is in the Fairmount Fire Protection District’s area, but along the eastern edge, there are two areas that are in the District: the water treatment plant and the truck farm.

Interstate 70 runs through this planning zone creating hazardous material and MCI threats. This portion of Interstate 70 sits at the base of a long downhill section of highway resulting in frequent vehicle brake fires. Some of these incidents grow into full vehicle fires. One incident, in 2019, involved 12 vehicles, injured 12 people, and resulted in four deaths.

The planning zone is on the north and eastern edge of South Table Mountain and is a wildland urban interface area.

## Water Supply:

This planning zone is serviced by the Consolidated Mutual Water & Sanitation District and the Pleasant View Metro District. There is adequate fire flow and hydrants for the zone with the exception of the area of Foothills Road and the wildland areas on South Table Mountain.

## Response History:

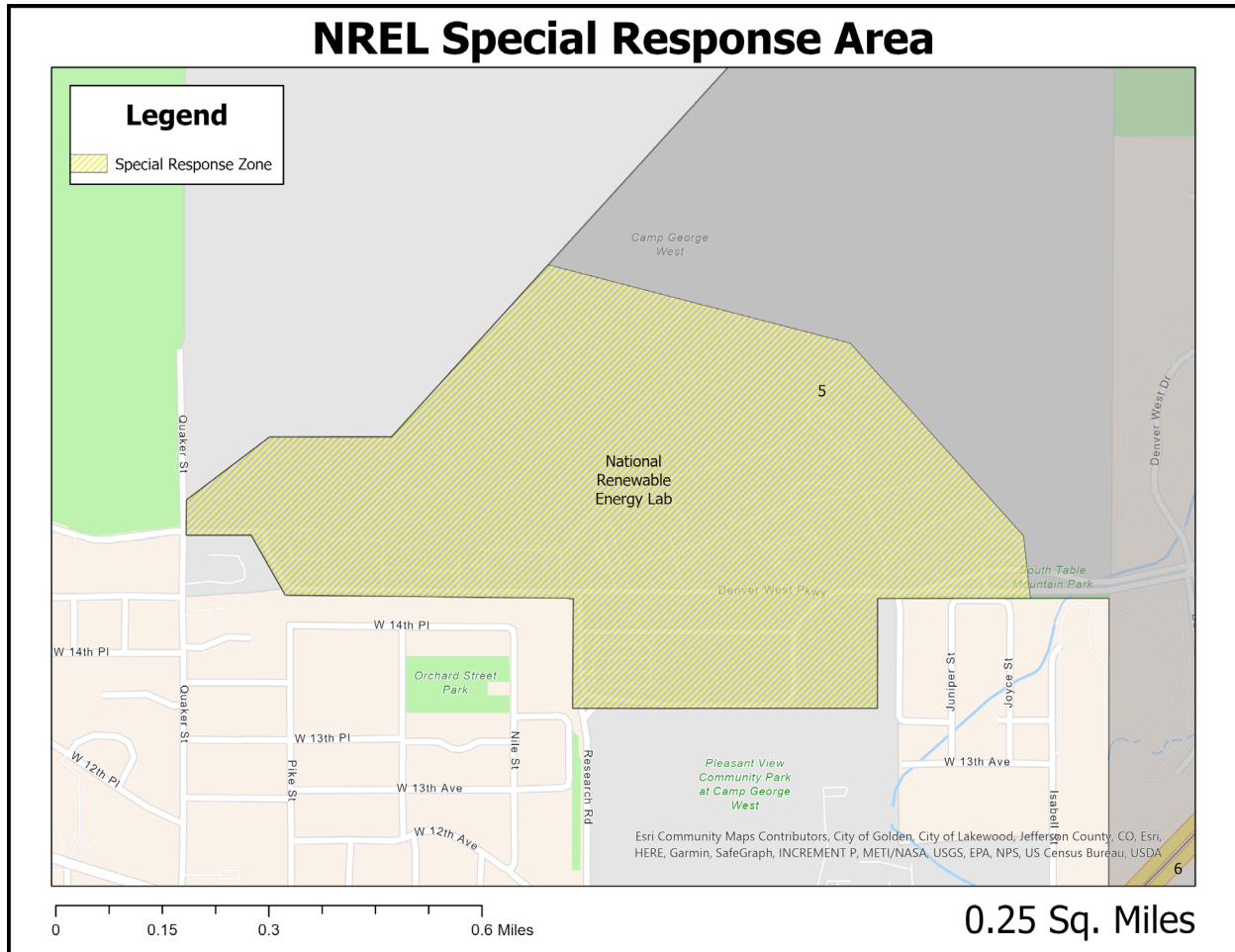
Station-5																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E5	2019	120	9.80%	39	3.19%	722	58.99%	98	8.01%	9	0.74%	33	2.70%	203	16.58%	1224
E5	2020	125	13.03%	23	2.40%	598	62.36%	78	8.13%	3	0.31%	11	1.15%	121	12.62%	959
E5	2021	136	12.44%	43	3.93%	663	60.66%	89	8.14%	4	0.37%	12	1.10%	146	13.36%	1093
E5	2022	145	12.41%	37	3.17%	715	61.22%	83	7.11%	7	0.60%	20	1.71%	161	13.78%	1168
E5	2023	121	10.08%	33	2.75%	764	63.67%	105	8.75%	9	0.75%	25	2.08%	143	11.92%	1200
E5	Total	647	11.46%	175	3.10%	3462	61.34%	453	8.03%	32	0.57%	101	1.79%	774	13.71%	5644
M5	2019	28	1.25%	23	1.03%	1850	82.70%	95	4.25%	2	0.09%	12	0.54%	227	10.15%	2237
M5	2020	33	1.78%	6	0.32%	1540	83.24%	82	4.43%	0	0.00%	1	0.05%	188	10.16%	1850
M5	2021	26	1.27%	17	0.83%	1707	83.64%	76	3.72%	2	0.10%	4	0.20%	209	10.24%	2041
M5	2022	26	1.30%	23	1.15%	1673	83.86%	82	4.11%	0	0.00%	3	0.15%	188	9.42%	1995
M5	2023	24	1.22%	14	0.71%	1639	83.11%	127	6.44%	0	0.00%	5	0.25%	163	8.27%	1972
M5	Total	137	1.36%	83	0.82%	8409	83.30%	462	4.58%	4	0.04%	25	0.25%	975	9.66%	10095
HZ5	2019	0	0.00%	1	4.55%	3	13.64%	1	4.55%	0	0.00%	15	68.18%	2	9.09%	22
HZ5	2020	0	0.00%	0	0.00%	2	20.00%	1	10.00%	1	10.00%	2	20.00%	4	40.00%	10
HZ5	2021	0	0.00%	4	33.33%	1	8.33%	2	16.67%	1	8.33%	2	16.67%	2	16.67%	12
HZ5	2022	0	0.00%	2	20.00%	0	0.00%	0	0.00%	1	10.00%	6	60.00%	1	10.00%	10
HZ5	2023	0	0.00%	0	0.00%	1	7.14%	1	7.14%	0	0.00%	9	64.29%	3	21.43%	14
HZ5	Total	0	0.00%	7	10.29%	7	10.29%	5	7.35%	3	4.41%	34	50.00%	12	17.65%	68
St -5	Total	784	4.96%	265	1.68%	11878	75.14%	920	5.82%	39	0.25%	160	1.01%	1761	11.14%	15807

Occupancy Classification: Station 5 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	49
Educational (200 series)	8
Health Care, Detention, Correction (300 series)	6
Residential (400 series)	57
Mercantile, Business (500 series)	117
Industrial, Utility (600 series)	5
Manufacturing (700 series)	0
Storage (800 series)	2
Outside, Special Property (900 series)	1

# National Renewable Energy Laboratory Special Planning Zone

## Description:

The National Renewable Energy Laboratory (NREL) is a federal reserve and is not included in the District. The 327-acre complex is adjacent to the District's boundary and is operated by Alliance for Sustainable Energy, LLC. The District has a contract to provide for fire protection, emergency medical response, rescue services, and first response to hazardous materials incidents in a manner consistent with services provided within the District's jurisdiction. The District's adopted code is the base for life safety requirements at the facility.



## Special Risks:

- NREL SERF - 15313 Denver West Parkway
- NREL AFUF - 16173 Denver West Parkway
- NREL S&TF - 15212 Denver West Parkway
- NREL TTF - 15973 Denver West Parkway
- NREL SIMTA, SRRL, HFSF - 2054 Quaker Street
- NREL SURF Waste Treatment Plant - 15313 Denver West Parkway
- NREL FTLB - 15532 Denver West Parkway
- NREL Hazmat Sheds - 15313 Denver West Parkway
- NREL RAIL – 15503 Denver West Parkway

**Risk Analysis:**

NREL was established by the Solar Energy Research and Development and Demonstration Act of 1974. The Golden facility consists of 20 structures housing 1,607,031 square feet. The facility office and research facilities for different types of renewable energy research (e.g., solar, wind, and alternative fuels). Lab facilities are leased to companies or organizations in order to assist with technology development or enhancement.

NREL utilizes and stores various quantities of hazardous materials including the production and storage of large quantities of hydrogen fuel.

NREL is a secure facility with limited access and 24-hour security. Approximately 1,100 full-time and contract staff are usually on-site during business hours. The facility is a modern research facility with both detection and protection systems in place. Surrounding this facility are residential neighborhoods, commercial occupancies, and open space.

Because there are no full-time residents, demographics are not included in this planning zone. CIKR assets are excluded for security reasons.

**Water Supply:**

This planning zone is serviced by the Consolidated Mutual Water & Sanitation District. There is adequate fire flow and hydrants for the zone.

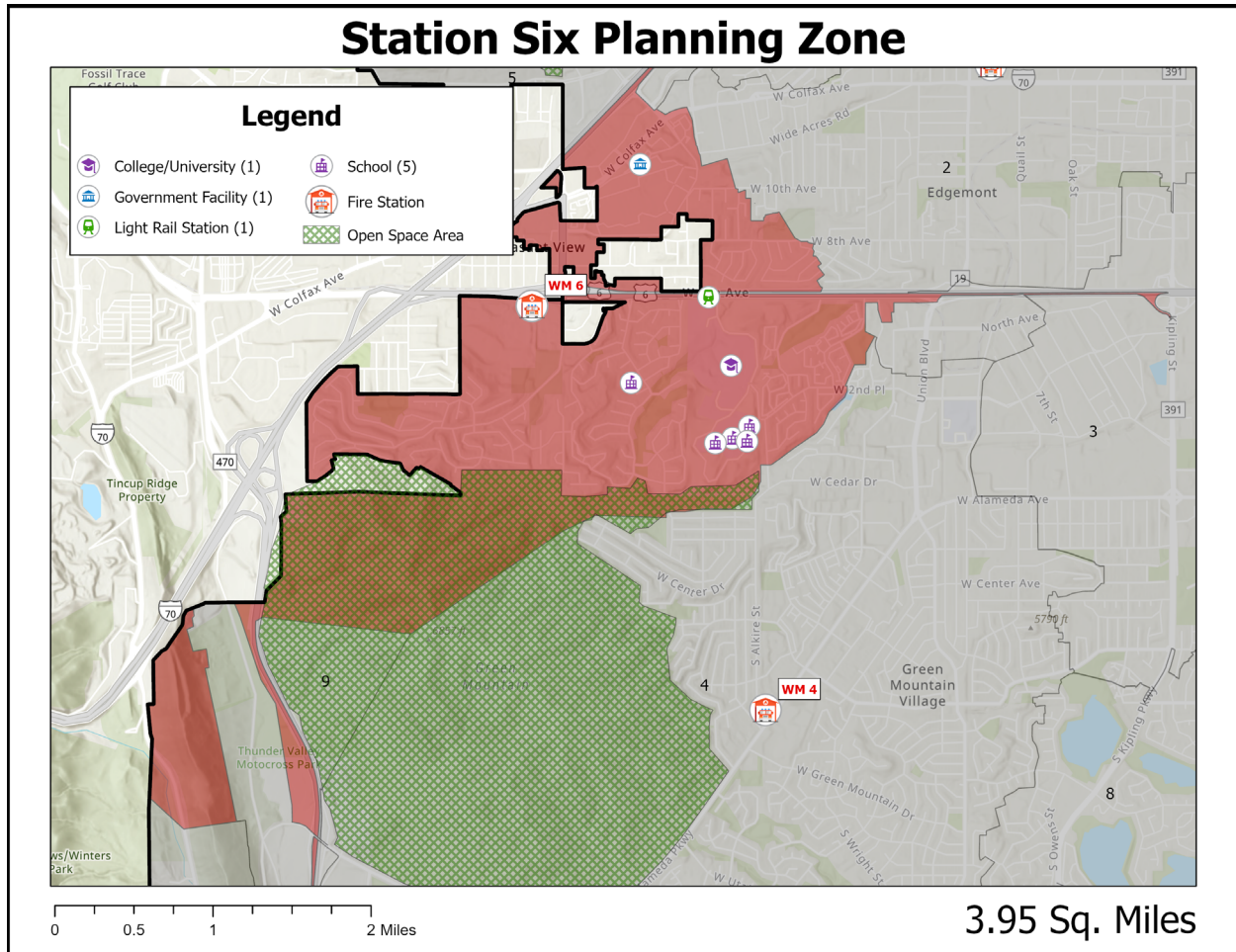
**Response History:**

National Renewable Energy Lab															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	10	41.67%	1	4.17%	10	41.67%	0	0.00%	0	0.00%	2	8.33%	1	4.17%	24
2020	7	38.89%	0	0.00%	8	44.44%	0	0.00%	0	0.00%	1	5.56%	2	11.11%	18
2021	16	55.17%	2	6.90%	9	31.03%	0	0.00%	0	0.00%	1	3.45%	1	3.45%	29
2022	20	64.52%	0	0.00%	6	19.35%	0	0.00%	2	6.45%	0	0.00%	3	9.68%	31
2023	29	52.73%	0	0.00%	5	9.09%	4	7.27%	5	9.09%	2	3.64%	10	18.18%	55
<b>Total</b>	<b>82</b>	<b>52.23%</b>	<b>3</b>	<b>1.91%</b>	<b>38</b>	<b>24.20%</b>	<b>4</b>	<b>2.55%</b>	<b>7</b>	<b>4.46%</b>	<b>6</b>	<b>3.82%</b>	<b>17</b>	<b>10.83%</b>	<b>157</b>

# Station Six Planning Zone

## Description:

This planning zone is exclusively in the first in area of Station 6. The planning zone consists of a variety of risks including a large portion of Green Mountain Park (open space), multi-family residences, a mall, and a dual response area (shared with Pleasant View Fire Department). The Green Mountain Special Planning Zone overlays a large portion of this planning zone. The zone is an urban setting with a density of 2,000+ persons per square mile. There is a mix of commercial buildings, mostly in the Colorado Mills Mall area.



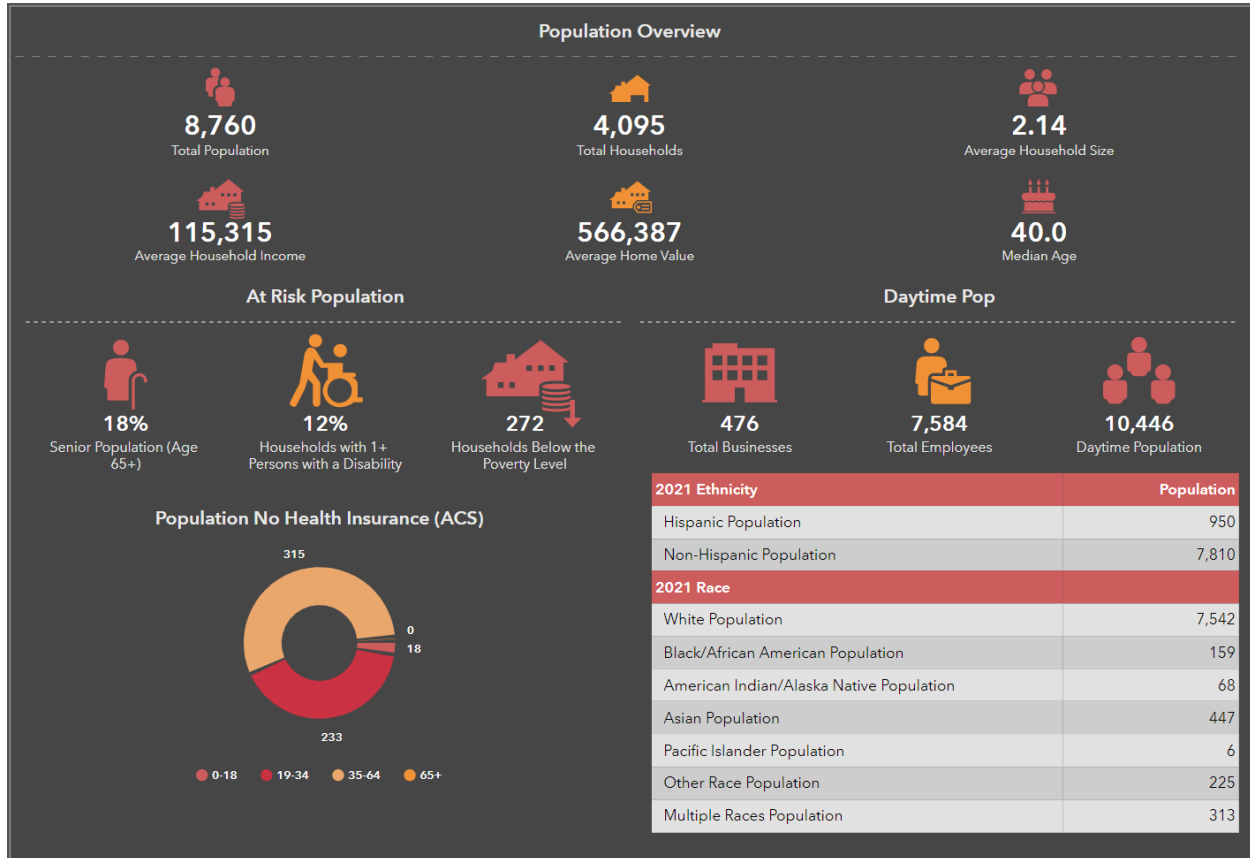
## Critical Infrastructure and Key Resources:

Name	Address
Red Rocks Community College	13300 West Sixth Avenue
Lakewood Police Substation	14500 West Colfax Avenue
Mills Mall	14500 West Colfax Avenue
Red Rocks Community College Station	6 <sup>th</sup> Avenue and Arbutus Drive
Kyffin Elementary School	205 North Flora Way
McLain High School	13600 West 2 <sup>nd</sup> Place
Warren Tech	13300 West 2 <sup>nd</sup> Place
Longview High School	13301 West 2 <sup>nd</sup> Place

## Special Risks:

- Jefferson County Fairgrounds - 15200-15400 West 6<sup>th</sup> Avenue
- Thunder Valley Motocross Park – special events

## Planning Zone Risk Profile and Demographics:



## Risk Analysis:

The multi-family apartment complexes situated along Holman Way are old and have a higher-than-normal structure fire propensity.

The Colorado Mills Mall is located in the planning zone. The mall suffered significant damage due to a hailstorm in 2017 and all systems were updated upon renovation. The mall is protected by both the District and Pleasant View Fire Department. This is a portion of a larger 'dual response area' where both districts respond to all incidents.

6<sup>th</sup> Avenue (U.S. Highway 6) is a major corridor into downtown Denver. The highway has a large volume of traffic including hazardous materials transportation. Light rail runs along the southern edge of 6<sup>th</sup> Avenue where it crosses the highway (to the north side) via a rail-only flyover. Due to access, a small portion of I-70 is also within the Station 6 Planning Zone. This area of highway is also prone to brake fires, hazardous materials incidents, and MCIs.

The residential occupancies on the southern border of this zone border Green Mountain Open Space. The Green Mountain Special Planning Zone is covered in more detail later in this document.

**Water Supply:**

This planning zone is serviced by the Consolidated Mutual Water & Sanitation, Pleasant View Metro District, College Park Water & Sanitation, and the Green Mountain Water & Sanitation District. There is adequate fire flow and hydrants for all exposures within the planning zone.

**Response History:**

Station-6																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E6	2019	187	16.86%	51	4.60%	624	56.27%	48	4.33%	5	0.45%	12	1.08%	182	16.41%	1109
E6	2020	159	17.73%	42	4.68%	510	56.86%	45	5.02%	2	0.22%	10	1.11%	129	14.38%	897
E6	2021	160	15.66%	65	6.36%	579	56.65%	45	4.40%	5	0.49%	13	1.27%	155	15.17%	1022
E6	2022	174	15.75%	47	4.25%	613	55.48%	78	7.06%	4	0.36%	12	1.09%	177	16.02%	1105
E6	2023	145	13.45%	51	4.73%	607	56.31%	62	5.75%	9	0.83%	8	0.74%	196	18.18%	1078
E6	Total	825	15.83%	256	4.91%	2933	56.28%	278	5.33%	25	0.48%	55	1.06%	839	16.10%	5211
BR6	2019	0	0.00%	10	62.50%	1	6.25%	1	6.25%	0	0.00%	0	0.00%	4	25.00%	16
BR6	2020	1	5.00%	11	55.00%	1	5.00%	2	10.00%	0	0.00%	0	0.00%	5	25.00%	20
BR6	2021	0	0.00%	23	60.53%	3	7.89%	3	7.89%	1	2.63%	0	0.00%	8	21.05%	38
BR6	2022	1	3.57%	15	53.57%	3	10.71%	2	7.14%	0	0.00%	0	0.00%	7	25.00%	28
BR6	2023	0	0.00%	4	44.44%	0	0.00%	2	22.22%	0	0.00%	0	0.00%	3	33.33%	9
BR6	Total	2	1.80%	63	56.76%	8	7.21%	10	9.01%	1	0.90%	0	0.00%	27	24.32%	111
St-06	Total	827	15.54%	319	5.99%	2941	55.26%	288	5.41%	26	0.49%	55	1.03%	866	16.27%	5322

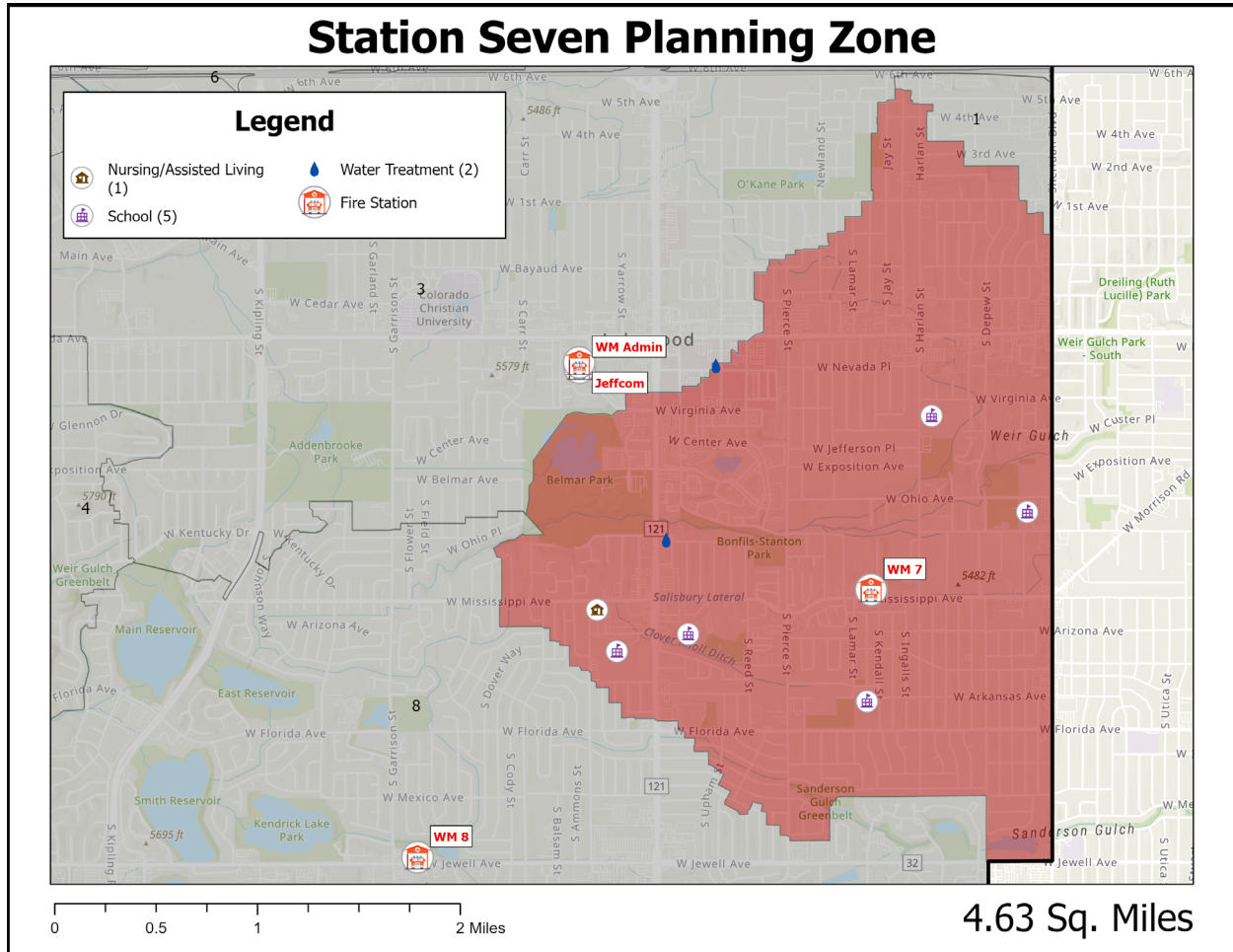
Occupancy Classification: Station 6 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	50
Educational (200 series)	15
Health Care, Detention, Correction (300 series)	2
Residential (400 series)	62
Mercantile, Business (500 series)	82
Industrial, Utility (600 series)	4
Manufacturing (700 series)	3
Storage (800 series)	5
Outside, Special Property (900 series)	1



# Station Seven Planning Zone

## Description:

This planning zone is exclusively in the first in area of Station 7. There are no unique features that would exclude any area within this zone. The zone is an urban setting with a density of 2,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include Alameda, Wadsworth, and Sheridan.



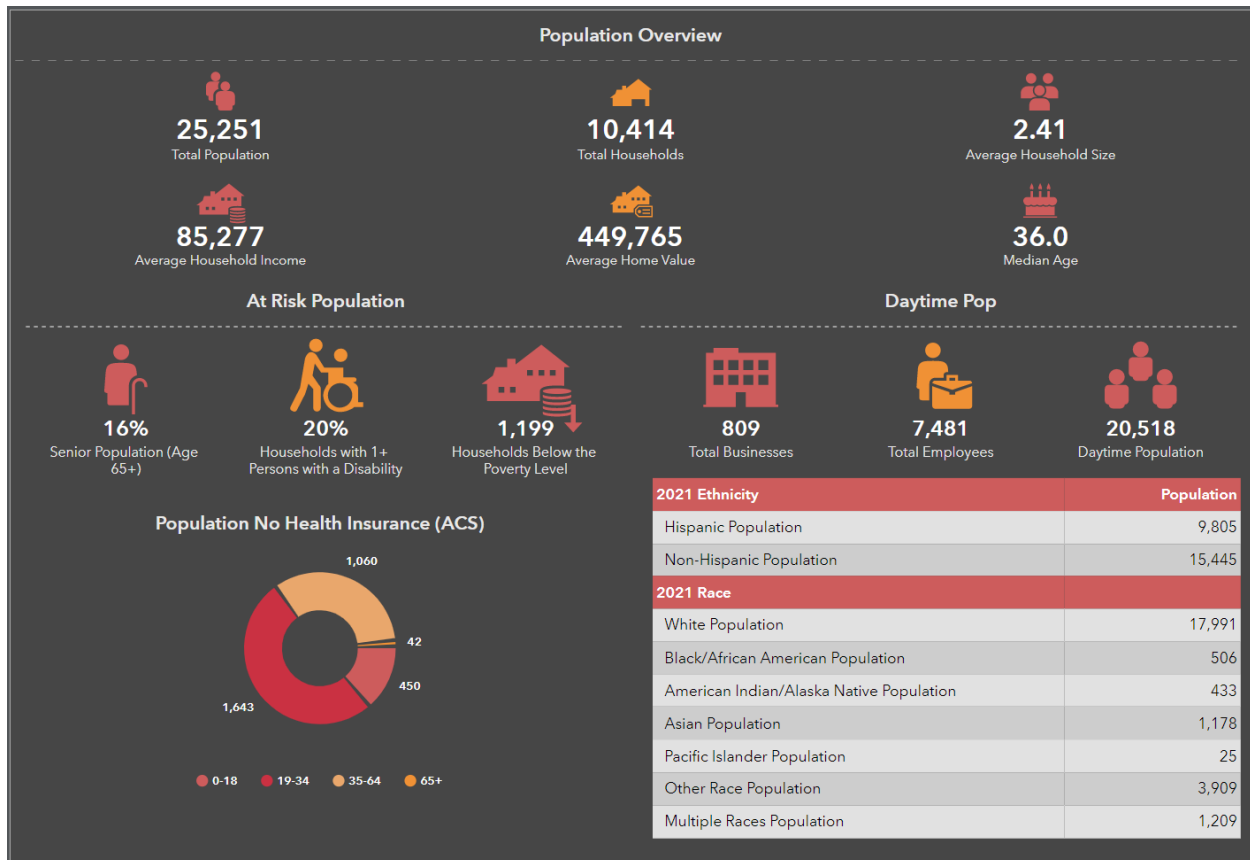
## Critical Infrastructure and Key Resources:

Name	Address
Alameda Junior/Senior High School	1255 South Wadsworth Boulevard
Lasley Elementary School	1401 South Kendall Street
Emory Elementary School	1275 South Teller Street
Deane Elementary School	580 South Harlan Street
Brady Exploration School	5220 West Ohio Avenue
Bancroft-Clover Water and Sanitation	900 South Wadsworth Boulevard
Alameda Water and Sanitation District	359 South Teller Street
Villa Manor Care Center	7950 West Mississippi Avenue

## Special Risks:

- Belmar – poor access and mixed-use properties
- Elevation Motors - 5480 West Alameda (bowstring truss)
- Martischang Plaza – 5800 West Alameda
- Electrical Sub Station - Kentucky Avenue and South Wadsworth Boulevard

## Planning Zone Risk Profile and Demographics:



## Risk Analysis:

Station 7 Planning Zone is the third busiest in the District due to the age and demographics of the area. Within the planning zone are older neighborhoods and the new Belmar development. The result is a diverse mixture of occupancies throughout the response area.

Belmar is the city of Lakewood’s pseudo-city center. The exposures are modern and are fully sprinklered. There are many mixed-use occupancies with residences above commercial. Narrow streets, non-traditional access points, and high-density residential provide unique challenges. The addition of an independent living facility and a hotel have increased call volume in the area.

Station 7 has numerous multi-family residential buildings, assisted care residential facilities, and nursing homes. The Alameda Corridor has a large number of older commercial structures with multiple vacant properties. Significant arterial streets include Wadsworth, Sheridan, and Alameda.

**Water Supply:**

This planning zone is serviced by Consolidated Mutual Water & Sanitation, Bancroft/Clover Water & Sanitation, South Sheridan Water & Sanitation, and Alameda Water & Sanitation. There is adequate fire flow and hydrants for all exposures within the planning zone.

**Response History:**

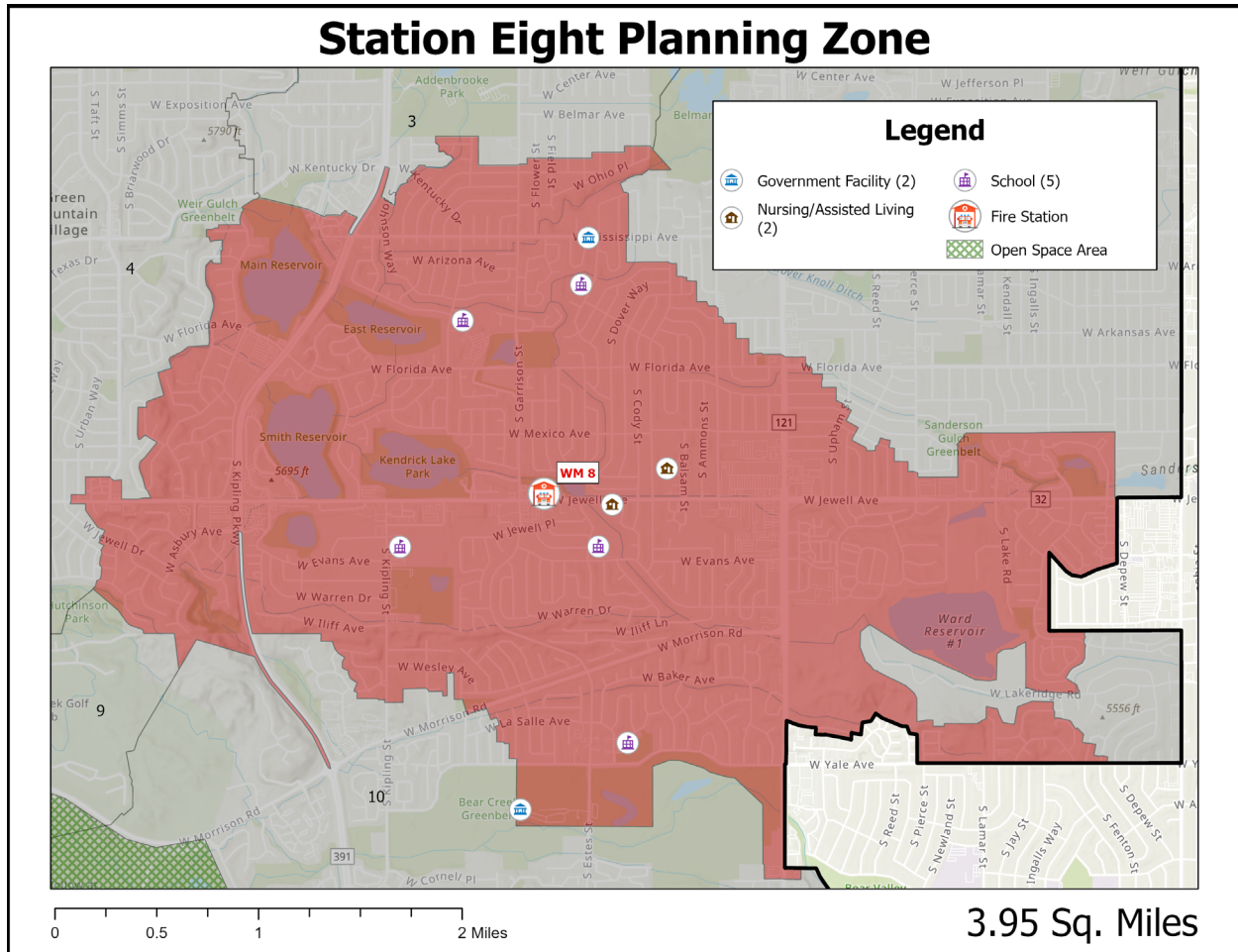
Station-7																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
ARM1	2019	1	0.15%	0	0.00%	631	91.85%	32	4.66%	1	0.15%	0	0.00%	22	3.20%	687
ARM1	2020	1	0.17%	0	0.00%	525	88.24%	54	9.08%	0	0.00%	0	0.00%	15	2.52%	595
ARM1	2021	3	0.32%	3	0.32%	863	90.75%	49	5.15%	0	0.00%	0	0.00%	33	3.47%	951
ARM1	2022	1	0.11%	4	0.45%	714	79.69%	113	12.61%	0	0.00%	0	0.00%	64	7.14%	896
ARM1	2023	1	0.10%	5	0.48%	799	76.90%	117	11.26%	0	0.00%	0	0.00%	117	11.26%	1039
ARM1	Total	7	0.17%	12	0.29%	3532	84.74%	365	8.76%	1	0.02%	0	0.00%	251	6.02%	4168
E7	2019	379	11.62%	66	2.02%	2146	65.77%	297	9.10%	10	0.31%	35	1.07%	330	10.11%	3263
E7	2020	338	11.52%	80	2.73%	1893	64.54%	254	8.66%	14	0.48%	21	0.72%	333	11.35%	2933
E7	2021	360	10.87%	65	1.96%	2197	66.33%	294	8.88%	14	0.42%	22	0.66%	360	10.87%	3312
E7	2022	372	10.74%	91	2.63%	2290	66.11%	307	8.86%	11	0.32%	39	1.13%	354	10.22%	3464
E7	2023	335	9.55%	52	1.48%	2388	68.09%	323	9.21%	6	0.17%	31	0.88%	372	10.61%	3507
E7	Total	1784	10.83%	354	2.15%	10914	66.23%	1475	8.95%	55	0.33%	148	0.90%	1749	10.61%	16479
M7	2019	51	1.66%	29	0.94%	2615	85.18%	171	5.57%	5	0.16%	4	0.13%	195	6.35%	3070
M7	2020	47	1.87%	24	0.96%	2141	85.40%	82	3.27%	8	0.32%	0	0.00%	205	8.18%	2507
M7	2021	39	1.28%	23	0.76%	2615	85.96%	105	3.45%	4	0.13%	1	0.03%	255	8.38%	3042
M7	2022	55	1.67%	25	0.76%	2819	85.68%	140	4.26%	2	0.06%	4	0.12%	245	7.45%	3290
M7	2023	34	1.26%	17	0.63%	2245	83.03%	165	6.10%	0	0.00%	2	0.07%	241	8.91%	2704
M7	Total	226	1.55%	118	0.81%	12435	85.10%	663	4.54%	19	0.13%	11	0.08%	1141	7.81%	14613
St-07	Total	2017	5.72%	484	1.37%	26881	76.24%	2503	7.10%	75	0.21%	159	0.45%	3141	8.91%	35260

Occupancy Classification: Station 7 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	108
Educational (200 series)	21
Health Care, Detention, Correction (300 series)	28
Residential (400 series)	57
Mercantile, Business (500 series)	317
Industrial, Utility (600 series)	4
Manufacturing (700 series)	0
Storage (800 series)	13
Outside, Special Property (900 series)	1

# Station Eight Planning Zone

## Description:

This planning zone is exclusively in the first in area of Station 8. The zone is an urban setting with a density of 2,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include the Jewell Avenue corridor, Kipling Parkway, and Wadsworth.



## Critical Infrastructure and Key Resources:

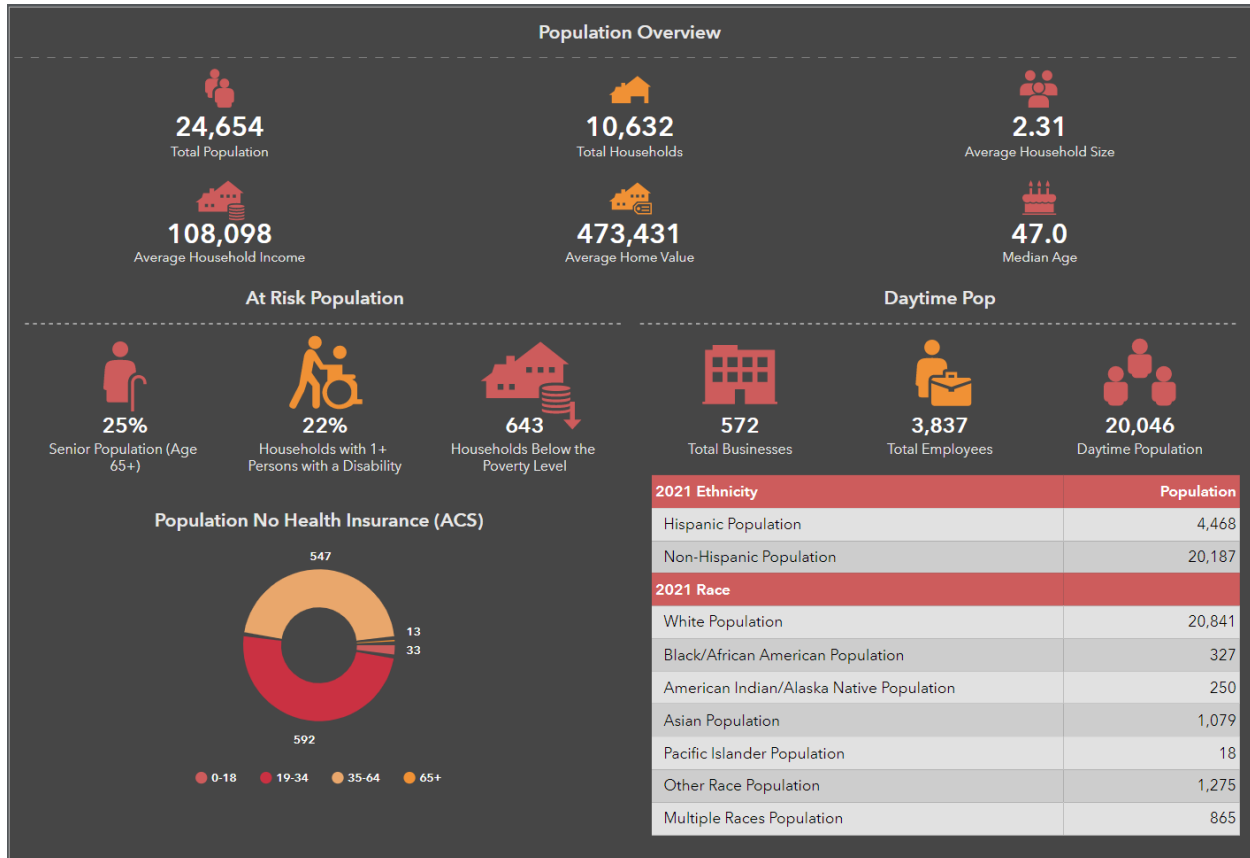
Name	Address
Lakewood Urban Parks - Maintenance	2805 South Estes Street
Westgate Elementary School	8550 West Vassar Drive
Kendrick Lakes Elementary School	1350 South Hoyt Street
Carmody Middle School	2050 South Kipling Street
Green Gables Elementary School	8701 West Woodard Drive
Patterson International School	1263 South Dudley Street

## Special Risks:

- The Mansion Office Building - 2315 South Wadsworth Boulevard – large office building

- Qwest Communications- 10001 West Asbury Avenue
- Multiple ponds and lakes: Main Reservoir, East Reservoir, Smith Reservoir, Kendrick Lake Park, and Ward Reservoir #1

**Planning Zone Risk Profile and Demographics:**



**Risk Analysis:**

Station 8 includes mostly single-family residential structures with some multi-family complexes as well. There are business corridors along Wadsworth, Jewell, and Kipling. Because this planning zone is heavily residential, there is an increased daytime population shift of almost 5,000 people.

This planning zone has the most lakes in the District.

**Water Supply:**

Bear Creek Water & Sanitation, Bancroft/Clover Water & Sanitation, South Sheridan Water & Sanitation, Green Mountain Water & Sanitation, and the Alameda Water & Sanitation District service this planning zone. There is adequate fire flow and hydrants for all exposures within the planning zone.

**Response History:**

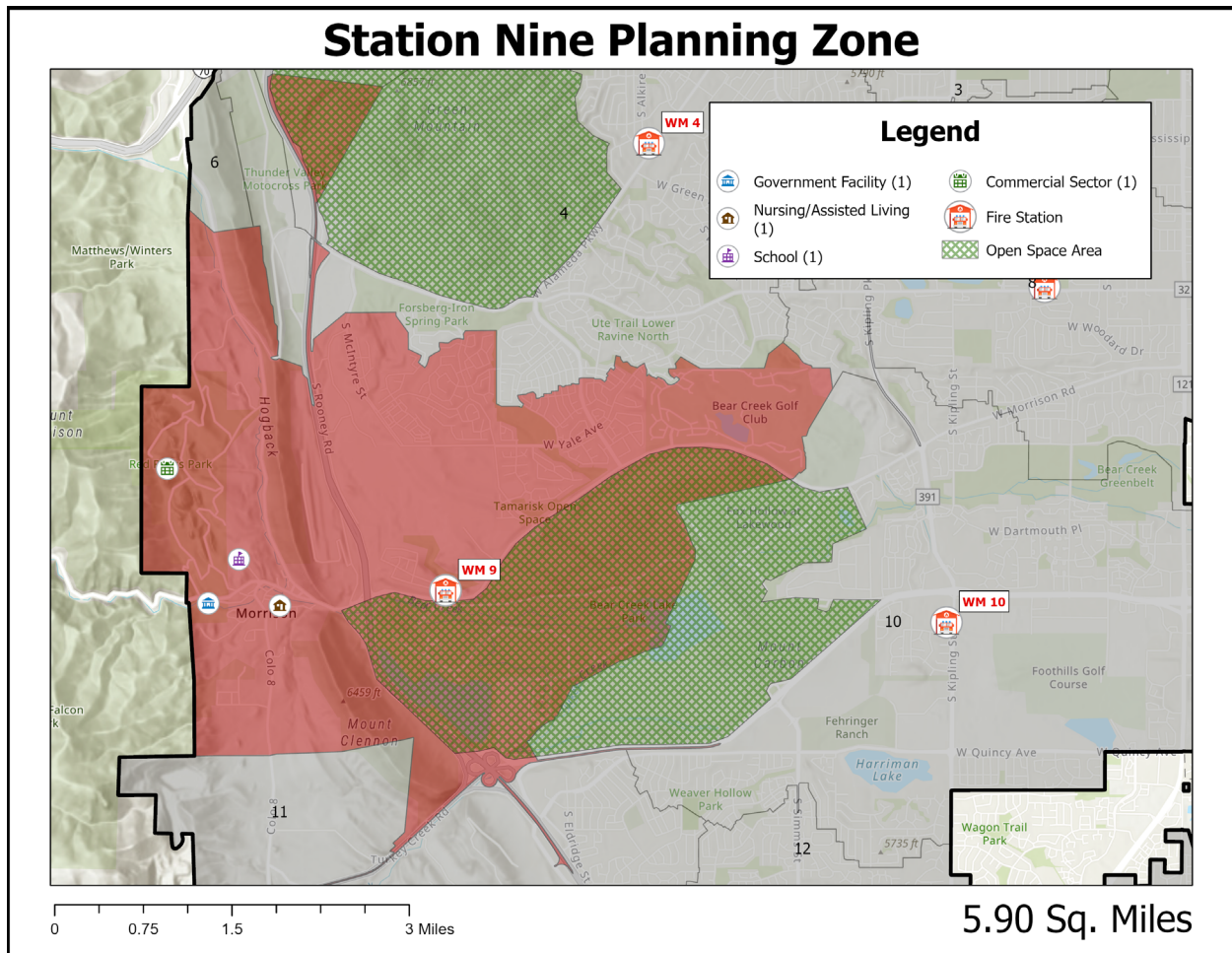
Station-8																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E8	2019	282	11.01%	69	2.69%	1676	65.42%	231	9.02%	13	0.51%	33	1.29%	258	10.07%	2562
E8	2020	232	9.92%	64	2.74%	1568	67.07%	191	8.17%	19	0.81%	31	1.33%	233	9.97%	2338
E8	2021	235	9.19%	68	2.66%	1734	67.84%	213	8.33%	6	0.23%	22	0.86%	278	10.88%	2556
E8	2022	281	9.66%	74	2.54%	1960	67.38%	272	9.35%	10	0.34%	30	1.03%	282	9.69%	2909
E8	2023	236	8.49%	63	2.27%	1877	67.52%	303	10.90%	5	0.18%	30	1.08%	266	9.57%	2780
E8	Total	1266	9.63%	338	2.57%	8815	67.06%	1210	9.21%	53	0.40%	146	1.11%	1317	10.02%	13145
TW8	2019	71	7.56%	110	11.71%	426	45.37%	76	8.09%	17	1.81%	32	3.41%	207	22.04%	939
TW8	2020	62	8.03%	96	12.44%	404	52.33%	52	6.74%	13	1.68%	13	1.68%	132	17.10%	772
TW8	2021	101	9.62%	107	10.19%	586	55.81%	73	6.95%	5	0.48%	2	0.19%	176	16.76%	1050
TW8	2022	104	9.60%	131	12.10%	555	51.25%	96	8.86%	10	0.92%	7	0.65%	180	16.62%	1083
TW8	2023	65	7.03%	110	11.90%	517	55.95%	77	8.33%	6	0.65%	8	0.87%	141	15.26%	924
TW8	Total	403	8.45%	554	11.62%	2488	52.18%	374	7.84%	51	1.07%	62	1.30%	836	17.53%	4768
DIVE2	2019	0	0.00%	0	0.00%	1	4.55%	1	4.55%	9	40.91%	0	0.00%	11	50.00%	22
DIVE2	2020	0	0.00%	0	0.00%	0	0.00%	2	11.11%	7	38.89%	0	0.00%	9	50.00%	18
DIVE2	2021	0	0.00%	0	0.00%	2	12.50%	4	25.00%	1	6.25%	0	0.00%	9	56.25%	16
DIVE2	2022	0	0.00%	0	0.00%	1	6.67%	0	0.00%	9	60.00%	0	0.00%	5	33.33%	15
DIVE2	2023	0	0.00%	0	0.00%	0	0.00%	2	28.57%	3	42.86%	0	0.00%	2	28.57%	7
DIVE2	Total	0	0.00%	0	0.00%	4	5.13%	9	11.54%	29	37.18%	0	0.00%	36	46.15%	78
ST-8	Total	1822	8.36%	1629	7.48%	13174	60.48%	1779	8.17%	195	0.90%	237	1.09%	2948	13.53%	21784

Occupancy Classification: Station 8 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	62
Educational (200 series)	15
Health Care, Detention, Correction (300 series)	15
Residential (400 series)	56
Mercantile, Business (500 series)	199
Industrial, Utility (600 series)	2
Manufacturing (700 series)	0
Storage (800 series)	5
Outside, Special Property (900 series)	0

## Station Nine Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 9. The zone has a density of less than 1,000 persons per square mile. The town of Morrison (within this planning zone) is an older historical area with older commercial and residential structures. There is a mix of wildland urban interface with a mix of parks (Red Rocks and Mt. Falcon). The Bear Creek Lake Park Special Planning Zone overlays a large portion of this planning zone.



### Critical Infrastructure and Key Resources:

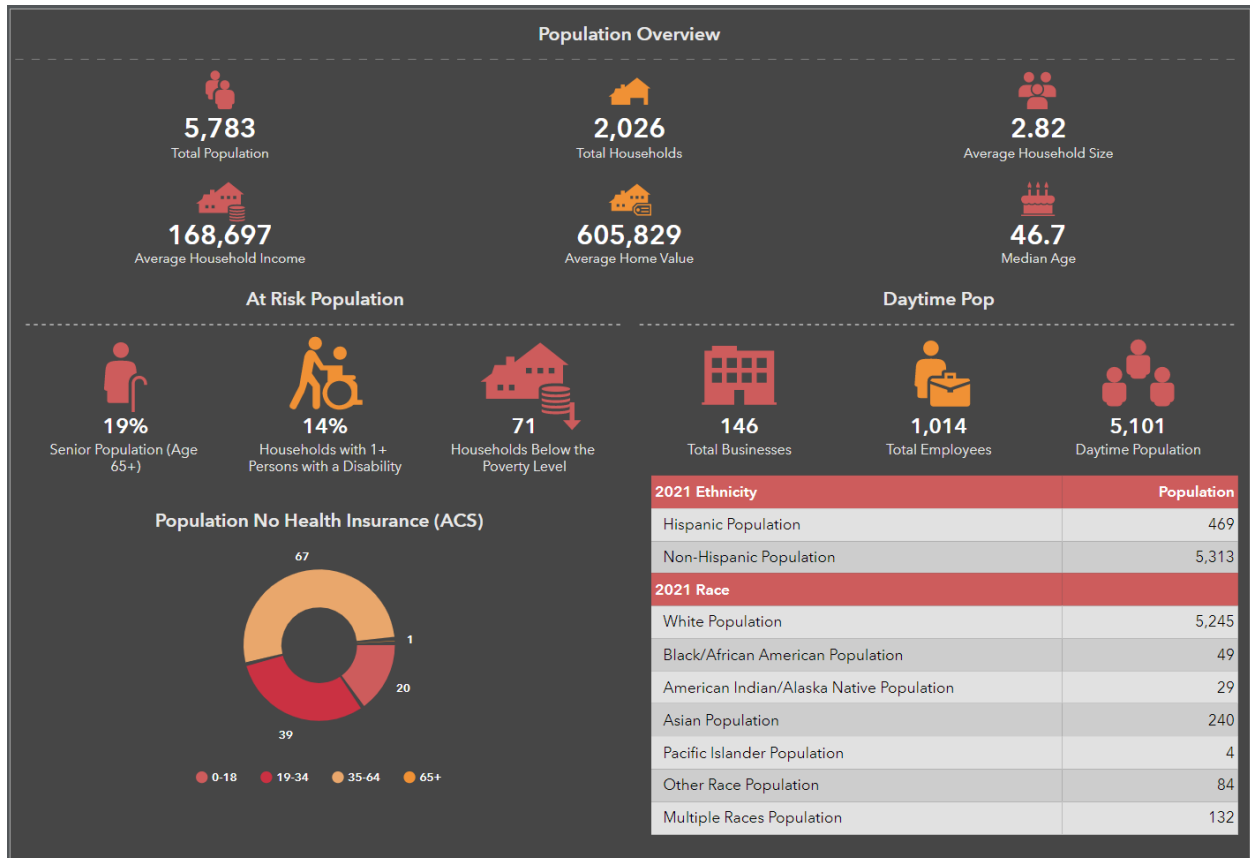
Name	Address
Red Rocks Amphitheater	17598 West Alameda Parkway
Mountain Parks Morrison	300 Union Avenue
Red Rocks Elementary School	17199 Highway 74
Bear Creek Center	150 Spring Street

### Special Risks:

- Bradley Engineering - 16371 Morrison Road – hazardous materials

- Downtown Morrison – historic structures
- US Highway 285, CO Highway C-470 – transportation routes
- Bandimere Speedway – special events
- Bear Creek Lake Park – See Bear Creek Lake Park Special Planning Zone
- Mt. Falcon Park

### Planning Zone Risk Profile and Demographics:



### Risk Analysis:

Station 9 has a significant wildland interface, areas without a water distribution system, and a large historical concert facility. The downtown area of the town of Morrison is condensed and vulnerable to exposure issues as well as flooding along Bear Creek. The area surrounding the town along with Red Rocks Park provides recreational opportunities such as climbing and hiking, which result in the majority of the District’s low-angle and high-angle rescues. Major roadways include a large portion of C-470, Highway 285, and Colorado 8.

The District’s CWPP shows a very high Risk 50 Hazard Rating for the Morrison Town Center and South Morrison.

The Bear Creek Lake Park Special Planning Zone is covered later in this document.



## Water Supply:

Mount Carbon Metro District, Bear Creek Water & Sanitation District, and the town of Morrison service this planning zone. The area south of the town of Morrison and Red Rocks Park is out of any organized water district and has no water distribution system. This area has commercial occupancies that include Aggregate Industries Gravel Pit and Red Rocks Amphitheater (including the gift shop). The town of Morrison has an old water distribution system and there is not adequate fire flow for multiple alarm structure fires.

## Response History:

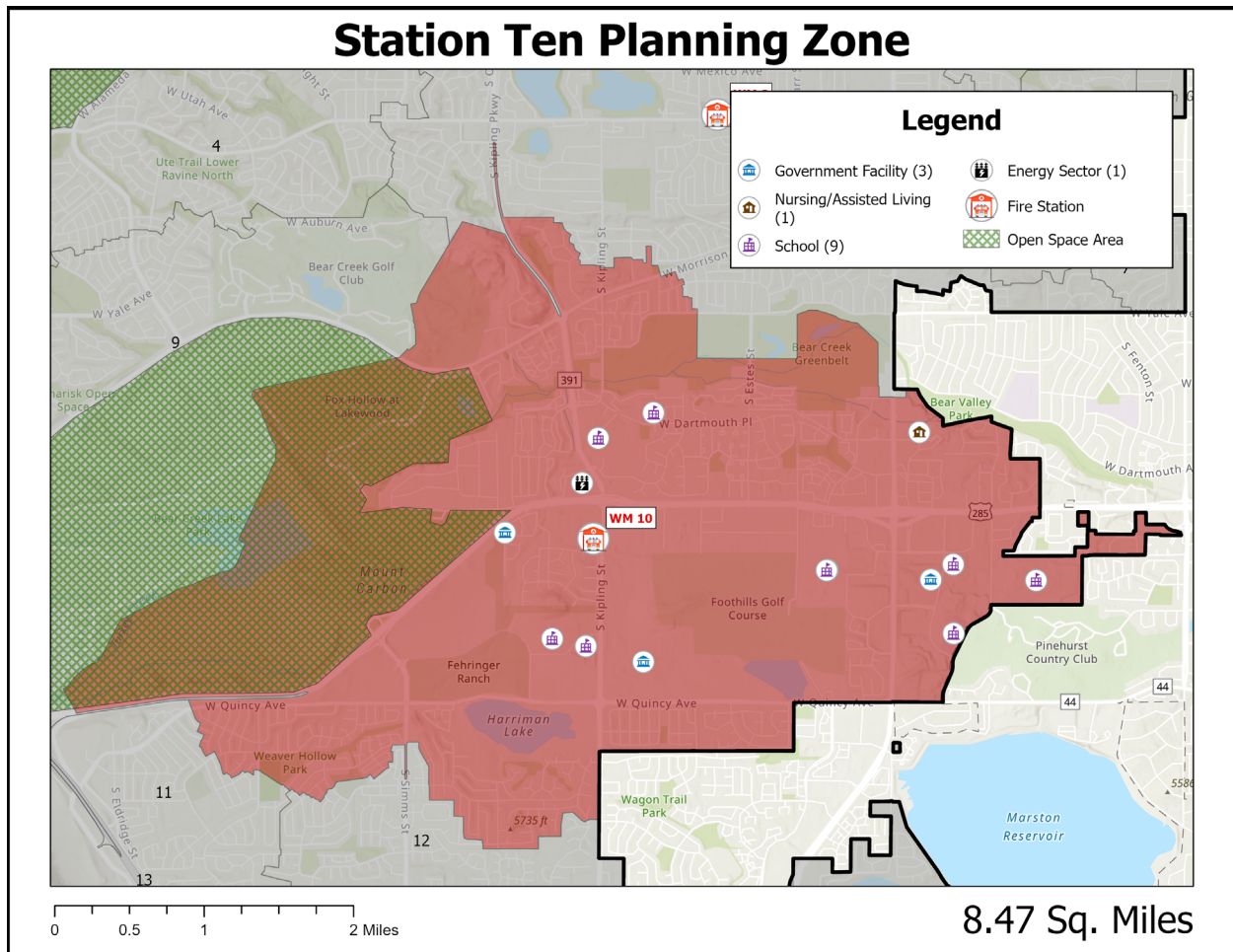
Station-9																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E9	2019	63	6.85%	54	5.87%	619	67.28%	42	4.57%	5	0.54%	12	1.30%	125	13.59%	920
E9	2020	65	7.96%	66	8.08%	492	60.22%	47	5.75%	6	0.73%	9	1.10%	132	16.16%	817
E9	2021	82	8.94%	71	7.74%	548	59.76%	50	5.45%	4	0.44%	17	1.85%	145	15.81%	917
E9	2022	72	7.57%	54	5.68%	633	66.56%	43	4.52%	7	0.74%	10	1.05%	132	13.88%	951
E9	2023	65	7.60%	37	4.33%	557	65.15%	50	5.85%	10	1.17%	10	1.17%	126	14.74%	855
E9	Total	347	7.78%	282	6.32%	2849	63.88%	232	5.20%	32	0.72%	58	1.30%	660	14.80%	4460
BR9	2019	0	0.00%	25	37.88%	15	22.73%	6	9.09%	1	1.52%	1	1.52%	18	27.27%	66
BR9	2020	2	2.20%	32	35.16%	24	26.37%	8	8.79%	2	2.20%	0	0.00%	23	25.27%	91
BR9	2021	4	4.00%	35	35.00%	26	26.00%	6	6.00%	1	1.00%	0	0.00%	28	28.00%	100
BR9	2022	0	0.00%	18	32.73%	13	23.64%	3	5.45%	0	0.00%	0	0.00%	21	38.18%	55
BR9	2023	0	0.00%	11	32.35%	4	11.76%	4	11.76%	0	0.00%	0	0.00%	15	44.12%	34
BR9	Total	6	1.73%	121	34.97%	82	23.70%	27	7.80%	4	1.16%	1	0.29%	105	30.35%	346
UTV9	2019	0	0.00%	0	0.00%	4	33.33%	1	8.33%	0	0.00%	0	0.00%	7	58.33%	12
UTV9	2020	0	0.00%	0	0.00%	9	60.00%	1	6.67%	2	13.33%	0	0.00%	3	20.00%	15
UTV9	2021	0	0.00%	0	0.00%	12	66.67%	2	11.11%	1	5.56%	0	0.00%	3	16.67%	18
UTV9	2022	0	0.00%	0	0.00%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	1	50.00%	2
UTV9	2023	0	0.00%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	2
UTV9	Total	0	0.00%	0	0.00%	28	57.14%	4	8.16%	3	6.12%	0	0.00%	14	28.57%	49
St-09	Total	353	7.27%	403	8.30%	2959	60.95%	263	5.42%	39	0.80%	59	1.22%	779	16.05%	4855

Occupancy Classification: Station 9 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	27
Educational (200 series)	4
Health Care, Detention, Correction (300 series)	2
Residential (400 series)	3
Mercantile, Business (500 series)	35
Industrial, Utility (600 series)	5
Manufacturing (700 series)	2
Storage (800 series)	4
Outside, Special Property (900 series)	3

## Station Ten Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 10. The Bear Creek Lake Park Special Planning Zone overlays a large portion of this planning zone. The zone is an urban setting with a density of 2,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include Kipling and Wadsworth. Highway 285 (Hampden Avenue) is a major corridor into south Denver.



### Critical Infrastructure and Key Resources:

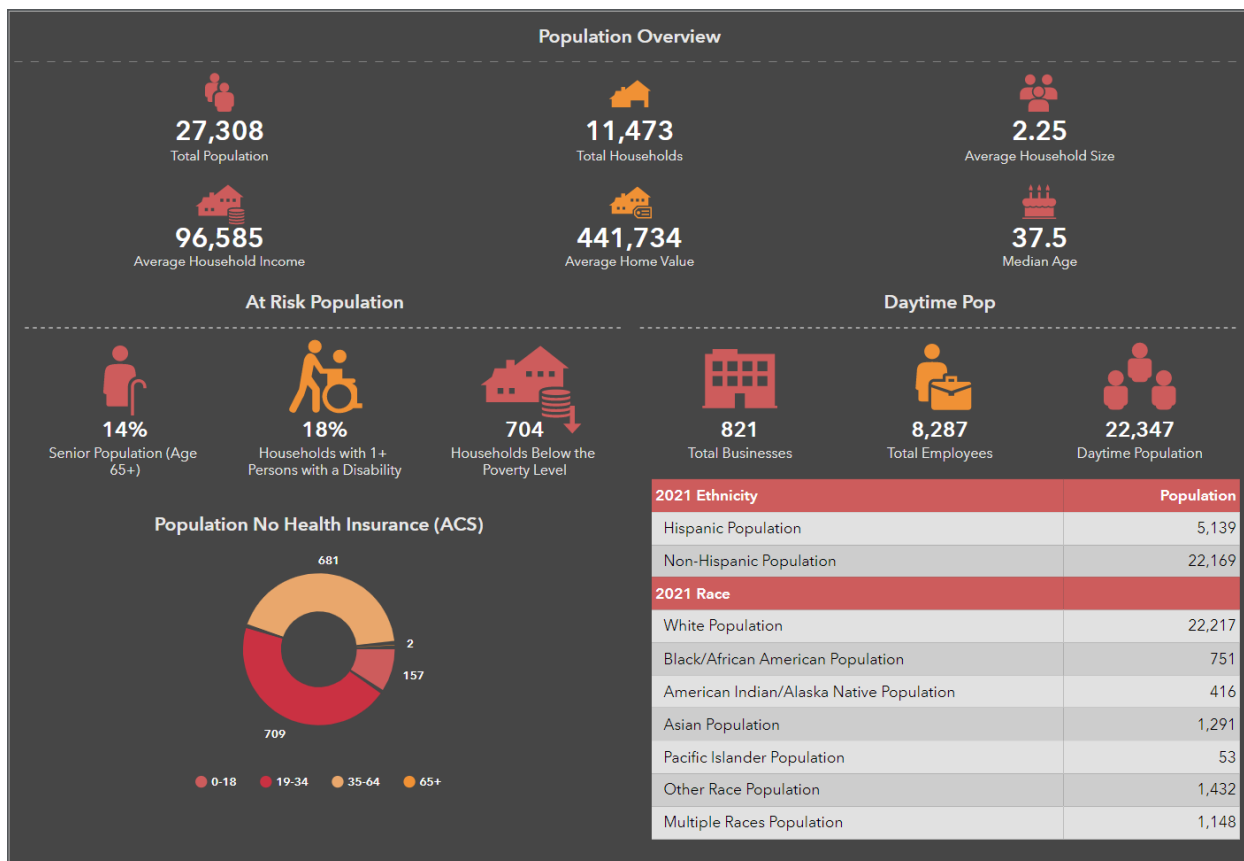
Name	Address
Business Center	7301 West Mansfield Avenue
West Metro Fire Rescue - Training Facility	3535 South Kipling Parkway
Montview Detention Center	7862 West Mansfield Parkway
Federal Correctional Institute	9595 West Quincy Avenue
Rocky Mountain Deaf School	10300 West Nassau Avenue
Bear Creek High School	9800 West Dartmouth Place
Bear Creek K-8 School	9601 West Dartmouth Place
Addenbrooke Classical Grammar School	7114 West Jefferson Avenue
D'Evelyn Junior/Senior High School	10359 West Nassau Avenue

Colorado Academy	3800 South Pierce Street
Xcel Energy - Southwest Kipling Service Center	10001 West Hampden Avenue
Power Back Rehabilitation	7395 West Eastman Place

### Special Risks:

- Bear Creek Greenbelt

### Planning Zone Risk Profile and Demographics:



### Risk Analysis:

Planning Zone 10 is a residential planning zone and has a number of two and three-story multi-family residential structures; many without detection or protection systems. The zone also includes two federal correctional facilities with large populations and a juvenile detention center. The Academy Park office complex includes multiple large commercial structures and nine hotels.

Bear Creek flows through the northern portion of this planning zone. There is a bike path along Bear Creek that runs through the entire planning zone from east to west. This trail is popular for many types of outdoor recreation. This greenbelt is also a wildfire risk as it is lined with residential occupancies on both the north and south sides.

The Bear Creek Lake Park Special Planning Zone, which is on the west side of this planning zone is covered later in this document.

**Water Supply:**

Bancroft-Clover Water & Sanitation, Bear Creek Water & Sanitation, Bennett/Bear Creek Water & Sanitation, and the Lakehurst Water & Sanitation Districts service this planning zone.

**Response History:**

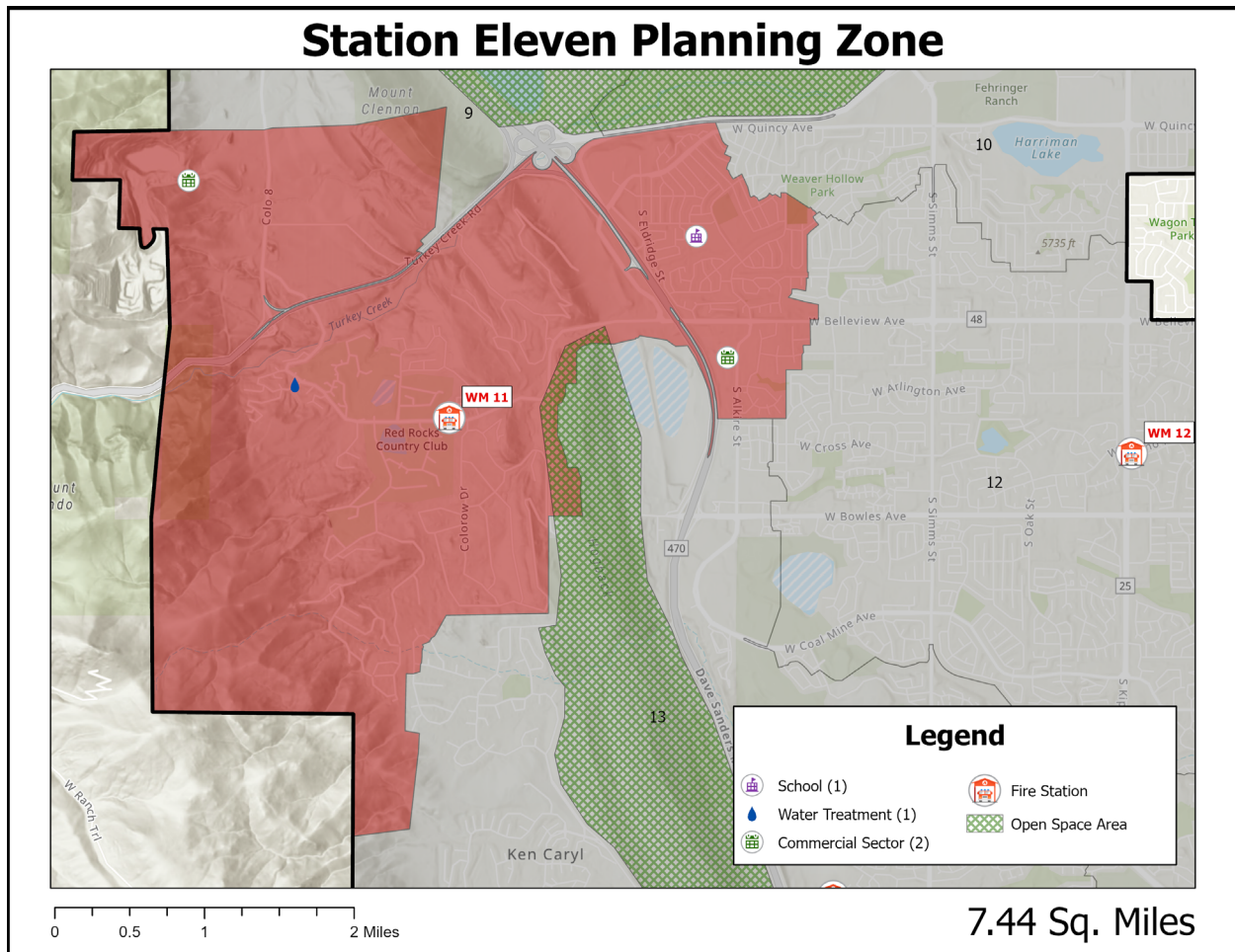
Station-10																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
M9	2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M9	2020	5	1.17%	6	1.41%	377	88.50%	13	3.05%	0	0.00%	0	0.00%	25	5.87%	426
M9	2021	1	1.56%	0	0.00%	56	87.50%	3	4.69%	0	0.00%	0	0.00%	4	6.25%	64
M9	2022	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M9	2023	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M9	Total	6	1.22%	6	1.22%	433	88.37%	16	3.27%	0	0.00%	0	0.00%	29	5.92%	490
M10	2019	39	1.50%	37	1.42%	2216	84.97%	116	4.45%	12	0.46%	2	0.08%	186	7.13%	2608
M10	2020	32	1.38%	23	0.99%	1991	86.08%	73	3.16%	17	0.73%	3	0.13%	174	7.52%	2313
M10	2021	34	1.24%	35	1.27%	2378	86.57%	91	3.31%	8	0.29%	2	0.07%	199	7.24%	2747
M10	2022	27	0.86%	38	1.22%	2665	85.33%	146	4.67%	8	0.26%	1	0.03%	238	7.62%	3123
M10	2023	23	0.82%	22	0.78%	2349	83.56%	230	8.18%	5	0.18%	5	0.18%	177	6.30%	2811
M10	Total	155	1.14%	155	1.14%	11599	85.27%	656	4.82%	50	0.37%	13	0.10%	974	7.16%	13602
M19	2019	0	0.00%	0	0.00%	46	25.27%	1	0.55%	0	0.00%	0	0.00%	135	74.18%	182
M19	2020	0	0.00%	0	0.00%	0	0.00%	1	33.33%	0	0.00%	0	0.00%	2	66.67%	3
M19	2021	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M19	2022	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
M19	2023	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3	100.00%	3
M19	Total	0	0.00%	0	0.00%	47	24.87%	2	1.06%	0	0.00%	0	0.00%	140	74.07%	189
SAM2	2019	42	5.01%	85	10.13%	486	57.93%	38	4.53%	20	2.38%	15	1.79%	153	18.24%	839
SAM2	2020	24	3.38%	75	10.55%	441	62.03%	27	3.80%	17	2.39%	10	1.41%	117	16.46%	711
SAM2	2021	23	2.97%	106	13.68%	491	63.35%	27	3.48%	15	1.94%	7	0.90%	106	13.68%	775
SAM2	2022	23	3.31%	96	13.81%	389	55.97%	24	3.45%	14	2.01%	5	0.72%	144	20.72%	695
SAM2	2023	14	2.05%	66	9.66%	420	61.49%	36	5.27%	11	1.61%	20	2.93%	116	16.98%	683
SAM2	Total	126	3.40%	428	11.56%	2227	60.14%	152	4.10%	77	2.08%	57	1.54%	636	17.18%	3703
ATV2	2019	0	0.00%	0	0.00%	31	22.14%	0	0.00%	0	0.00%	0	0.00%	109	77.86%	140
ATV2	2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1	100.00%	1
ATV2	2021	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
ATV2	2022	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
ATV2	2023	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
ATV2	Total	0	0.00%	0	0.00%	31	21.99%	0	0.00%	0	0.00%	0	0.00%	110	78.01%	141
CR10	2019	0	0.00%	1	4.55%	11	50.00%	0	0.00%	1	4.55%	1	4.55%	8	36.36%	22
CR10	2020	0	0.00%	0	0.00%	10	55.56%	1	5.56%	1	5.56%	0	0.00%	6	33.33%	18
CR10	2021	0	0.00%	1	5.56%	8	44.44%	3	16.67%	0	0.00%	0	0.00%	6	33.33%	18
CR10	2022	0	0.00%	2	12.50%	12	75.00%	0	0.00%	0	0.00%	1	6.25%	1	6.25%	16
CR10	2023	0	0.00%	0	0.00%	7	46.67%	2	13.33%	0	0.00%	1	6.67%	5	33.33%	15
CR10	Total	0	0.00%	4	4.49%	48	53.93%	6	6.74%	2	2.25%	3	3.37%	26	29.21%	89
R10	2019	324	12.26%	83	3.14%	1693	64.06%	226	8.55%	13	0.49%	38	1.44%	266	10.06%	2643
R10	2020	322	11.40%	85	3.01%	1872	66.29%	217	7.68%	27	0.96%	27	0.96%	274	9.70%	2824
R10	2021	363	12.48%	93	3.20%	1861	63.97%	254	8.73%	24	0.83%	25	0.86%	289	9.93%	2909
R10	2022	288	11.61%	76	3.06%	1602	64.60%	258	10.40%	8	0.32%	28	1.13%	220	8.87%	2480
R10	2023	289	9.74%	61	2.06%	2024	68.22%	332	11.19%	12	0.40%	30	1.01%	219	7.38%	2967
R10	Total	1586	11.47%	398	2.88%	9052	65.49%	1287	9.31%	84	0.61%	148	1.07%	1268	9.17%	13823
BUR7	2019	35	8.31%	201	47.74%	13	3.09%	21	4.99%	0	0.00%	3	0.71%	148	35.15%	421
BUR7	2020	22	6.45%	190	55.72%	2	0.59%	13	3.81%	0	0.00%	0	0.00%	114	33.43%	341
BUR7	2021	26	5.05%	294	57.09%	11	2.14%	31	6.02%	0	0.00%	1	0.19%	152	29.51%	515
BUR7	2022	40	3.59%	486	43.63%	7	0.63%	152	13.64%	0	0.00%	2	0.18%	427	38.33%	1114
BUR7	2023	20	5.65%	192	54.24%	2	0.56%	27	7.63%	1	0.28%	5	1.41%	107	30.23%	354
BUR7	Total	143	5.21%	1363	49.65%	35	1.28%	244	8.89%	1	0.04%	11	0.40%	948	34.54%	2745
St-10	Total	2010	5.86%	2348	6.85%	23039	67.18%	2347	6.84%	214	0.62%	232	0.68%	4102	11.96%	34292

Occupancy Classification: Station 10 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	66
Educational (200 series)	39
Health Care, Detention, Correction (300 series)	37
Residential (400 series)	138
Mercantile, Business (500 series)	160
Industrial, Utility (600 series)	2
Manufacturing (700 series)	1
Storage (800 series)	9
Outside, Special Property (900 series)	3

## Station Eleven Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 11. The Dakota Ridge Hogback is a large natural barrier that limits access to the Willowbrook and Willow Springs communities. The topography on West Belleview Avenue requires a very steep and curvy route and prevents rapid responses in the residential neighborhood to the east. The zone has a density of 1000 persons per square mile. There is a new subdivision of homes being built just east of Station 11. There is a limited number of commercial buildings in the area of Quincy and C-470. Significant wildland interface exposures are common to this response zone.



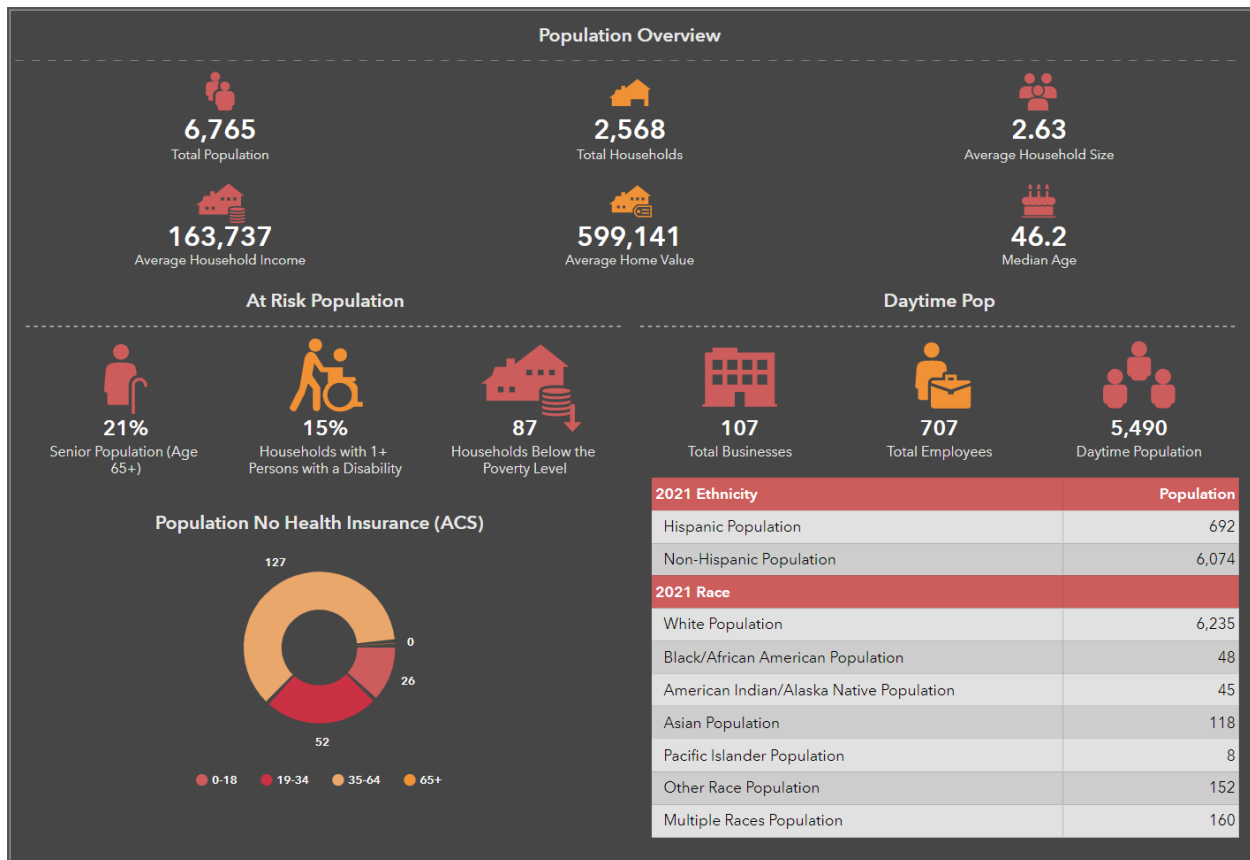
### Critical Infrastructure and Key Resources:

Name	Address
Kendallvue Elementary School	13658 West Marlowe Avenue
Willow Springs North Pump House	5412 Tiger Bend Lane
Holcim – WCR, Inc. AGG Morrison	Colorado 8
3D Systems	5381 South Alkire Street

## Special Risks:

- The Fort Restaurant - 19192 Highway 8 – limited water supply
- Willow Ridge Manor - 4903 Willow Springs Road – limited water supply
- Both the Willowbrook and Willow Springs neighborhoods have significant wildland interface exposure
- Rural firefighting areas:
  - North of Highway 285 and south of the town of Morrison, which includes three commercial exposures (Fort Restaurant, Willow Ridge Manor, and a gravel quarry) and single-family residences
  - North of Bowles and west of C-470 with multiple single-family residences

## Planning Zone Risk Profile and Demographics:



## Risk Analysis:

This planning zone is bisected by the Dakota Ridge Hogback limiting access from Station 11 to the east into the Friendly Hills subdivision and the commercial areas along C-470. On the east, the exposures include a Home Depot and older residential exposures.

The west side of the area is generally newer and there are two distinct residential areas with large single-family residences. The Willowbrook subdivision tends to have less wildland fire mitigation and more mature brush/trees mixed in among residences. The homes tend to be



constructed of wood with a mix of shake shingles. Willow Springs (filings 1, 2, and 3) is a newer development with very large modern homes. The homes are generally constructed with fire-resistant siding and roofing materials. However, the upper end of the development has extended response times for both initial responses and the remaining effective response force. Initial response times can run between 14 and 18 minutes to the upper reaches of the planning area. A new subdivision is being built directly to the east of Station 11. This area provides good access to the initial responding unit.

The District’s CWPP shows a very high Risk 50 Hazard Rating for the Willow Springs/North Ranch area.

**Water Supply:**

Fairview Willowbrook Water District services this planning zone. There is adequate fire flow and hydrants in the area covered by the water district.

There are two areas where the hydrants are more than 1,000 feet away. The first area is north of State Highway 285 and south of the town of Morrison, including a restaurant, reception/wedding occupancy, and a gravel pit. The second area is north of Bowles Avenue and west of C-470. The exposures are large single-family residences.

**Response History:**

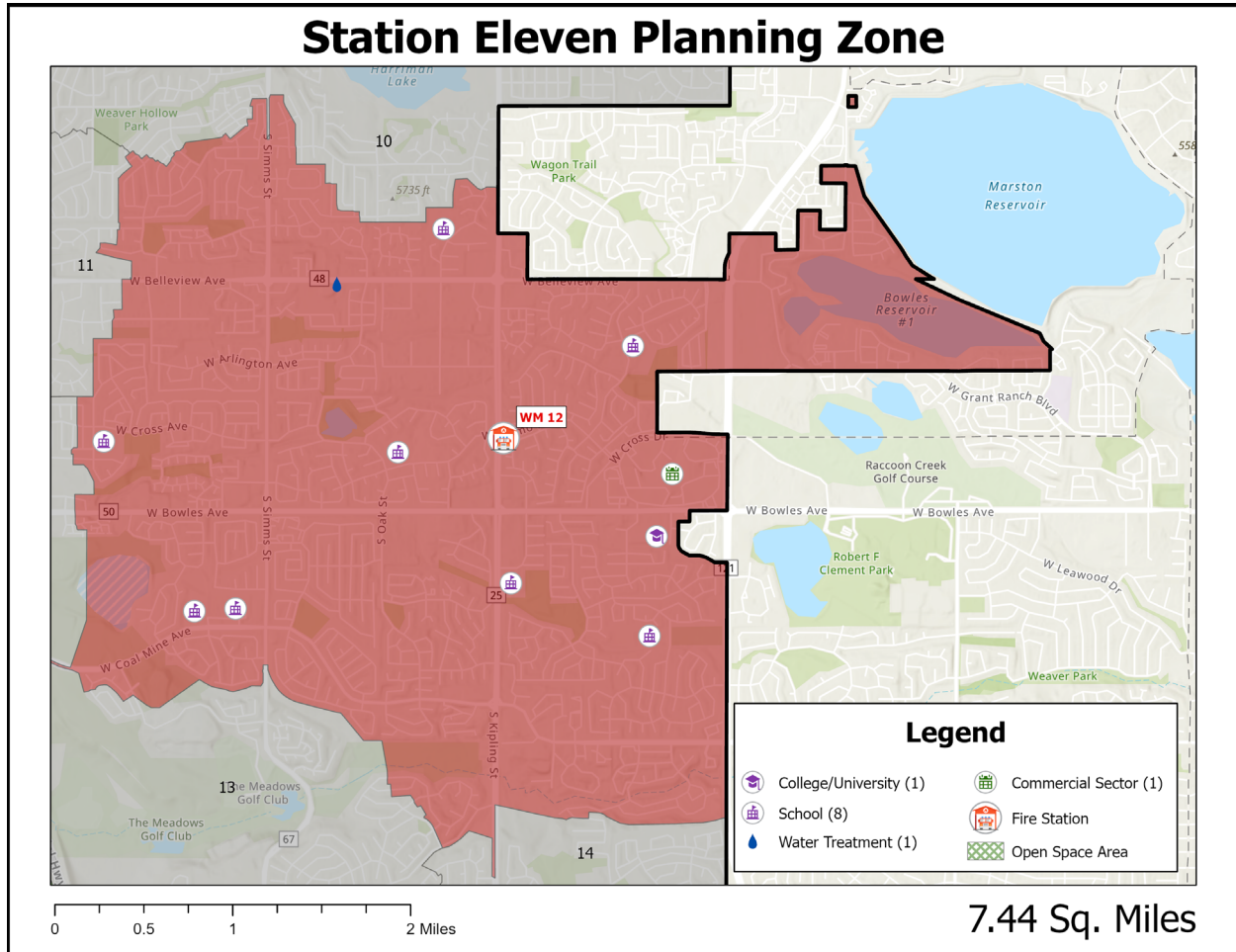
Station-11																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E11	2019	41	7.93%	28	5.42%	338	65.38%	23	4.45%	3	0.58%	12	2.32%	72	13.93%	517
E11	2020	37	7.31%	27	5.34%	312	61.66%	25	4.94%	2	0.40%	13	2.57%	90	17.79%	506
E11	2021	61	10.29%	28	4.72%	380	64.08%	37	6.24%	1	0.17%	7	1.18%	79	13.32%	593
E11	2022	50	7.39%	29	4.28%	440	64.99%	64	9.45%	3	0.44%	7	1.03%	84	12.41%	677
E11	2023	60	8.65%	20	2.88%	432	62.25%	64	9.22%	1	0.14%	14	2.02%	103	14.84%	694
E11	Total	249	8.34%	132	4.42%	1902	63.68%	213	7.13%	10	0.33%	53	1.77%	428	14.33%	2987
BR11	2019	0	0.00%	4	44.44%	0	0.00%	1	11.11%	0	0.00%	0	0.00%	4	44.44%	9
BR11	2020	1	3.57%	11	39.29%	3	10.71%	1	3.57%	0	0.00%	1	3.57%	11	39.29%	28
BR11	2021	0	0.00%	2	33.33%	1	16.67%	0	0.00%	0	0.00%	0	0.00%	3	50.00%	6
BRE11	2022	2	5.56%	8	22.22%	11	30.56%	0	0.00%	0	0.00%	0	0.00%	15	41.67%	36
BRE11	2023	0	0.00%	1	14.29%	0	0.00%	1	14.29%	0	0.00%	0	0.00%	5	71.43%	7
BR11	Total	3	3.49%	26	30.23%	15	17.44%	3	3.49%	0	0.00%	1	1.16%	38	44.19%	86
St -11	Total	252	8.20%	158	5.14%	1917	62.38%	216	7.03%	10	0.33%	54	1.76%	466	15.16%	3073

Occupancy Classification: Station 11 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	15
Educational (200 series)	2
Health Care, Detention, Correction (300 series)	0
Residential (400 series)	1
Mercantile, Business (500 series)	21
Industrial, Utility (600 series)	1
Manufacturing (700 series)	0
Storage (800 series)	2
Outside, Special Property (900 series)	0

## Station Twelve Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 12. There are no unique features that would exclude any area within this zone. The zone is a suburban setting with a density of 1,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include Bowles Avenue, Kipling Parkway, and Wadsworth Boulevard.



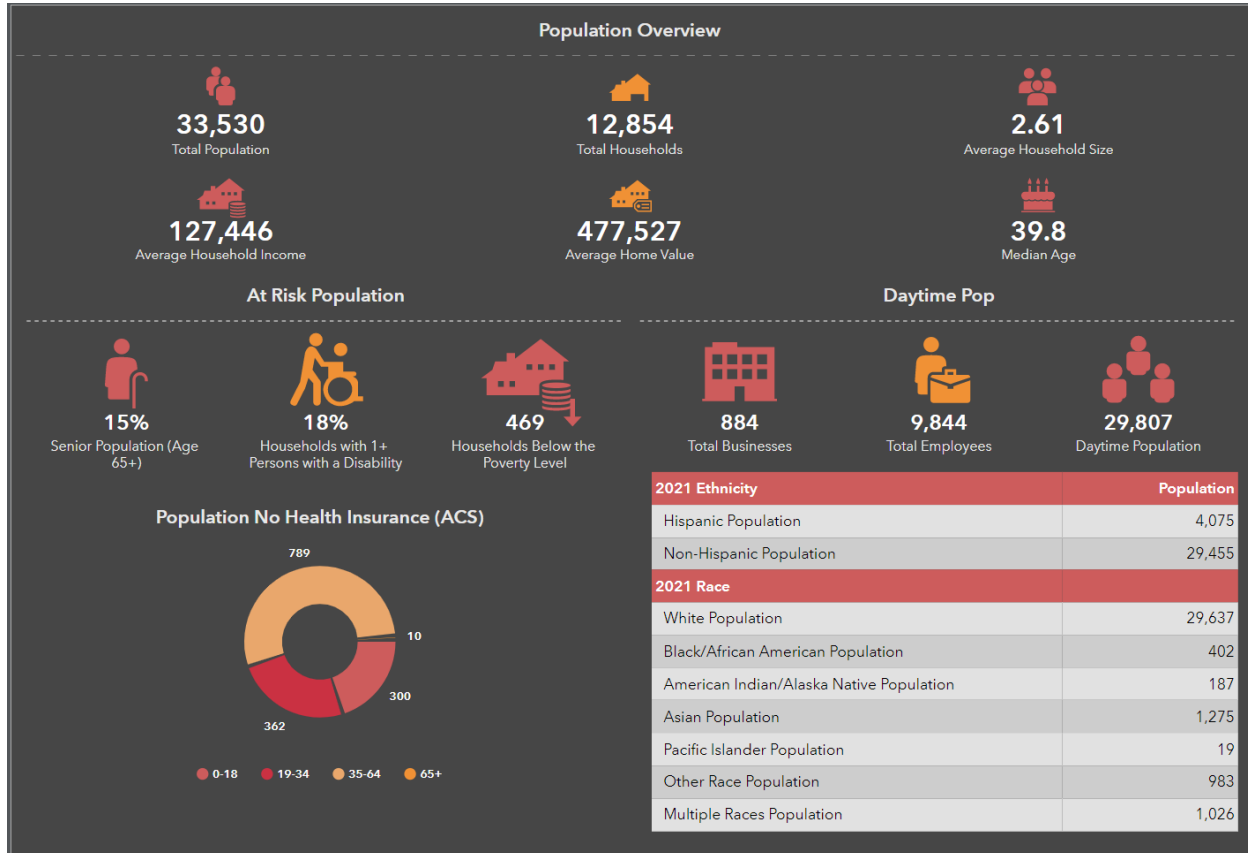
### Critical Infrastructure and Key Resources:

Name	Address
Southwest Plaza Mall	8501 West Bowles Avenue
Governor's Ranch Elementary School	5354 South Field Street
Powderhorn Elementary School	12109 West Coal Mine Avenue
Summit Ridge Middle School	11809 West Coal Mine Road
Colorow Elementary School	6317 South Estes Street
Montessori Peaks Charter Academy	9904 West Capri Avenue
Mount Carbon Elementary School	12776 West Cross Avenue
Westridge Elementary School	10785 West Alamo Place
Denver Water – Belleview Pump Station	11200 West Belleview Avenue
Peiffer Elementary School	4997 South Miller Way

## Special Risks:

- Bowles Community Church - 12345 West Bowles – high occupancy
- Light of the World Catholic Church - 10306 West Bowles – high occupancy
- Relay pumping: Montgomery Avenue from Kipling to Oak and south on Miller

## Planning Zone Risk Profile and Demographics:



## Risk Analysis:

Planning Zone 12 is a residential area with a large mall and some commercial occupancies along main arterials. This planning zone borders two other response jurisdictions. There is automatic aid with South Metro and mutual aid with Denver. Southwest Plaza Mall is a regional destination shopping center. The building is modern with full sprinkler systems. The planning zone has several greenbelts, which pose a wildfire risk.

## Water Supply:

Lakehurst Water & Sanitation, Ken-Caryl Ranch Water & Sanitation, Lochmoor Water & Sanitation, Southwest Metropolitan Water & Sanitation, and Southwest Plaza Metropolitan Districts service the planning zone. The area on the west side of Kipling Street, south of Montgomery Avenue, east of Miller Street, and north of Miller Avenue does not have hydrants and is preplanned on water supply. The remainder of the planning zone has adequate fire flow and hydrants for the exposures.

**Response History:**

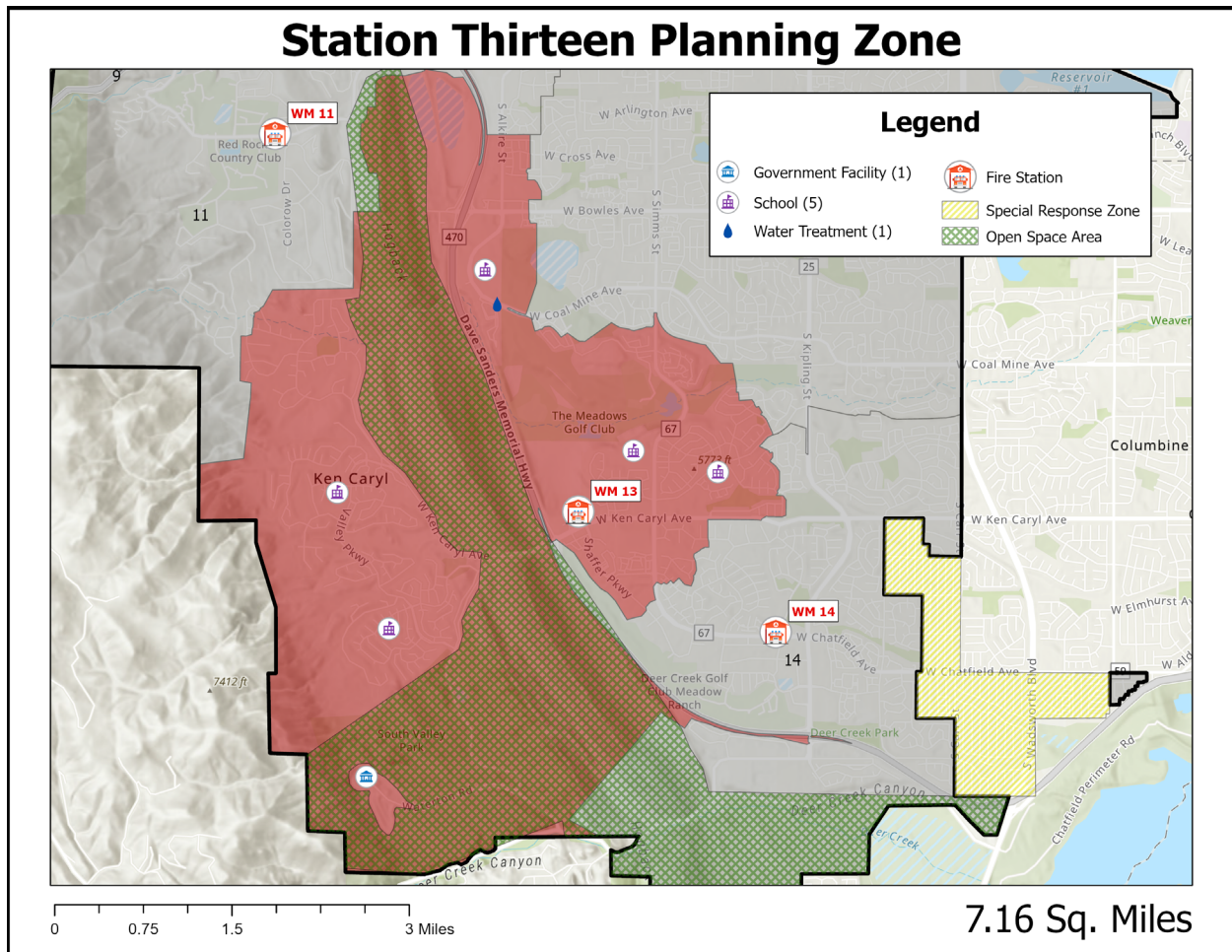
Station-12																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E12	2019	275	10.78%	58	2.27%	1636	64.11%	218	8.54%	4	0.16%	29	1.14%	332	13.01%	2552
E12	2020	271	11.43%	58	2.45%	1554	65.57%	180	7.59%	8	0.34%	43	1.81%	256	10.80%	2370
E12	2021	290	11.35%	65	2.55%	1698	66.48%	185	7.24%	10	0.39%	37	1.45%	269	10.53%	2554
E12	2022	262	9.06%	52	1.80%	1887	65.25%	296	10.24%	5	0.17%	47	1.63%	343	11.86%	2892
E12	2023	280	9.76%	47	1.64%	1875	65.33%	308	10.73%	9	0.31%	50	1.74%	301	10.49%	2870
E12	Total	1378	10.41%	280	2.12%	8650	65.34%	1187	8.97%	36	0.27%	206	1.56%	1501	11.34%	13238
M12	2019	18	0.79%	24	1.05%	1940	84.64%	89	3.88%	2	0.09%	2	0.09%	217	9.47%	2292
M12	2020	28	1.33%	26	1.23%	1809	85.78%	51	2.42%	9	0.43%	3	0.14%	183	8.68%	2109
M12	2021	34	1.47%	35	1.51%	2013	87.03%	58	2.51%	3	0.13%	2	0.09%	168	7.26%	2313
M12	2022	24	0.91%	32	1.21%	2263	85.36%	108	4.07%	4	0.15%	1	0.04%	219	8.26%	2651
M12	2023	26	1.02%	15	0.59%	2114	82.93%	175	6.87%	2	0.08%	3	0.12%	214	8.40%	2549
M12	Total	130	1.09%	132	1.11%	10139	85.10%	481	4.04%	20	0.17%	11	0.09%	1001	8.40%	11914
St-12	Total	1508	6.00%	412	1.64%	18789	74.70%	1668	6.63%	56	0.22%	217	0.86%	2502	9.95%	25152

Occupancy Classification: Station 12 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	102
Educational (200 series)	13
Health Care, Detention, Correction (300 series)	26
Residential (400 series)	70
Mercantile, Business (500 series)	183
Industrial, Utility (600 series)	0
Manufacturing (700 series)	1
Storage (800 series)	4
Outside, Special Property (900 series)	0

## Station Thirteen Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 13. The Dakota Ridge Hogback is a large natural barrier that limits access to the Ken-Caryl Valley and North Ranch communities. The zone primarily has a density of 1,000+ persons per square mile. However, the area west of the Dakota Ridge Hogback including Ken-Caryl Valley has a population of 500+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include Simms Avenue, Ken-Caryl Avenue, and Ward Avenue. The largest building in the District is within this zone at 12999 Deer Creek Canyon Road. The Hogback Special Planning Zone overlays a large portion of this planning zone. Significant Wildland Interface exposures are common to this response zone.



### Critical Infrastructure and Key Resources:

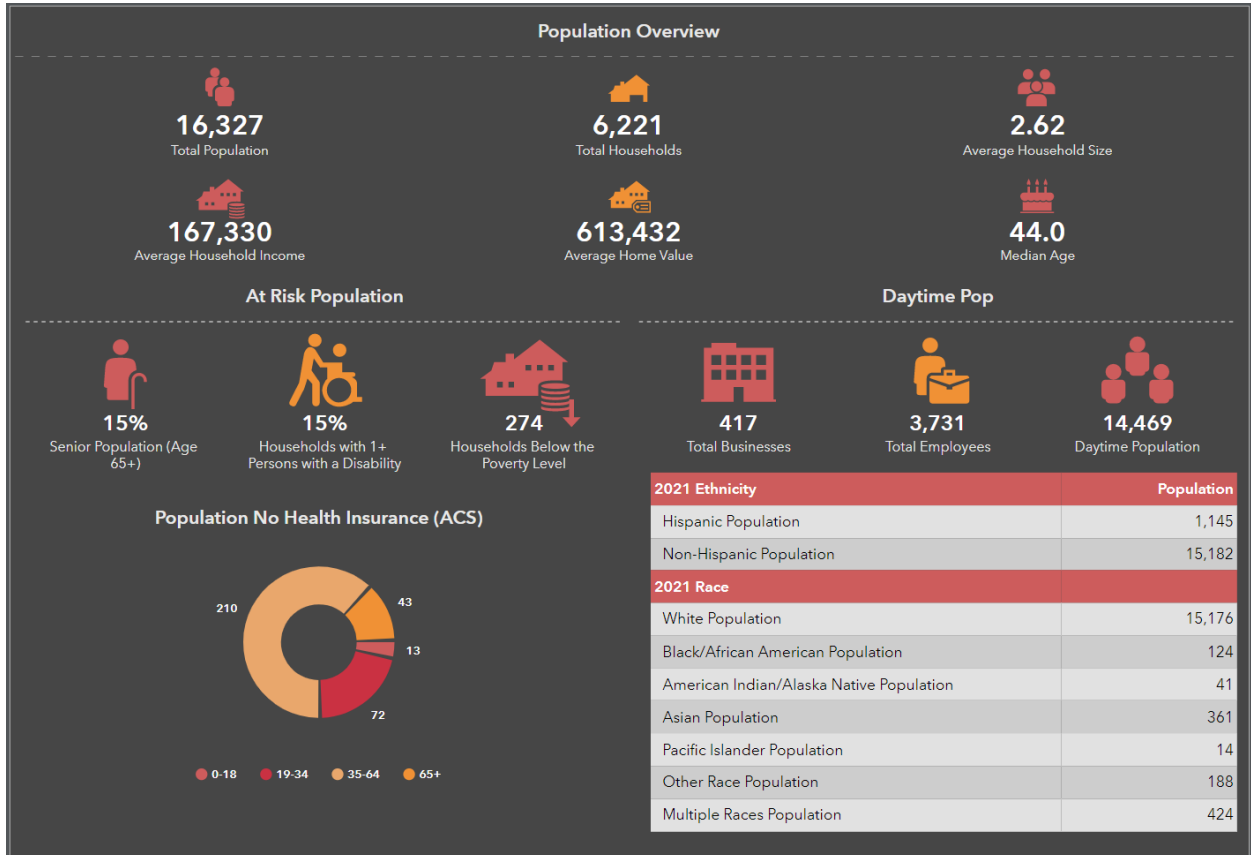
Name	Address
Lockheed Martin	12999 Deer Creek Canyon Road
Southwest Metropolitan Water and Sanitation	13398 West Coal Mine Avenue
Ute Meadows Elementary School	11050 West Meadows Drive
Bradford K8 South	1 White Oak Drive
Bradford K8 North	2 Woodruff Drive

Dakota Ridge Senior High School	13399 West Coal Mine Avenue
Chatfield High School	7227 South Simms Street

**Special Risks:**

Apria Health Care - 7910 Shaffer Parkway (Hazardous materials)  
 The Ridge, Peak, and Edge Recreation Centers – 6612 South Ward Street  
 Open space areas – see the Hogback Special Planning Zone

**Planning Zone Risk Profile and Demographics:**



**Risk Analysis:**

Station 13 was constructed to service the Ken-Caryl Valley and Ken-Caryl North Ranch subdivisions on the west side of the Dakota Ridge Hogback. The station was placed on the east side of the hogback due to opposition from the citizens. Its placement is close to Station 14. The planning zone has light commercial along the arterials with single and multi-family occupancies throughout the area. The Lockheed Martin Deer Creek facility is a very large modern complex in a remote location.

Highway C-470 passes through the planning zone and has potential for auto accidents including commercial vehicle hazardous materials incidents and MCIs.

The wildland fire potential is scattered throughout the western edge of the planning zone and the Ken-Caryl Master Association maintains a sizeable privately owned open space. The Ken-Caryl and North Ranch developments are considered urban interface because of fuels and density of structures. In 1978, a wildfire burned along the west edge of the District west of Ken-Caryl. The majority of the fire burned in the Inter-Canyon Fire District; however, the Lockheed Martin facility was threatened during the fire.

The District’s CWPP shows a very high Risk 50 Hazard Rating for the Willow Springs/North Ranch area. The Hogback Special Planning Zone is covered later in this document.

**Water Supply:**

Platte Canyon, Ken-Caryl Ranch Water & Sanitation, and Southwest Metropolitan Water & Sanitation Districts service this planning zone. The fire flow and hydrant spacing is adequate.

**Response History:**

Station-13																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E13	2019	172	15.90%	36	3.33%	631	58.32%	78	7.21%	0	0.00%	17	1.57%	148	13.68%	1082
E13	2020	144	14.17%	46	4.53%	567	55.81%	96	9.45%	5	0.49%	17	1.67%	141	13.88%	1016
E13	2021	188	15.52%	45	3.72%	702	57.97%	107	8.84%	6	0.50%	24	1.98%	139	11.48%	1211
E13	2022	225	17.47%	35	2.72%	749	58.15%	94	7.30%	3	0.23%	22	1.71%	160	12.42%	1288
E13	2023	174	14.49%	28	2.33%	680	56.62%	115	9.58%	6	0.50%	24	2.00%	174	14.49%	1201
E13	Total	903	15.57%	190	3.28%	3329	57.42%	490	8.45%	20	0.34%	104	1.79%	762	13.14%	5798
M13	2019	27	1.82%	24	1.62%	1210	81.76%	63	4.26%	5	0.34%	6	0.41%	145	9.80%	1480
M13	2020	24	1.78%	25	1.85%	1138	84.17%	33	2.44%	9	0.67%	1	0.07%	122	9.02%	1352
M13	2021	26	1.70%	34	2.22%	1301	84.98%	47	3.07%	4	0.26%	3	0.20%	116	7.58%	1531
M13	2022	18	1.07%	17	1.01%	1453	86.54%	59	3.51%	4	0.24%	2	0.12%	126	7.50%	1679
M13	2023	8	0.51%	14	0.89%	1306	83.03%	86	5.47%	7	0.45%	5	0.32%	147	9.35%	1573
M13	Total	103	1.35%	114	1.50%	6408	84.15%	288	3.78%	29	0.38%	17	0.22%	656	8.61%	7615
BR13	2019	0	0.00%	4	22.22%	1	5.56%	2	11.11%	0	0.00%	0	0.00%	11	61.11%	18
BR13	2020	0	0.00%	13	56.52%	1	4.35%	2	8.70%	0	0.00%	0	0.00%	7	30.43%	23
BR13	2021	0	0.00%	7	50.00%	0	0.00%	1	7.14%	0	0.00%	0	0.00%	6	42.86%	14
BR13	2022	0	0.00%	10	41.67%	5	20.83%	0	0.00%	0	0.00%	0	0.00%	9	37.50%	24
BR13	2023	0	0.00%	7	25.93%	3	11.11%	4	14.81%	0	0.00%	0	0.00%	13	48.15%	27
BR13	Total	0	0.00%	41	38.68%	10	9.43%	9	8.49%	0	0.00%	0	0.00%	46	43.40%	106
St -13	Total	1006	7.44%	345	2.55%	9747	72.10%	787	5.82%	49	0.36%	121	0.90%	1464	10.83%	13519



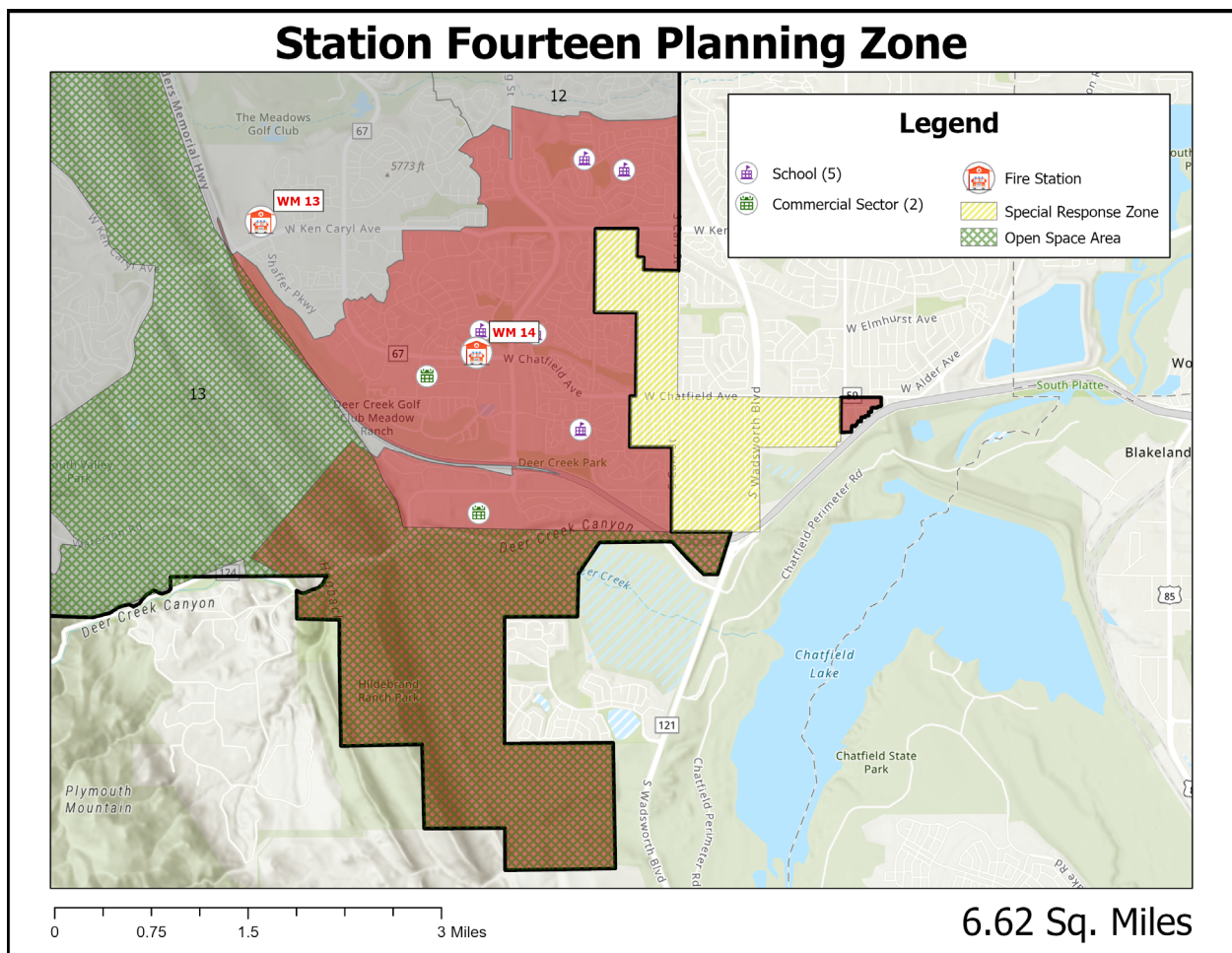
Occupancy Classification: Station 13 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	37
Educational (200 series)	11
Health Care, Detention, Correction (300 series)	11
Residential (400 series)	87
Mercantile, Business (500 series)	81
Industrial, Utility (600 series)	4
Manufacturing (700 series)	0
Storage (800 series)	14
Outside, Special Property (900 series)	0

## Station Fourteen Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 14. The Dakota Ridge Hogback is a large natural barrier that delays responses into the Deer Creek Canyon area. The Hogback Special Planning Zone overlays a large portion of this planning zone. The zone has urban areas with a density of 1,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets that include Chatfield Avenue, Schaefer Parkway, Continental Drive, and Ute Avenue.

This planning zone borders the Meadowbrook Fairview Special Response Zone, which is a residential area to which the District provides primary emergency response service under a contract with South Metro.



### Critical Infrastructure and Key Resources:

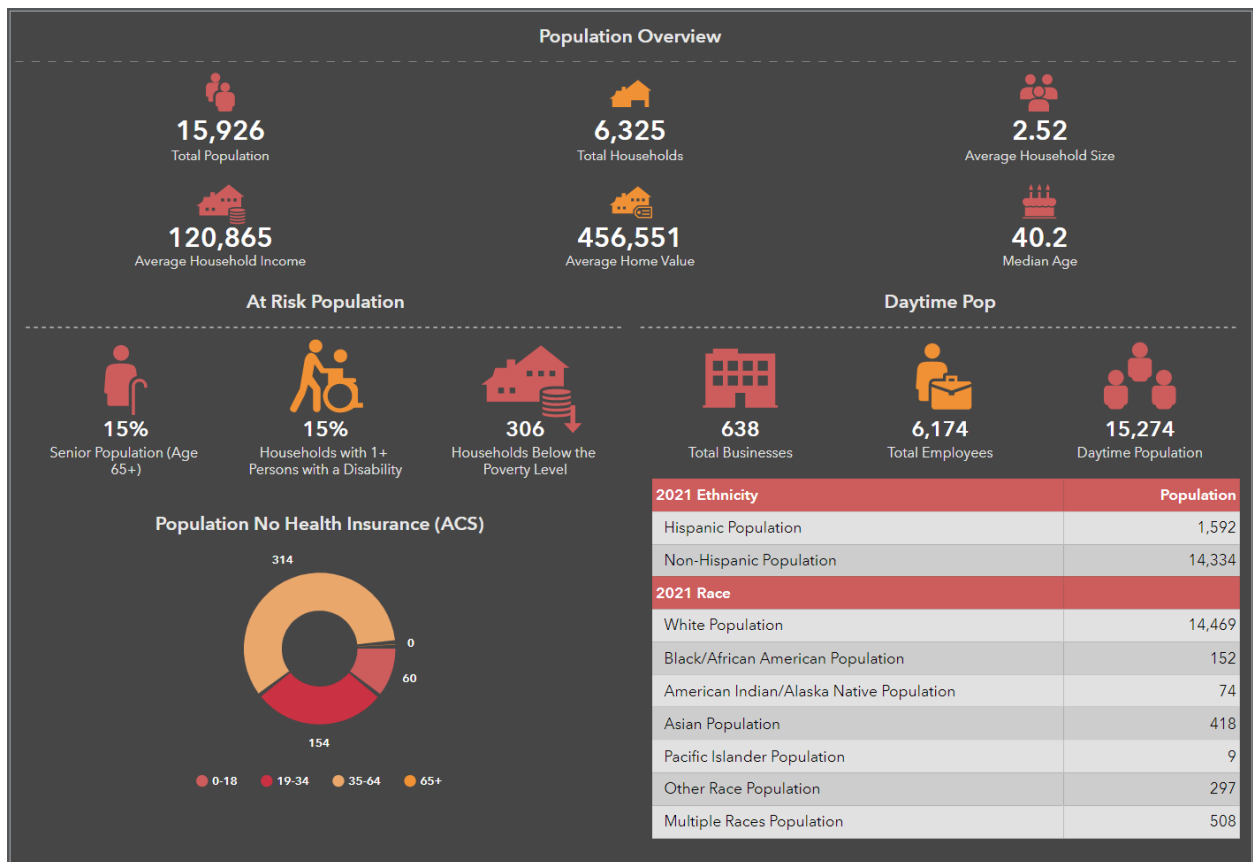
Name	Address
Stony Creek Elementary School	7203 South Everett
Mortensen Elementary School	8006 South Iris Way
Deer Creek Middle School	9201 West Columbine Drive
Falcon Bluffs Middle School	8449 South Garrison Street

Shaffer Elementary School	7961 South Sangre De Cristo Road
TTM Technologies	10720 Bradford Road
Johns Manville Technical Center	10100 West Ute Avenue

### Special Risks:

- Johns Manville – 10100 West Ute Avenue – hazardous materials
- E2 Power Systems – 8115 Shaffer Parkway – hazardous materials
- High Tek Tube Corp – 10758 West Centennial Road – hazardous materials
- Colorado Plastic Card – 10368 West Centennial Road – hazardous materials
- Open space areas – see the Hogback Special Planning Zone

### Planning Zone Risk Profile and Demographics:



### Risk Analysis:

Planning Zone 14 is mostly residential with light commercial along the arterials. The planning zone has an industrial area along Bradford Drive that has a number of large box-type structures with a scattering of hazardous material occupancies. The planning zone also has large open space and wildland urban interface areas, which pose a wildfire risk.

Highway C-470 passes through the planning zone and has potential for auto accidents including commercial vehicle hazardous materials incidents and MCIs.

The Hogback Special Planning Zone and the Meadowbrook Fairview Special Response Zones are both covered later in this document.

**Water Supply:**

Platte Canyon and Southwest Metropolitan Water & Sanitation Districts service the planning zone. There is adequate fire flow and hydrants for the exposures.

**Response History:**

Station-14																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
BC3	2019	18	3.69%	72	14.75%	211	43.24%	40	8.20%	6	1.23%	10	2.05%	131	26.84%	488
BC3	2020	9	2.22%	67	16.54%	199	49.14%	22	5.43%	11	2.72%	4	0.99%	93	22.96%	405
BC3	2021	11	2.59%	65	15.29%	240	56.47%	30	7.06%	6	1.41%	3	0.71%	70	16.47%	425
BC3	2022	11	2.29%	67	13.93%	218	45.32%	30	6.24%	13	2.70%	8	1.66%	134	27.86%	481
BC3	2023	11	2.62%	41	9.76%	197	46.90%	45	10.71%	14	3.33%	14	3.33%	98	23.33%	420
BC3	Total	60	2.70%	312	14.06%	1065	47.99%	167	7.53%	50	2.25%	39	1.76%	526	23.70%	2219
TK14	2019	147	15.06%	32	3.28%	511	52.36%	84	8.61%	5	0.51%	22	2.25%	175	17.93%	976
TK14	2020	167	13.77%	55	4.53%	687	56.64%	68	5.61%	11	0.91%	30	2.47%	195	16.08%	1213
TK14	2021	144	11.70%	53	4.31%	743	60.36%	111	9.02%	6	0.49%	17	1.38%	157	12.75%	1231
TK14	2022	191	13.54%	40	2.83%	804	56.98%	146	10.35%	11	0.78%	36	2.55%	183	12.97%	1411
TK14	2023	205	14.79%	30	2.16%	829	59.81%	117	8.44%	16	1.15%	42	3.03%	147	10.61%	1386
TK14	Total	854	13.74%	210	3.38%	3574	57.49%	526	8.46%	49	0.79%	147	2.36%	857	13.78%	6217
TW14	2019	56	15.05%	16	4.30%	202	54.30%	28	7.53%	3	0.81%	3	0.81%	64	17.20%	372
TW14	2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
TW14	2021	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
TW14	2022	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
TW14	2023	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
TW14	Total	56	15.05%	16	4.30%	202	54.30%	28	7.53%	3	0.81%	3	0.81%	64	17.20%	372
R14	2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
R14	2020	0	0.00%	0	0.00%	6	37.50%	2	12.50%	6	37.50%	0	0.00%	2	12.50%	16
R14	2021	0	0.00%	0	0.00%	8	57.14%	3	21.43%	2	14.29%	0	0.00%	1	7.14%	14
R14	2022	1	4.00%	0	0.00%	14	56.00%	2	8.00%	5	20.00%	0	0.00%	3	12.00%	25
R14	2023	0	0.00%	0	0.00%	19	65.52%	1	3.45%	6	20.69%	0	0.00%	3	10.34%	29
R14	Total	1	1.19%	0	0.00%	47	55.95%	8	9.52%	19	22.62%	0	0.00%	9	10.71%	84
St-14	Total	971	10.92%	538	6.05%	4888	54.97%	729	8.20%	121	1.36%	189	2.13%	1456	16.37%	8892

Occupancy Classification: Station 14 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	44
Educational (200 series)	9
Health Care, Detention, Correction (300 series)	9
Residential (400 series)	40
Mercantile, Business (500 series)	113
Industrial, Utility (600 series)	9
Manufacturing (700 series)	8
Storage (800 series)	12
Outside, Special Property (900 series)	1



**Response History:**

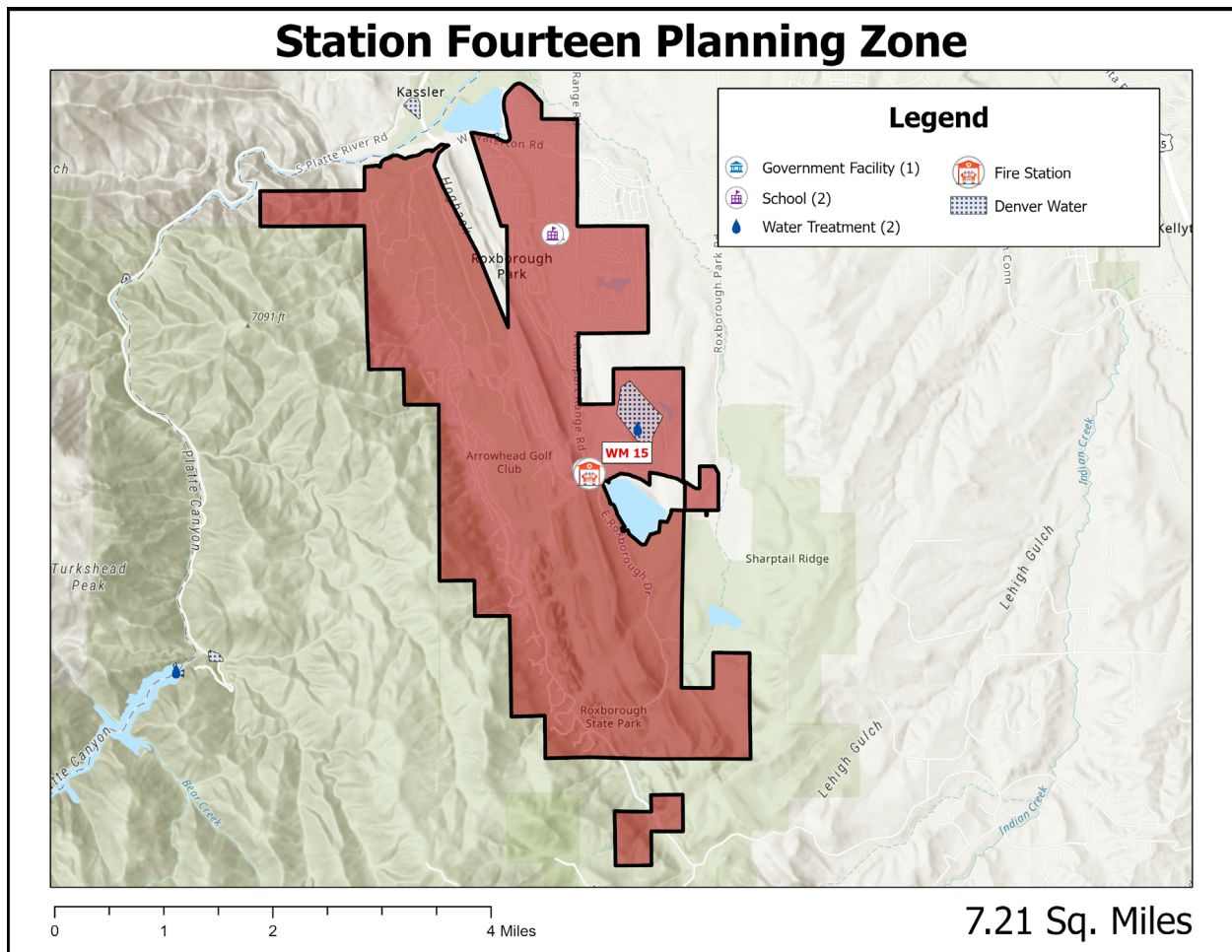
Meadowbrook Fairview District															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	8	7.69%	0	0.00%	47	45.19%	11	10.58%	1	0.96%	0	0.00%	37	35.58%	104
2020	10	16.95%	1	1.69%	21	35.59%	1	1.69%	0	0.00%	0	0.00%	26	44.07%	59
2021	8	12.12%	1	1.52%	37	56.06%	6	9.09%	0	0.00%	1	1.52%	13	19.70%	66
2022	6	5.61%	1	0.93%	72	67.29%	6	5.61%	0	0.00%	3	2.80%	19	17.76%	107
2023	12	8.39%	0	0.00%	91	63.64%	12	8.39%	0	0.00%	4	2.80%	24	16.78%	143
<b>Total</b>	<b>44</b>	<b>9.19%</b>	<b>3</b>	<b>0.63%</b>	<b>268</b>	<b>55.95%</b>	<b>36</b>	<b>7.52%</b>	<b>1</b>	<b>0.21%</b>	<b>8</b>	<b>1.67%</b>	<b>119</b>	<b>24.84%</b>	<b>479</b>

## Station Fifteen Planning Zone

### Description:

This planning zone is exclusively in the first in area of Station 15. The Dakota Ridge Hogback is a large natural barrier that delays responses into the Roxborough Park community and Roxborough State Park. The zone has densities of 500 to 1,000 persons per square mile. There are a few commercial buildings, mostly along Rampart Range Road. A large water treatment facility is located in close proximity to Roxborough Village communities. Significant wildland interface exposures are common to this planning zone. The Denver Water Special Response Zone covers a number of small areas within the Station 15 Planning Zone.

This planning zone does not share a border with any other station planning zones in the District. The District relies on automatic aid to provide secondary and expanded response resources within this zone. Fulfillment of District ERF apparatus and personnel will be delayed due to travel times in all areas of this planning zone. This delay is exacerbated if a significant incident occurs south and west of the hogback.





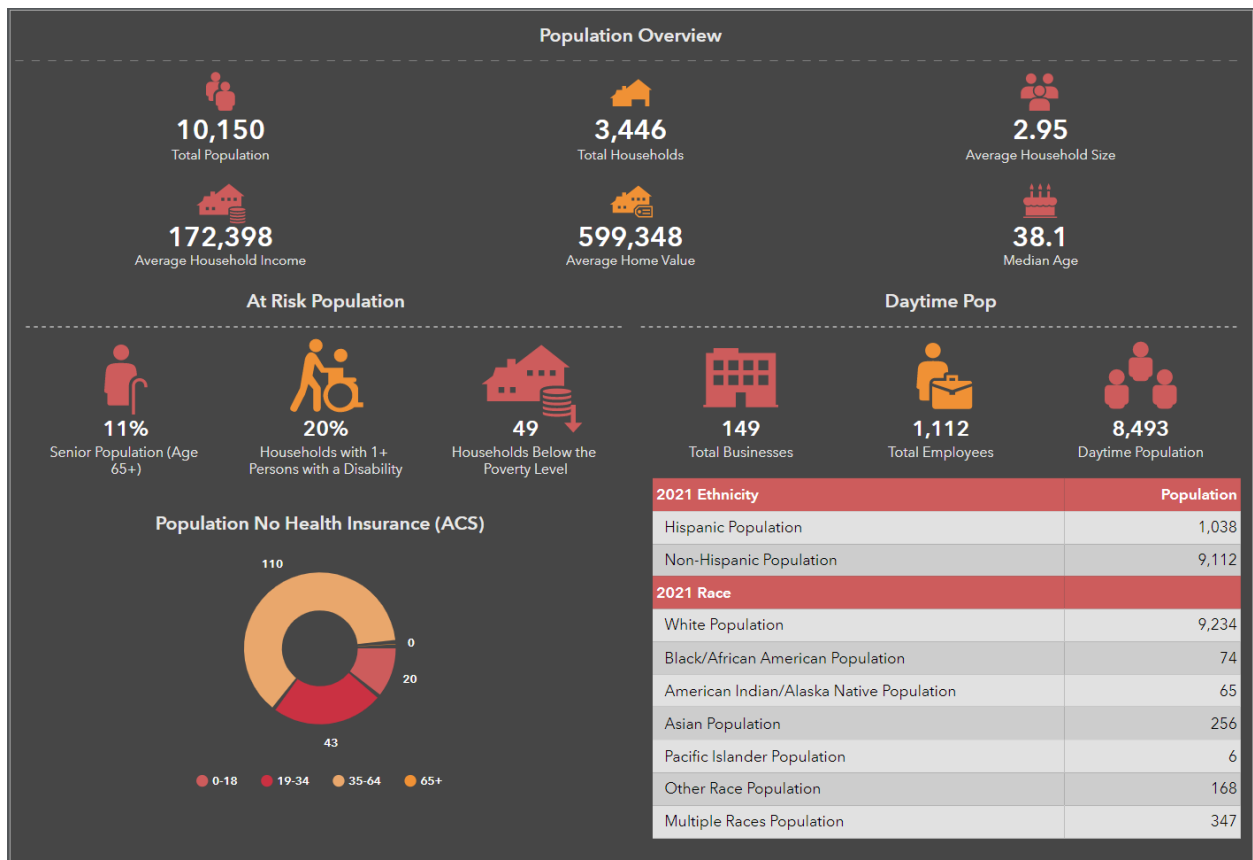
## Critical Infrastructure and Key Resources:

Name	Address
Roxborough State Park - Entry Station	6016 East Roxborough Drive
Denver Water (see special planning zone below)	
Roxborough Intermediate	7370 Village Circle East
Roxborough Elementary School	8000 Village Circle West

## Special Risks:

- Waterton Canyon and Trails, West of Waterton Canyon Road and CO-121
- Clay mines – hogback northwest of Station 15
- Open space and wildland urban interface areas

## Planning Zone Risk Profile and Demographics:



## Risk Analysis:

Planning Zone 15 is unique in its isolation. The zone is 12 miles south of Station 14 and is not contiguous with the rest of the District. The District has stationed a medic unit in the planning zone to support the engine until additional apparatus can arrive. The District relies on automatic aid to augment resources in this planning zone.

The planning zone is divided by the Dakota Ridge hogback. The western portion is on the western slope of the hogback and the fire station is on the eastern slope. There is a single point of access through the hogback, limiting access to the western portion of the planning zone and also limiting public egress. The District CWPP and Roxborough CWPP each reference distinct evacuation routes, of which there are three: through the hogback, north through the Ravenna subdivision, and south through Roxborough Park, which would be impassable in bad weather.

Station 15 and several areas of the Roxborough community are located within the flood plain, which can complicate egress during flash floods or other severe weather events. Waterton Road, the main connector between the Station 15 Planning Zone and the remainder of the District, crosses the Platte River. This access/egress path has the potential to be impassable during a flood event. This is considered a very low risk due to multiple flood control structures upstream from this location.

This area has the potential to grow; a new development is under construction in the area east of the planning zone. This will increase the use of the recreational areas interspersed within this planning zone.

The entrance to Waterton Canyon is at the north end of this planning zone. While the entrance to the canyon is within District boundaries, the canyon is not. The District has, however, historically covered emergency response in this area. This area is popular with cyclists, hikers, runners, and anglers. The Waterton Canyon trail parallels the South Platte River and is the starting point to the Colorado Trail (a 486-mile trail that crosses Colorado) and serves as a connector to multiple trail systems. Outdoor recreation has become increasingly popular in this area, which has resulted in increased calls for back-country rescues or rescues that are more technical in nature.

The District's CWPP shows a very high Risk 50 Hazard Rating for the Roxborough Park and Ravenna areas. This area has the highest risk within the District with a score of 35. The fuels in this area are extreme, with areas of oak brush as tall as homes. Additional hazards pertaining to wildfire in the Station 15 Planning Zone are limited access, response delays, heavy fuel loading, areas of flammable siding/roofs/decks, flammable vegetation bordering structures, steep terrain, narrow (often dead-end) roads, and limited water supply in areas.

The Denver Water Special Planning Zone, covered by the District under contract, is detailed later in this document.

### **Water Supply:**

Roxborough and Ravenna Water District service the planning zone. There is adequate fire flow and hydrant spacing to protect the exposures; however, there are open space areas within the planning zone with no water supply.

**Response History:**

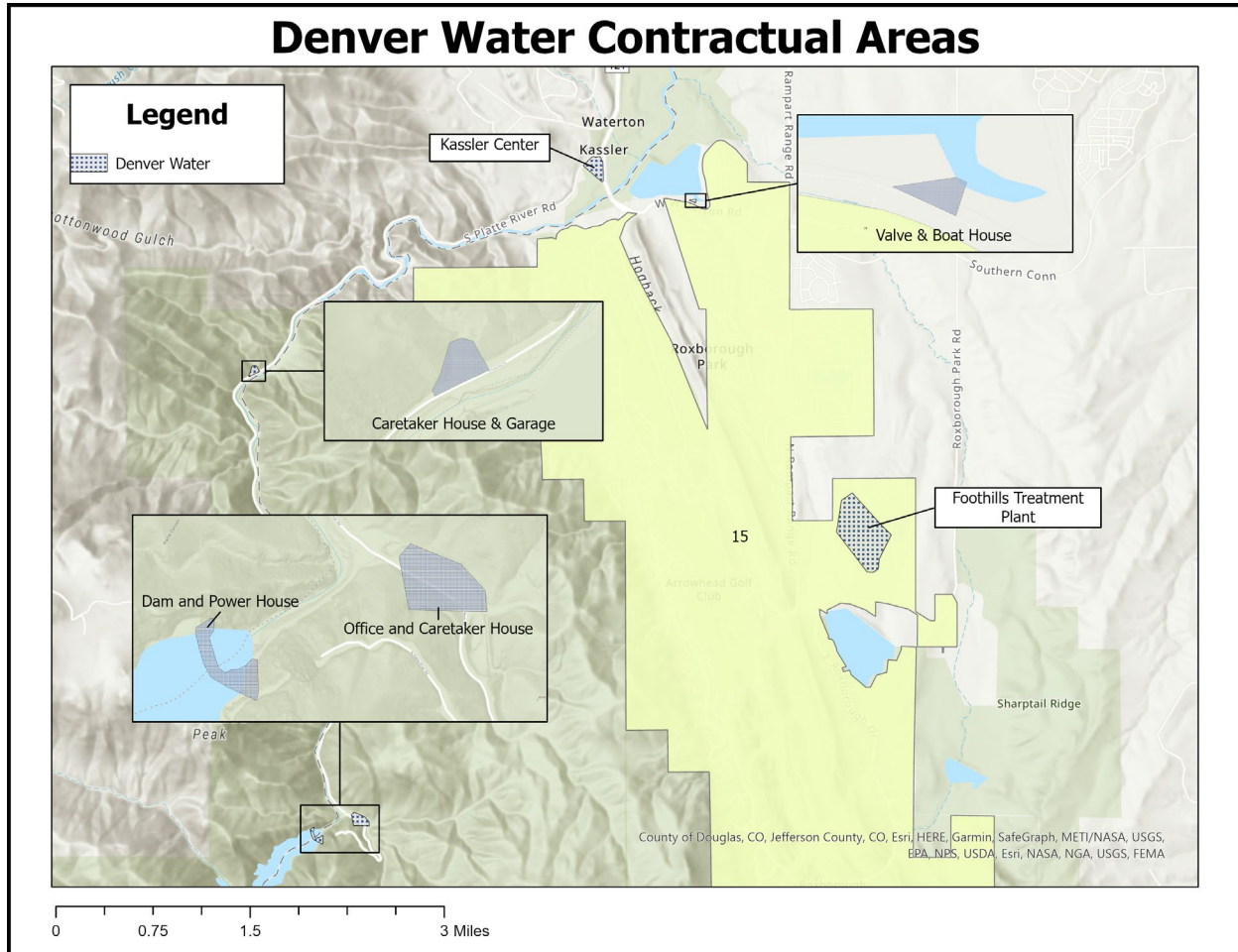
Station-15																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E15	2019	54	13.95%	5	1.29%	209	54.01%	28	7.24%	3	0.78%	10	2.58%	78	20.16%	387
E15	2020	46	12.20%	14	3.71%	211	55.97%	25	6.63%	1	0.27%	13	3.45%	67	17.77%	377
E15	2021	47	10.90%	16	3.71%	257	59.63%	34	7.89%	0	0.00%	16	3.71%	61	14.15%	431
E15	2022	67	15.06%	11	2.47%	244	54.83%	25	5.62%	4	0.90%	18	4.04%	76	17.08%	445
E15	2023	51	10.37%	9	1.83%	310	63.01%	42	8.54%	3	0.61%	22	4.47%	55	11.18%	492
E15	<b>Total</b>	<b>265</b>	<b>12.43%</b>	<b>55</b>	<b>2.58%</b>	<b>1231</b>	<b>57.74%</b>	<b>154</b>	<b>7.22%</b>	<b>11</b>	<b>0.52%</b>	<b>79</b>	<b>3.71%</b>	<b>337</b>	<b>15.81%</b>	<b>2132</b>
M15	2019	48	11.32%	4	0.94%	258	60.85%	19	4.48%	2	0.47%	9	2.12%	84	19.81%	424
M15	2020	31	8.59%	7	1.94%	229	63.43%	18	4.99%	1	0.28%	10	2.77%	65	18.01%	361
M15	2021	43	9.25%	10	2.15%	304	65.38%	30	6.45%	0	0.00%	14	3.01%	64	13.76%	465
M15	2022	11	2.87%	6	1.57%	295	77.02%	14	3.66%	3	0.78%	2	0.52%	52	13.58%	383
M15	2023	2	0.43%	5	1.08%	388	83.98%	22	4.76%	2	0.43%	2	0.43%	41	8.87%	462
M15	<b>Total</b>	<b>135</b>	<b>6.44%</b>	<b>32</b>	<b>1.53%</b>	<b>1474</b>	<b>70.36%</b>	<b>103</b>	<b>4.92%</b>	<b>8</b>	<b>0.38%</b>	<b>37</b>	<b>1.77%</b>	<b>306</b>	<b>14.61%</b>	<b>2095</b>
BR15	2019	0	0.00%	2	15.38%	1	7.69%	3	23.08%	0	0.00%	0	0.00%	7	53.85%	13
BR15	2020	0	0.00%	9	31.03%	0	0.00%	2	6.90%	0	0.00%	0	0.00%	18	62.07%	29
BR15	2021	1	3.85%	6	23.08%	2	7.69%	4	15.38%	0	0.00%	0	0.00%	13	50.00%	26
BR15	2022	2	11.76%	4	23.53%	1	5.88%	0	0.00%	0	0.00%	0	0.00%	10	58.82%	17
BR15	2023	0	0.00%	3	20.00%	3	20.00%	3	20.00%	2	13.33%	0	0.00%	4	26.67%	15
B15/BR15	<b>Total</b>	<b>3</b>	<b>3.00%</b>	<b>24</b>	<b>24.00%</b>	<b>7</b>	<b>7.00%</b>	<b>12</b>	<b>12.00%</b>	<b>2</b>	<b>2.00%</b>	<b>0</b>	<b>0.00%</b>	<b>52</b>	<b>52.00%</b>	<b>100</b>
<b>St-15</b>	<b>Total</b>	<b>403</b>	<b>9.31%</b>	<b>111</b>	<b>2.57%</b>	<b>2712</b>	<b>62.68%</b>	<b>269</b>	<b>6.22%</b>	<b>21</b>	<b>0.49%</b>	<b>116</b>	<b>2.68%</b>	<b>695</b>	<b>16.06%</b>	<b>4327</b>

Occupancy Classification: Station 15 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	12
Educational (200 series)	6
Health Care, Detention, Correction (300 series)	3
Residential (400 series)	0
Mercantile, Business (500 series)	24
Industrial, Utility (600 series)	15
Manufacturing (700 series)	0
Storage (800 series)	7
Outside, Special Property (900 series)	1

# Denver Water Special Planning Zone

## Description:

This special planning zone has six specific geographical locations covered under a contract with Denver Water. Two locations are inside District boundaries while the other four rest outside the District. Denver Water operates each of these facilities. These areas have a number of response challenges including delayed response, gated access, and poor communications.



## Special Risks:

- Foothills Water Treatment Plant
  - Large water treatment facility
  - Gated access
  - Hazardous materials
  - Confined spaces
- Valve and Boat House
- Kassler Center
  - Maintenance facility
  - Gated access
- Caretaker House and Garage
  - Gated access

- Delayed response - approximately three miles up the canyon
- Year-round resident(s)
- Poor radio communications
- Office and Caretaker House
  - Gated access
  - Delayed response - approximately 6 miles up the canyon
  - Year-round resident(s)
  - Poor radio communications
- Dam and Powerhouse
  - Large dam with hydro-electric turbines
  - Confined spaces
  - Double gated access
  - Poor radio communications

**Response History:**

Denver Water															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	1	12.50%	1	12.50%	3	37.50%	2	25.00%	0	0.00%	0	0.00%	1	12.50%	8
2020	0	0.00%	0	0.00%	3	42.86%	1	14.29%	1	14.29%	0	0.00%	2	28.57%	7
2021	0	0.00%	0	0.00%	2	40.00%	1	20.00%	0	0.00%	0	0.00%	2	40.00%	5
2022	0	0.00%	1	16.67%	4	66.67%	1	16.67%	0	0.00%	0	0.00%	0	0.00%	6
2023	0	0.00%	0	0.00%	6	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	6
<b>Total</b>	<b>1</b>	<b>3.13%</b>	<b>2</b>	<b>6.25%</b>	<b>18</b>	<b>56.25%</b>	<b>5</b>	<b>15.63%</b>	<b>1</b>	<b>3.13%</b>	<b>0</b>	<b>0.00%</b>	<b>5</b>	<b>15.63%</b>	<b>32</b>

# Station Sixteen Planning Zone

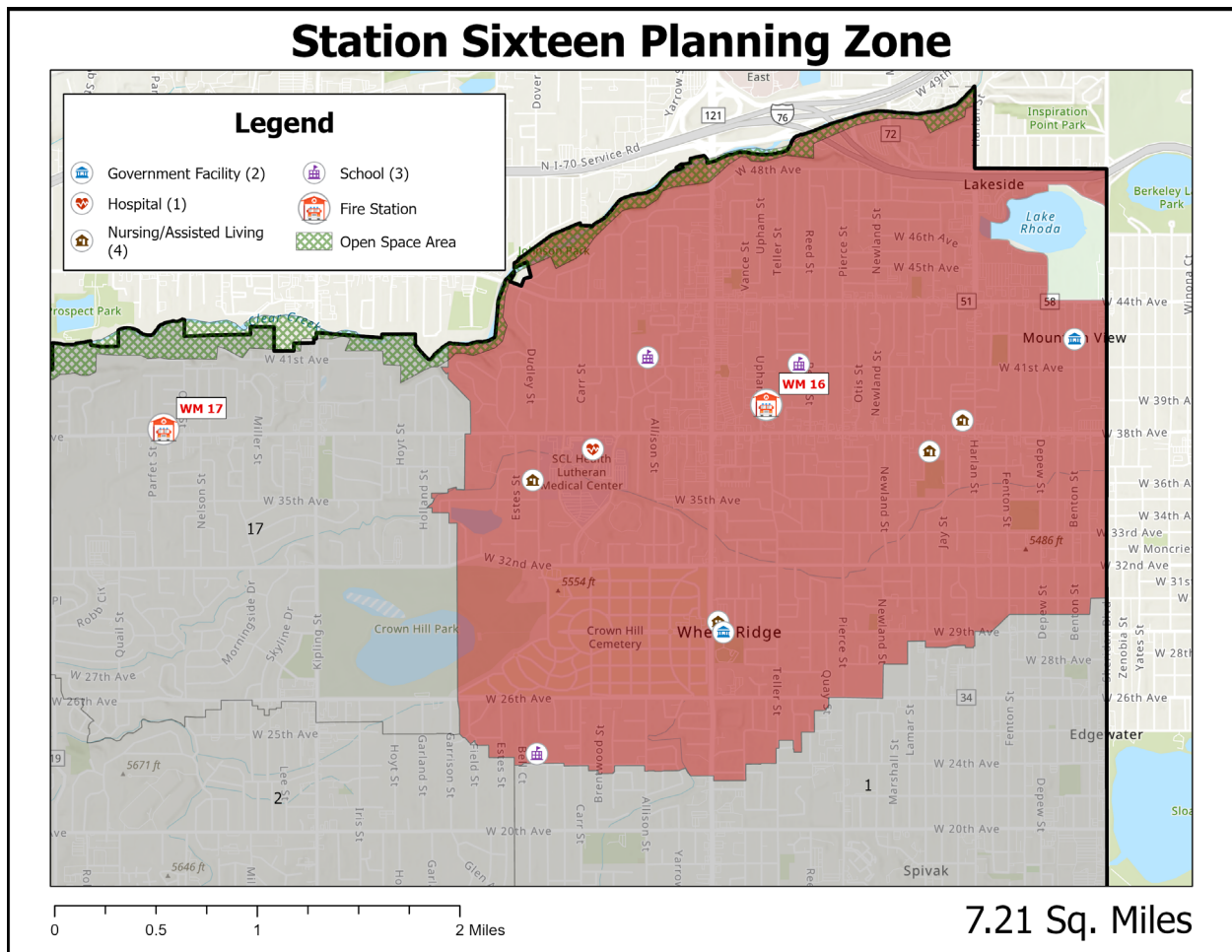
## Description:

This planning zone is exclusively in the first in area of Station 16. This planning zone was added on April 16, 2016, as part of the merger between the District and Wheat Ridge Fire Protection District and became included into the West Metro Fire Protection District on January 1, 2017.

This zone is an urban setting with a density of 2,000+ persons per square mile, multiple senior and assisted living facilities, a major hospital and medical office complex (Lutheran), and proximity to I-70 and other major streets. The zone includes Wheat Ridge, Mountain View, Lakeside, and shares Edgewater with the Station 1 Planning Zone. The Clear Creek Special Planning Zone overlays the northern border of this planning zone.

Bordering Arvada Fire to the north, this zone has many multi-family buildings and commercial properties, substance abuse and mental health facilities (Jefferson Center for Mental Health, West Pines), and natural hazards (Clear Creek).

This planning zone is the second busiest planning zone in the District.



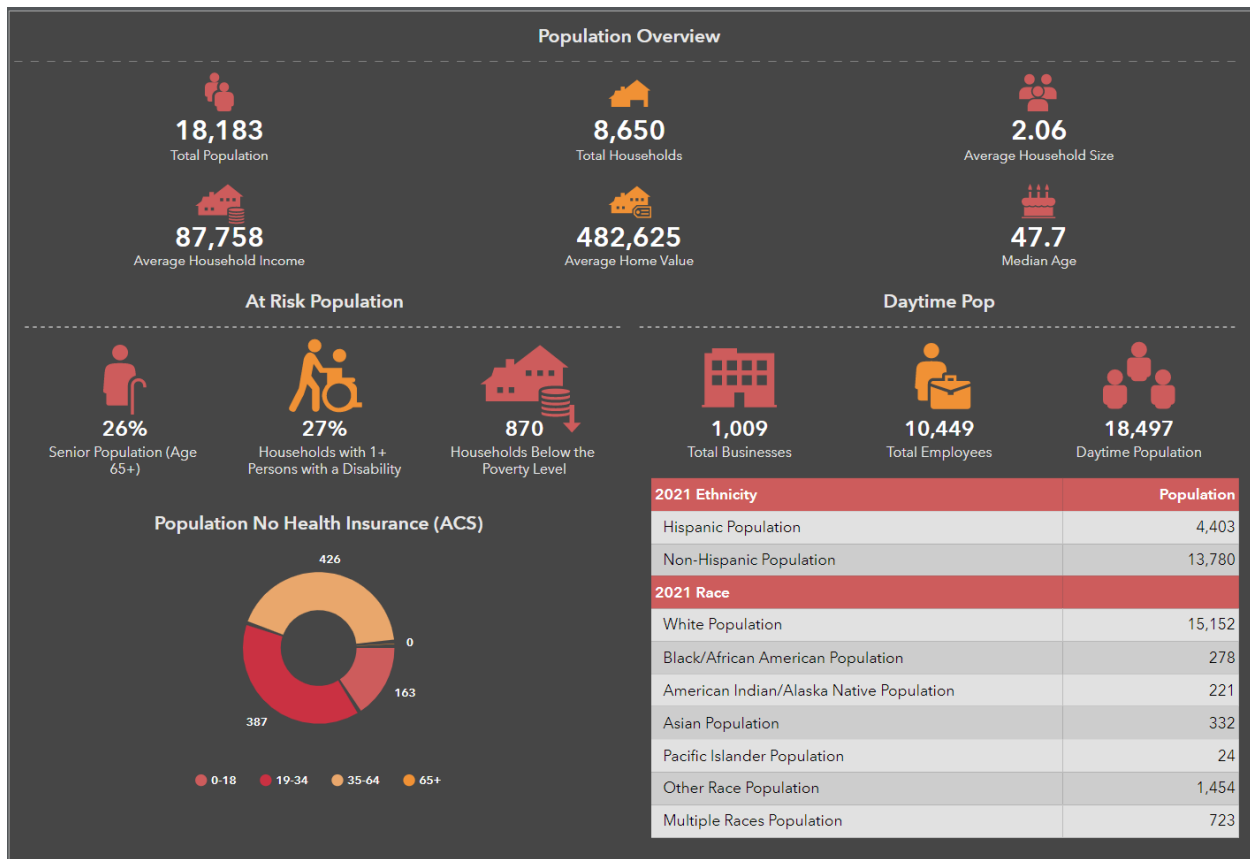
## Critical Infrastructure and Key Resources:

Name	Address
Wheat Ridge City Hall	7500 West 29 <sup>th</sup> Avenue
Mountain View Town Hall	4176 Benton Street
Lutheran Medical Center	8300 West 38 <sup>th</sup> Avenue
Stevens Elementary School	4001 Reed Street
Slater Elementary School	8605 West 23 <sup>rd</sup> Avenue
Wilmore Davis Elementary School	7975 West 41 <sup>st</sup> Avenue
Teller Place	7495 West 29 <sup>th</sup> Avenue
Rehabilitation Center At Sandalwood	3835 Harlan Street
Ashley Manor	3555 Dudley Street
Christopher House Rehabilitation And Care	6270 West 38 <sup>th</sup> Avenue

## Special Risks:

- Highland West (12-story senior living apartments) – 6340 West 38<sup>th</sup> Avenue
  - Recreational area on the 12<sup>th</sup> floor
- West Pines (substance abuse and mental health facility) – 3400 Lutheran Parkway
- AAA Propane – 7405 West 44<sup>th</sup> Avenue
- Jefferson Center for Mental Health – 4643 Wadsworth Boulevard
- Clear Creek – see Clear Creek Special Planning Zone

## Planning Zone Risk Profile and Demographics:



## **Risk Analysis:**

The population density and demographics result in higher call volume in this planning zone. There is an increased need for medical care with an aging population (senior living, assisted living, nursing care). 26% of the population is aged 65 or above.

There are several distinct target hazards with life safety as the primary concern. These can be classified as multi-family, assisted living, medical care/hospital, and special commercial. The multi-family is prevalent throughout the zone with numerous senior living complexes. An 11-story senior living apartment building located at 6340 W. 38<sup>th</sup> Avenue represents the tallest building in the zone and requires a strong understanding of high-rise operations.

There are multiple assisted living and medical facilities throughout, including a major hospital, Lutheran Medical Center (LMC). These facilities provide adequate fire detection and protection with fire-rated assemblies allowing for a “protect in place” option if necessary. LMC has some radio coverage issues in the basement and requires coordinated radio-to-radio (simplex) communications.

Several commercial properties have increased fire hazards due to the combustibility of their product (or by-product), fire load, open layout, or structural design. These include propane and feed stores, big box stores, and more.

There are additional risks posed by Clear Creek and I-70 along the north border of this zone. The Clear Creek Special Planning Zone provides additional details on the creek and the open space along the shoreline. I-70 is a major interstate at increased risk for high-speed crashes requiring extrication and/or fire control. This station planning zone covers I-70 at Harlan.

## **Water Supply:**

This planning zone is serviced by Wheat Ridge Water, Consolidated Mutual Water, Denver Water, and Edgewater.

Water supply is sufficient with domestic hydrants throughout. There are many older neighborhoods where hydrants are few in number and distant from one another. However, most hydrants are within the 1000 feet of large diameter hose carried on engines. There are also hydrant access doors along I-70 to facilitate water supply along the highway (accessible from the frontage roads).

Clear Creek also allows access to water via drafting operations if needed for a vegetation fire (especially in the spring and summer months).



**Response History:**

Station-16																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
BC1	2019	35	4.65%	141	18.75%	313	41.62%	39	5.19%	9	1.20%	11	1.46%	204	27.13%	752
BC1	2020	33	4.86%	112	16.49%	326	48.01%	53	7.81%	7	1.03%	3	0.44%	145	21.35%	679
BC1	2021	35	4.33%	142	17.57%	353	43.69%	49	6.06%	11	1.36%	4	0.50%	214	26.49%	808
BC1	2022	42	4.65%	133	14.71%	404	44.69%	69	7.63%	4	0.44%	4	0.44%	248	27.43%	904
BC1	2023	24	2.97%	129	15.95%	375	46.35%	71	8.78%	3	0.37%	7	0.87%	200	24.72%	809
BC1	<b>Total</b>	<b>169</b>	<b>4.28%</b>	<b>657</b>	<b>16.62%</b>	<b>1771</b>	<b>44.81%</b>	<b>281</b>	<b>7.11%</b>	<b>34</b>	<b>0.86%</b>	<b>29</b>	<b>0.73%</b>	<b>1011</b>	<b>25.58%</b>	<b>3952</b>
E16	2019	317	8.61%	75	2.04%	2329	63.27%	376	10.21%	8	0.22%	37	1.01%	539	14.64%	3681
E16	2020	281	7.77%	71	1.96%	2161	59.76%	481	13.30%	6	0.17%	49	1.36%	567	15.68%	3616
E16	2021	341	8.45%	95	2.35%	2465	61.06%	428	10.60%	12	0.30%	36	0.89%	660	16.35%	4037
E16	2022	333	8.67%	90	2.34%	2395	62.37%	372	9.69%	11	0.29%	54	1.41%	585	15.23%	3840
E16	2023	285	7.64%	88	2.36%	2335	62.63%	349	9.36%	10	0.27%	47	1.26%	614	16.47%	3728
E16	<b>Total</b>	<b>1557</b>	<b>8.24%</b>	<b>419</b>	<b>2.22%</b>	<b>11685</b>	<b>61.82%</b>	<b>2006</b>	<b>10.61%</b>	<b>47</b>	<b>0.25%</b>	<b>223</b>	<b>1.18%</b>	<b>2965</b>	<b>15.69%</b>	<b>18902</b>
M16	2019	59	1.77%	32	0.96%	2562	76.84%	221	6.63%	4	0.12%	3	0.09%	453	13.59%	3334
M16	2020	70	2.11%	16	0.48%	2409	72.71%	141	4.26%	1	0.03%	2	0.06%	674	20.34%	3313
M16	2021	50	1.37%	21	0.58%	2813	77.03%	166	4.55%	1	0.03%	2	0.05%	599	16.40%	3652
M16	2022	55	1.70%	29	0.90%	2581	79.73%	160	4.94%	1	0.03%	3	0.09%	408	12.60%	3237
M16	2023	40	1.50%	25	0.94%	2041	76.38%	165	6.18%	0	0.00%	5	0.19%	396	14.82%	2672
M16	<b>Total</b>	<b>274</b>	<b>1.69%</b>	<b>123</b>	<b>0.76%</b>	<b>12406</b>	<b>76.54%</b>	<b>853</b>	<b>5.26%</b>	<b>7</b>	<b>0.04%</b>	<b>15</b>	<b>0.09%</b>	<b>2530</b>	<b>15.61%</b>	<b>16208</b>
<b>St-16</b>	<b>Total</b>	<b>2000</b>	<b>5.12%</b>	<b>1199</b>	<b>3.07%</b>	<b>25862</b>	<b>66.21%</b>	<b>3140</b>	<b>8.04%</b>	<b>88</b>	<b>0.23%</b>	<b>267</b>	<b>0.68%</b>	<b>6506</b>	<b>16.66%</b>	<b>39062</b>

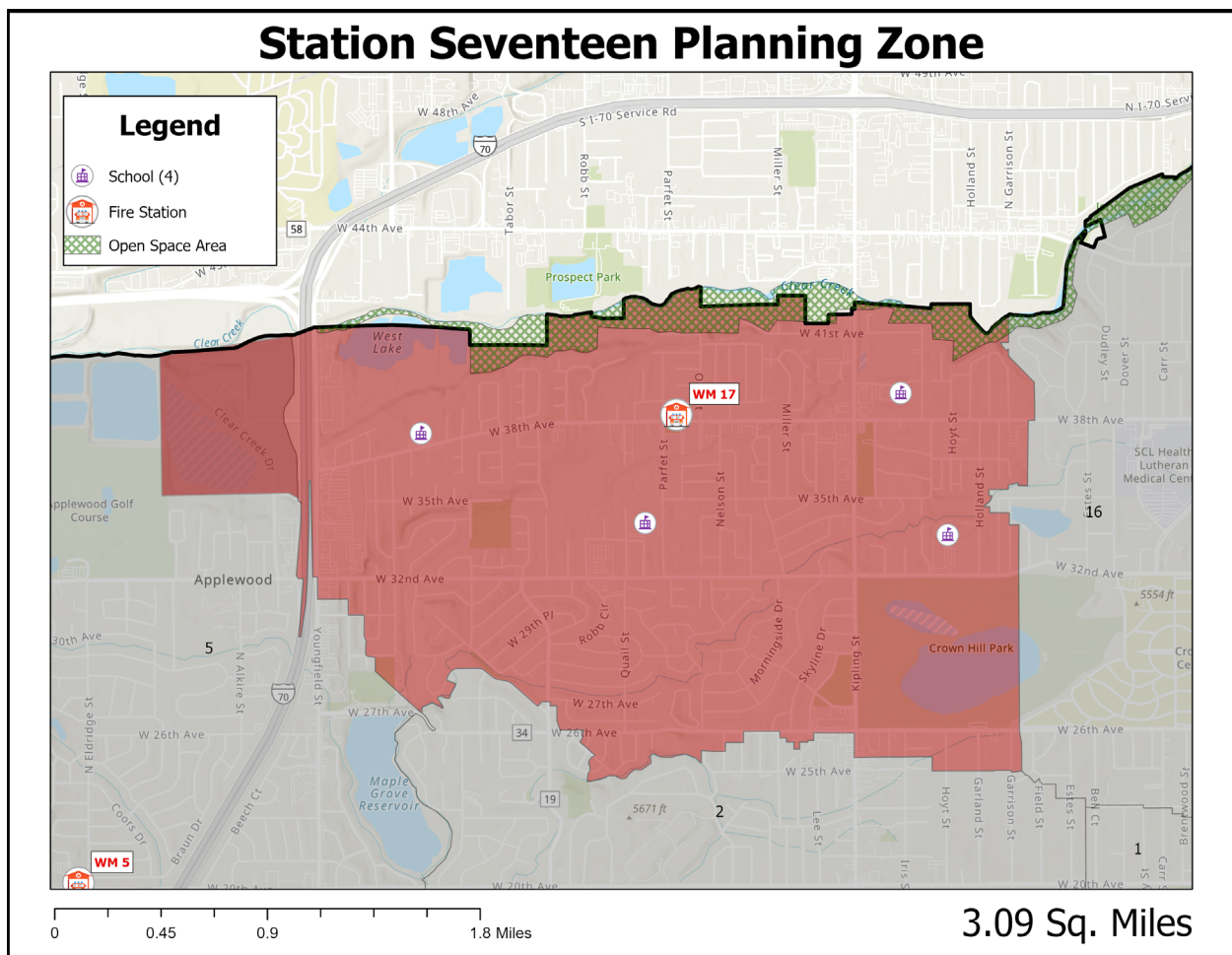
Occupancy Classification: Station 16 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	107
Educational (200 series)	18
Health Care, Detention, Correction (300 series)	50
Residential (400 series)	49
Mercantile, Business (500 series)	410
Industrial, Utility (600 series)	4
Manufacturing (700 series)	5
Storage (800 series)	5
Outside, Special Property (900 series)	2

# Station Seventeen Planning Zone

## Description:

This planning zone is exclusively in the first in area of Station 17. This planning zone was added on April 16, 2016, as part of the merger between the District and Wheat Ridge Fire Protection District and became included in the West Metro Fire Protection District on January 1, 2017. Station 17 is an older station with several remodels, the most recent of which was completed in 2018. Station 17 is home to Engine 17, Brush 17, Medic 17 (surge unit), and Swift Water 17, and serves as storage for a reserve engine. The station also stores the Colorado Professional Firefighter’s antique engine. The Clear Creek Special Planning Zone overlays the northern border of this planning zone.

Clear Creek, a natural border to the north, and Interstate 70 to the west create small operational delays, specifically to responses on the highway in this zone and the surrounding zones alike. The zone is a suburban setting with a density of 1,000+ persons per square mile. There is a mix of commercial buildings, mostly along major streets including the Youngfield and Kipling corridors.



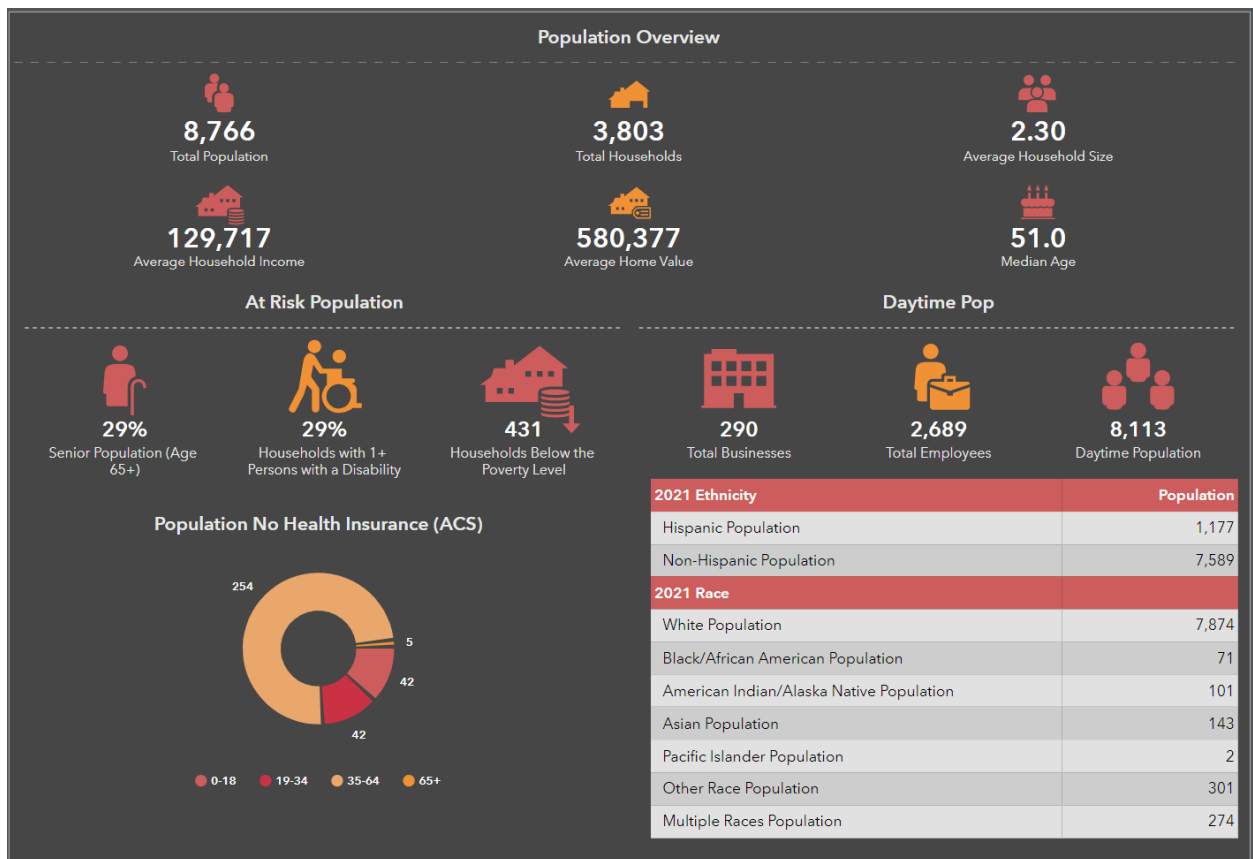
## Critical Infrastructure and Key Resources:

Name	Address
Lutheran Hospital	40 <sup>th</sup> and Youngfield Street
Prospect Valley Elementary School	3400 Pierson Street
Kullerstrand Elementary School	12225 West 38 <sup>th</sup> Avenue
Wheat Ridge High School	9505 West 32 <sup>nd</sup> Avenue
Everitt Middle School	3900 Kipling Street

## Special Risks:

- Wheat Ridge Recreation Center – 4005 Kipling Street
- Industrial Laboratories – 4046 Youngfield Street
- Crown Hill Park
- Clear Creek – see Clear Creek Special Planning Zone

## Planning Zone Risk Profile and Demographics:



## Risk Analysis:

Station 17 is a residential zone with a mix of large single-family, small single-family, and multi-family residences. There are commercial areas along the arterial corridors, most of which are modernized with sprinkler systems.

There are additional risks posed by Clear Creek along the north border of this zone. The Clear Creek Special Planning Zone provides additional details on the creek and the open space along the shoreline.

## Water Supply:

Wheat Ridge Water District services the zone. There is adequate fire flow and hydrants for all exposures within the planning zone and no identified areas where water supply is of concern.

## Response History:

Station-17																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E17	2019	100	6.20%	54	3.35%	1030	63.82%	156	9.67%	11	0.68%	26	1.61%	237	14.68%	1614
E17	2020	112	7.20%	57	3.66%	870	55.91%	175	11.25%	6	0.39%	13	0.84%	323	20.76%	1556
E17	2021	161	8.75%	58	3.15%	1091	59.29%	201	10.92%	5	0.27%	20	1.09%	304	16.52%	1840
E17	2022	125	7.27%	64	3.72%	1072	62.36%	175	10.18%	6	0.35%	21	1.22%	256	14.89%	1719
E17	2023	123	7.90%	48	3.08%	960	61.70%	153	9.83%	7	0.45%	17	1.09%	248	15.94%	1556
E17	<b>Total</b>	<b>621</b>	<b>7.50%</b>	<b>281</b>	<b>3.39%</b>	<b>5023</b>	<b>60.63%</b>	<b>860</b>	<b>10.38%</b>	<b>35</b>	<b>0.42%</b>	<b>97</b>	<b>1.17%</b>	<b>1368</b>	<b>16.51%</b>	<b>8285</b>
M17	2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M17	2020	14	2.34%	9	1.50%	507	84.64%	19	3.17%	0	0.00%	0	0.00%	50	8.35%	599
M17	2021	6	2.82%	1	0.47%	178	83.57%	6	2.82%	0	0.00%	0	0.00%	22	10.33%	213
M17	2022	12	1.88%	6	0.94%	525	82.16%	37	5.79%	0	0.00%	0	0.00%	59	9.23%	639
M17	2023	34	1.98%	20	1.16%	1342	78.02%	107	6.22%	0	0.00%	2	0.12%	215	12.50%	1720
M17	<b>Total</b>	<b>66</b>	<b>2.08%</b>	<b>36</b>	<b>1.14%</b>	<b>2552</b>	<b>80.48%</b>	<b>169</b>	<b>5.33%</b>	<b>0</b>	<b>0.00%</b>	<b>2</b>	<b>0.06%</b>	<b>346</b>	<b>10.91%</b>	<b>3171</b>
BR17	2019	0	0.00%	4	22.22%	0	0.00%	4	22.22%	0	0.00%	0	0.00%	10	55.56%	18
BR17	2020	0	0.00%	9	26.47%	2	5.88%	6	17.65%	0	0.00%	0	0.00%	17	50.00%	34
BR17	2021	0	0.00%	17	54.84%	0	0.00%	6	19.35%	0	0.00%	0	0.00%	8	25.81%	31
BR17	2022	0	0.00%	9	56.25%	2	12.50%	2	12.50%	0	0.00%	1	6.25%	2	12.50%	16
BR17	2023	0	0.00%	6	28.57%	4	19.05%	5	23.81%	0	0.00%	0	0.00%	6	28.57%	21
BR17	<b>Total</b>	<b>0</b>	<b>0.00%</b>	<b>45</b>	<b>37.50%</b>	<b>8</b>	<b>6.67%</b>	<b>23</b>	<b>19.17%</b>	<b>0</b>	<b>0.00%</b>	<b>1</b>	<b>0.83%</b>	<b>43</b>	<b>35.83%</b>	<b>120</b>
SW17	2019	0	0.00%	0	0.00%	1	4.76%	0	0.00%	9	42.86%	0	0.00%	11	52.38%	21
SW17	2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3	30.00%	0	0.00%	7	70.00%	10
SW17	2021	0	0.00%	0	0.00%	2	22.22%	1	11.11%	1	11.11%	0	0.00%	5	55.56%	9
SW17	2022	0	0.00%	0	0.00%	1	10.00%	0	0.00%	4	40.00%	0	0.00%	5	50.00%	10
SW17	2023	0	0.00%	1	16.67%	0	0.00%	1	16.67%	3	50.00%	0	0.00%	1	16.67%	6
SW17	<b>Total</b>	<b>0</b>	<b>0.00%</b>	<b>1</b>	<b>1.79%</b>	<b>4</b>	<b>7.14%</b>	<b>2</b>	<b>3.57%</b>	<b>20</b>	<b>35.71%</b>	<b>0</b>	<b>0.00%</b>	<b>29</b>	<b>51.79%</b>	<b>56</b>
<b>St-17</b>	<b>Total</b>	<b>687</b>	<b>5.91%</b>	<b>363</b>	<b>3.12%</b>	<b>7587</b>	<b>65.23%</b>	<b>1054</b>	<b>9.06%</b>	<b>55</b>	<b>0.47%</b>	<b>100</b>	<b>0.86%</b>	<b>1786</b>	<b>15.35%</b>	<b>11632</b>

Occupancy Classification: Station 17 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	39
Educational (200 series)	5
Health Care, Detention, Correction (300 series)	16
Residential (400 series)	11
Mercantile, Business (500 series)	68
Industrial, Utility (600 series)	6
Manufacturing (700 series)	0
Storage (800 series)	4
Outside, Special Property (900 series)	0

## Open Space Special Planning Zones

The District has identified five open space special planning zones throughout the response area. These are: Clear Creek, Table Mountain, Green Mountain, Bear Creek Lake Park, and Hogback. While these areas vary in size and have individual risks that are unique to their location or purpose, they also have a number of common risk factors.

Each of the open space zones represents open space or recreational areas with little to no development, limited access, and low historical incident volumes. Common risks in each of these zones are:

- 1) Response delays compared to the remainder of the District:
  - The 4 ½ minute travel benchmark (established by the District) is unobtainable in most of these areas.
  - The areas have limited or controlled access points causing response delays.
  - Incident types in these areas (e.g., wildfire, technical rescue, or water rescue) require a specialized response from cross-staffed apparatus.
  - Specialty apparatus required to meet specialty call types are not distributed as widely as first-in engine companies.
- 2) Open areas with increased wildfire risk. The District's CWPP community risk ratings in these areas range from moderate to very high. Because of the open spaces, wildfires have the potential to grow and spread exposing various communities in the wildland urban interface.
- 3) Outdoor recreation including, but not limited to hiking, cycling, fishing, kayaking, and running.
- 4) Limited water supply. Some areas may have hydrants or natural water resources. Ponds, creeks, or rivers (as a water resource) are usually difficult to access for firefighting operations.

Each of the five open space special planning zones is covered in more detail on the following pages.



Swift water and Floods:

The creek has an inherent swift water risk during the spring run-off season. During this time of year, the creek can flow at very high rates. The creek can also be impacted by weather events in the watershed area. Clear Creek lacks a substantial upstream flood control structure to prevent large flood events.

Outdoor recreation:

The planning zone includes a paved path paralleling the creek and multiple other trails. There are multiple access points to the creek throughout the zone. The area is popular with walkers, runners, road cyclists, mountain bikers, kayakers, and anglers.

It is very common for Arvada Fire Protection units to respond with District resources due to poor access and the difficulty of locating patients throughout the zone.

**Response History:**

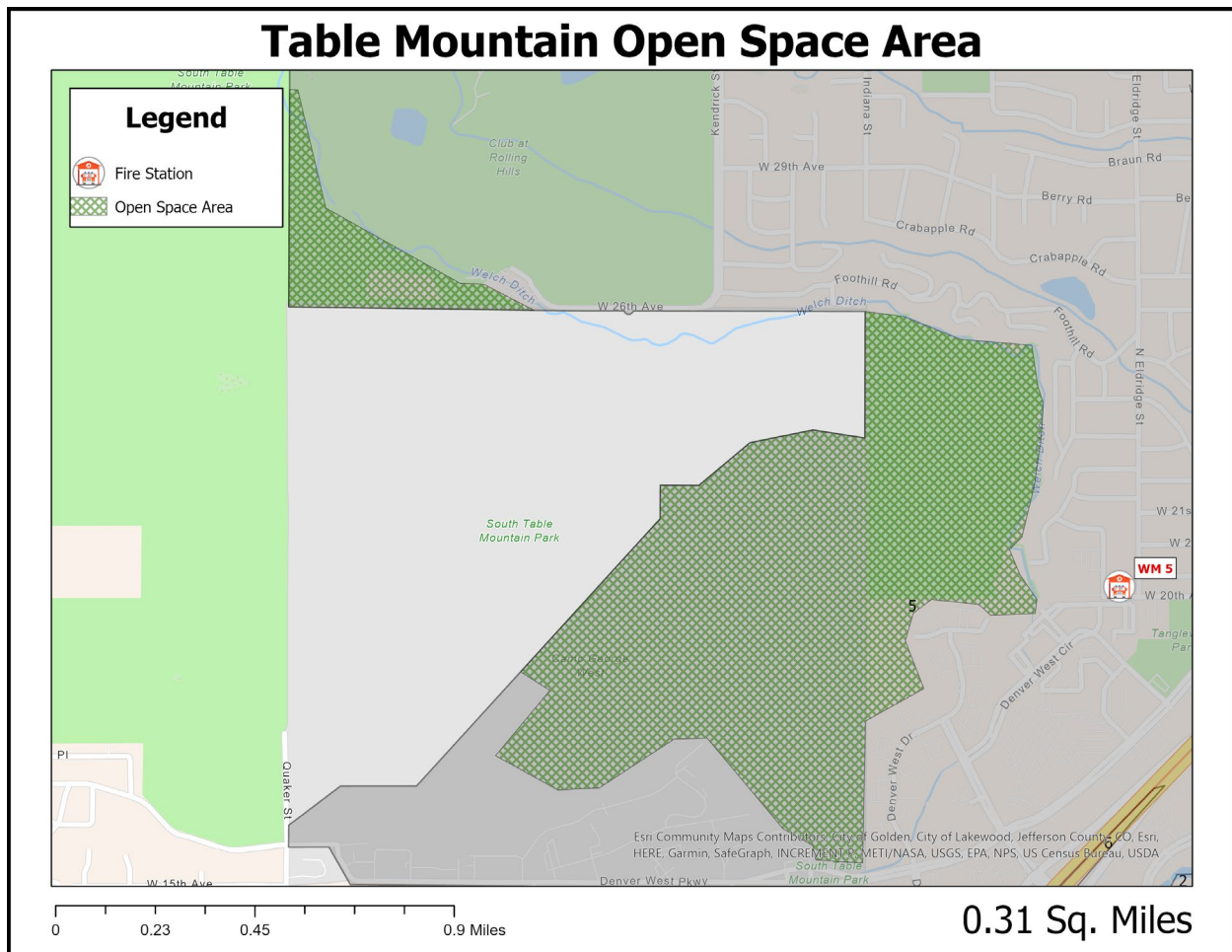
Clear Creek															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	0	0.00%	0	0.00%	2	33.33%	0	0.00%	0	0.00%	0	0.00%	4	66.67%	6
2020	0	0.00%	1	25.00%	2	50.00%	0	0.00%	0	0.00%	0	0.00%	1	25.00%	4
2021	0	0.00%	1	25.00%	1	25.00%	0	0.00%	0	0.00%	0	0.00%	2	50.00%	4
2022	0	0.00%	2	40.00%	3	60.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	5
2023	0	0.00%	0	0.00%	4	30.77%	1	7.69%	0	0.00%	0	0.00%	8	61.54%	13
<b>Total</b>	<b>0</b>	<b>0.00%</b>	<b>4</b>	<b>12.50%</b>	<b>12</b>	<b>37.50%</b>	<b>1</b>	<b>3.13%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>15</b>	<b>46.88%</b>	<b>32</b>



# Table Mountain Special Planning Zone

## Description:

This special planning zone encompasses two portions of the Station 5 Planning Zone. Both areas within the Table Mountain Special Planning Zone border South Table Mountain. The northern part of this zone is also bordered by the Rolling Hills Country Club to the east and a portion of the zone also borders NREL. This zone was established to characterize the risks associated with the open areas with exposures to the homes in the Station 5 Planning Zone.



## Risk Analysis:

### Wildfire:

The District’s CWPP community risk rating is high in this zone. The east side of the zone is surrounded by homes in the wildland urban interface. Vegetation bordering homes creates an increased risk for the loss of multiple structures during a wildfire event. This area has experienced multiple wildfire incidents in the past. The origins of these fires were outside of the Table Mountain Special Planning Zone boundaries and are not represented in the table below. Once established, these fires spread into this zone.

Outdoor recreation:

The planning zone includes a mixed-use trail system that is popular with walkers, runners, and mountain bikers.

Access to this area is very limited. There is no water supply except for the hydrants found outside of the zone.

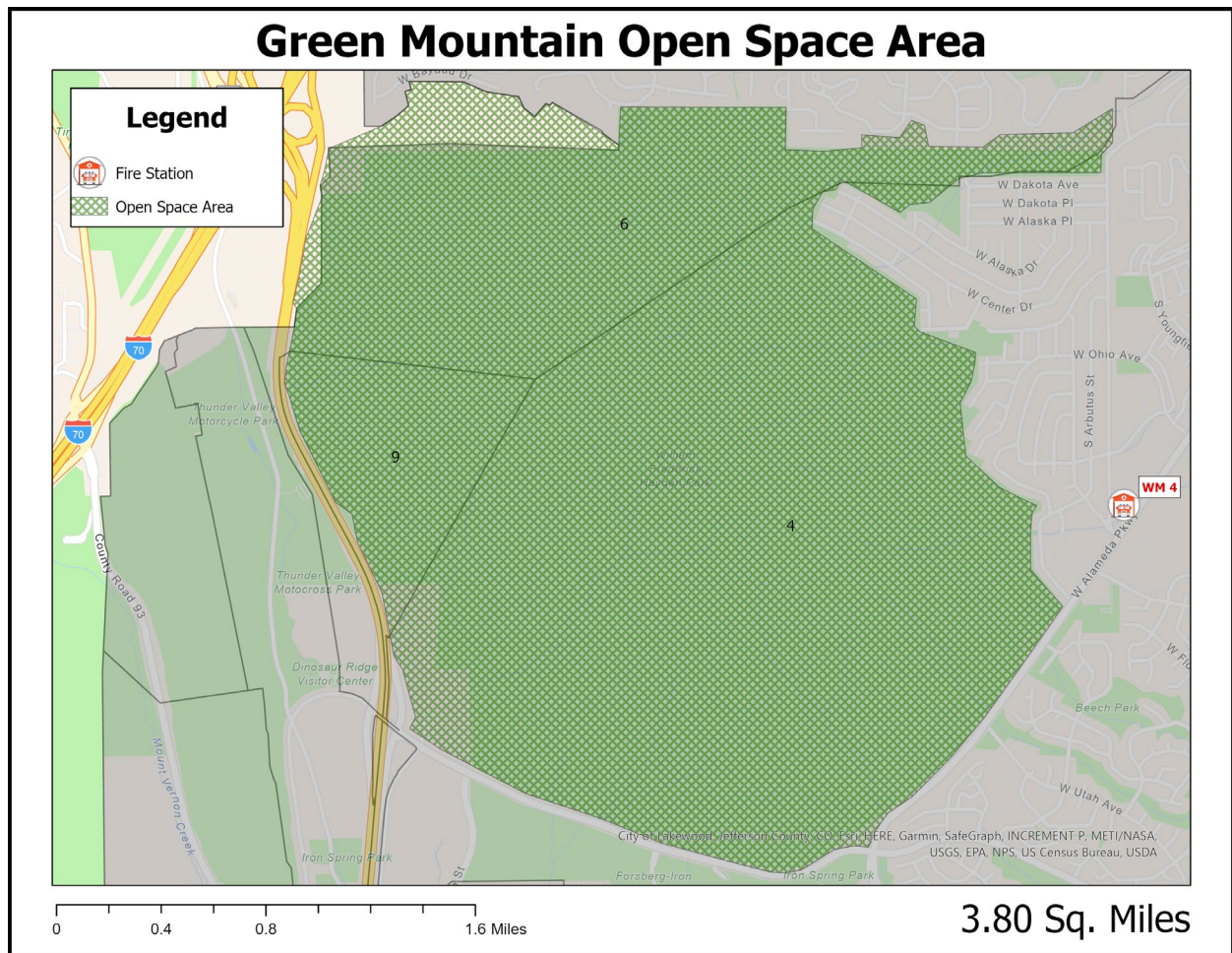
**Response History:**

Table Mountain															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
2020	0	0.00%	0	0.00%	1	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
2021	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
2022	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
2023	0	0.00%	0	0.00%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	1	50.00%	2
<b>Total</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>3</b>	<b>75.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>1</b>	<b>25.00%</b>	<b>4</b>

# Green Mountain Special Planning Zone

## Description:

This special planning zone covers the William F. Hayden Green Mountain Park. It covers areas within Station 4, 6, and 9 Planning Zones. The entire park sits within District boundaries. The zone is bordered by C-470 to the west, Alameda Parkway to the south, and residential neighborhoods to the north and east. This zone was established to characterize the risks associated with the Green Mountain park and open space areas. This area is extremely popular with outdoor enthusiasts due to its close proximity to Lakewood and the rest of metropolitan Denver.



## Critical Infrastructure and Key Resources:

The District’s primary communication tower is located in the center of this zone. The tower is accessed via a two-track gravel road on the west side of Green Mountain.

## Risk Analysis:

### Wildfire:

The District’s CWPP community risk rating is high in this zone. The park is surrounded by residential neighborhoods on both the north and east sides. There are numerous drainages that create chimneys for fire progression up towards the planning zone. Natural vegetation borders many homes adjacent to this zone, increasing the risk of fire spread in the event of a vegetation fire. Fuel models include grasses, oak brush, and limited timber stands. The District has experienced multiple fires within this zone, some requiring multiple alarms to extinguish.

### Outdoor recreation:

The planning zone includes an extensive trail system used by walkers, runners, and mountain bikers. The District has also rescued paragliders from this planning zone. Some ‘rescue’ calls in this planning zone are categorized as EMS incidents because they result in a patient transport.

Access to this area is very limited. There is no water supply except for the hydrants found outside of the zone.

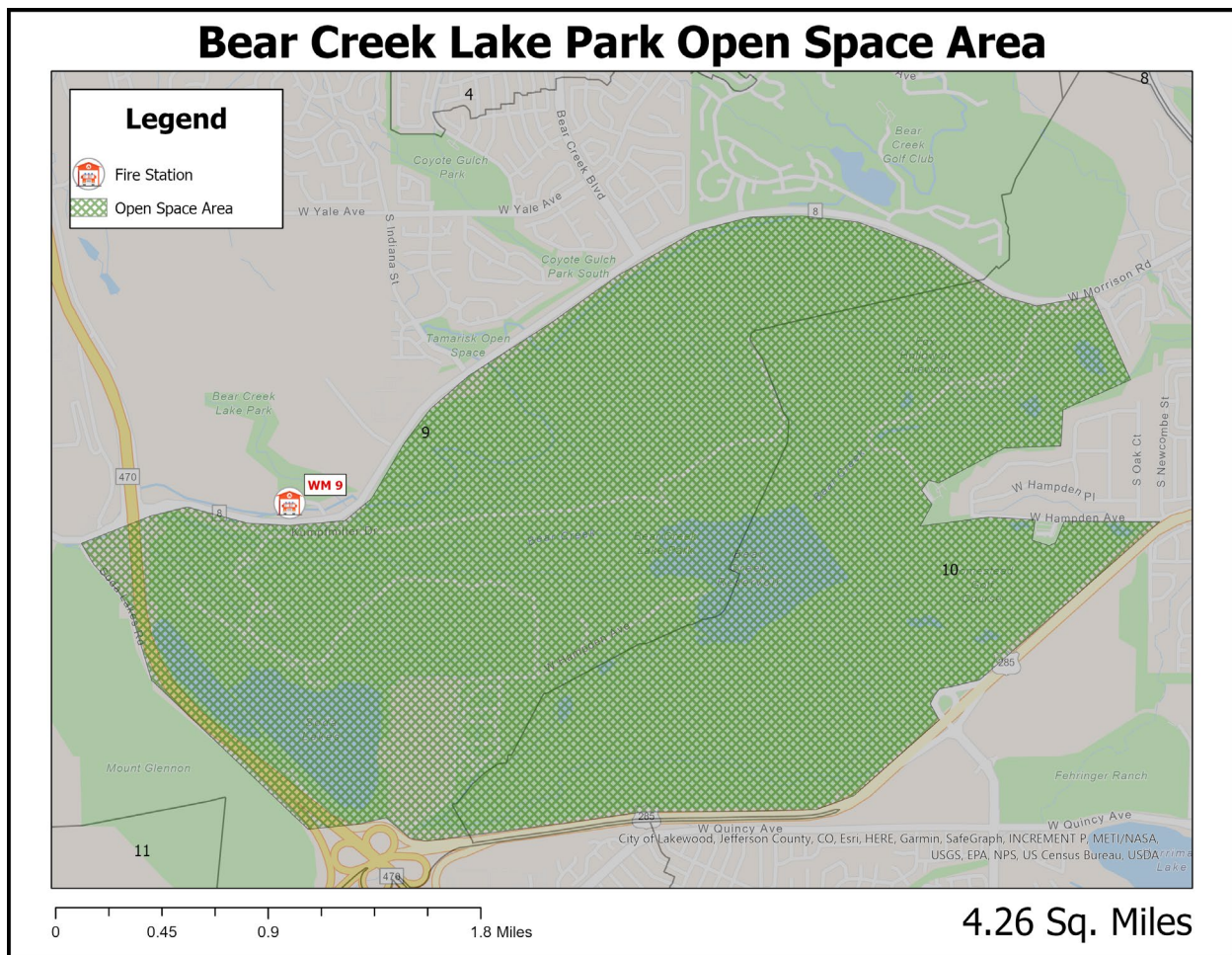
## Response History:

Green Mountain															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
2020	0	0.00%	0	0.00%	7	77.78%	1	11.11%	0	0.00%	0	0.00%	1	11.11%	9
2021	0	0.00%	0	0.00%	6	75.00%	1	12.50%	1	12.50%	0	0.00%	0	0.00%	8
2022	0	0.00%	0	0.00%	3	42.86%	0	0.00%	0	0.00%	0	0.00%	4	57.14%	7
2023	0	0.00%	0	0.00%	3	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3
<b>Total</b>	<b>0</b>	<b>0.00%</b>	<b>0</b>	<b>0.00%</b>	<b>20</b>	<b>71.43%</b>	<b>2</b>	<b>7.14%</b>	<b>1</b>	<b>3.57%</b>	<b>0</b>	<b>0.00%</b>	<b>5</b>	<b>17.86%</b>	<b>28</b>

## Bear Creek Lake Park Special Planning Zone

### Description:

This special planning zone covers all of Bear Creek Lake Park and two golf courses that border the park to the east. Areas within both the Station 9 Planning Zone and the Station 10 Planning Zones are part of this zone. The northern border of this zone is Morrison Road, the west is C-470, the south is Highway 285, and the east is two golf courses and a residential neighborhood. Bear Creek runs through this planning zone, entering on the west and exiting through a dam spillway to the east. There are three lakes within the park. A major feature of the park is a large earthen flood control dam, which provides flood control on Bear Creek. This zone was established to characterize the risks associated with Bear Creek Lake Park.



### Critical Infrastructure and Key Resources:

The Bear Creek Lake Dam provides flood control for Bear Creek. There is no upstream flood control on Bear Creek from this location.

**Risk Analysis:**

Wildfire:

A District CWPP community risk rating is not provided in this zone; however, the park has experienced multiple wildfires in the past. The most recent occurred in February of 2021, consumed 535 acres, and threatened homes on the east side of the planning zone.

Outdoor recreation:

The planning zone includes an extensive trail system, Bear Creek, three lakes, a campground, and horse stables. The trail system is used by walkers, runners, equestrians, and mountain bikers. The roads are often used by road cyclists as well. The lakes offer fishing, boating, swimming (Big Soda Lake only), paddle boarding, and water skiing (Small Soda Lake only). There is an active equestrian center with frequent group rides. The park includes a year-round campground with full hookups.

Bear Creek Lake Park hosts multiple competitive events each year including fishing tournaments, running races, and mountain bike races. The park can become very crowded and often reaches capacity during holiday weekends. The District has responded to many different types of incidents in this zone including medical calls, drownings, rescues, and fires.

Vehicle access to this area is limited; however, the park can be accessed through numerous trail access points.

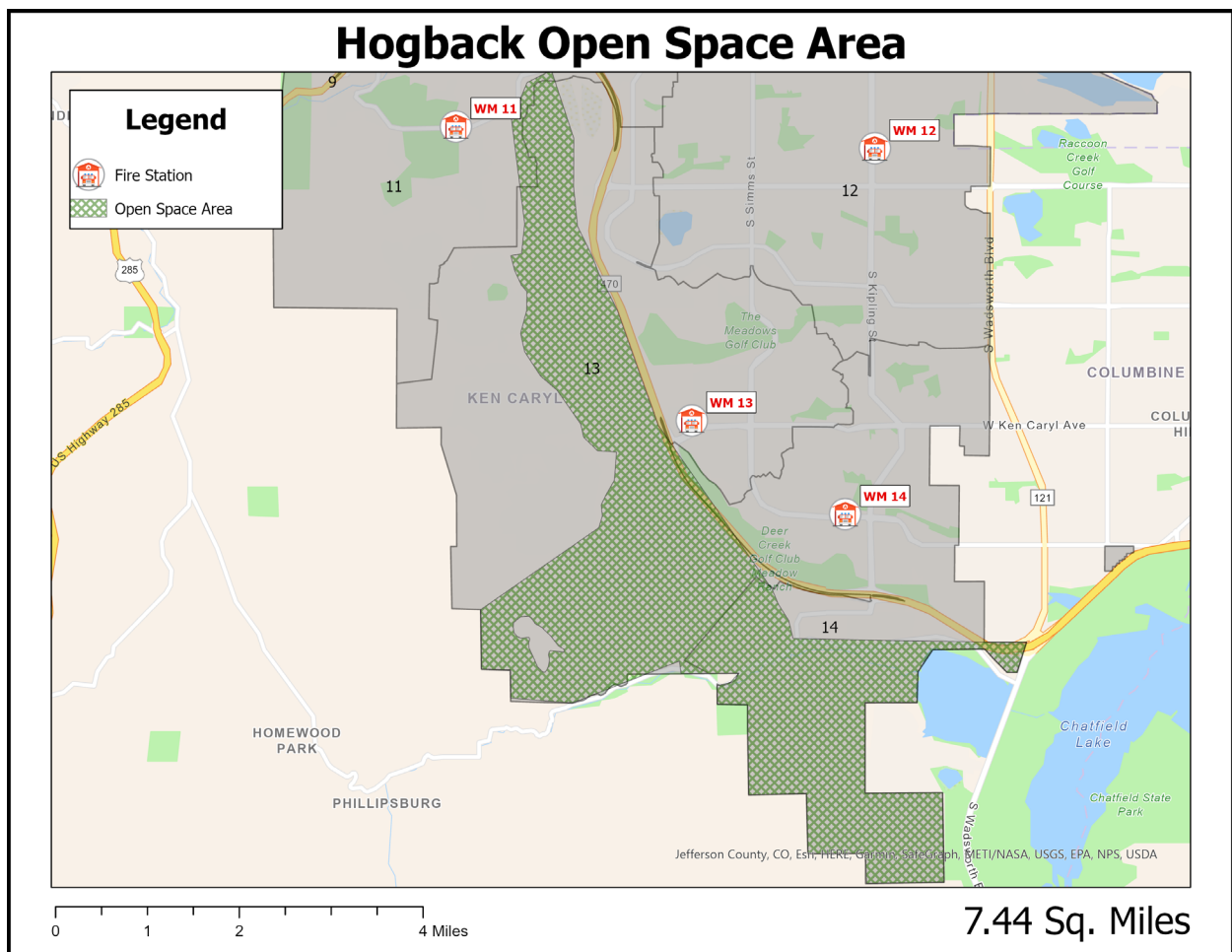
**Response History:**

Bear Creek Lake Park															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	5	8.33%	0	0.00%	43	71.67%	1	1.67%	3	5.00%	0	0.00%	8	13.33%	60
2020	5	7.81%	3	4.69%	36	56.25%	6	9.38%	3	4.69%	0	0.00%	11	17.19%	64
2021	4	7.27%	1	1.82%	37	67.27%	1	1.82%	0	0.00%	0	0.00%	12	21.82%	55
2022	0	0.00%	3	4.35%	50	72.46%	3	4.35%	3	4.35%	0	0.00%	10	14.49%	69
2023	3	5.08%	1	1.69%	37	62.71%	3	5.08%	5	8.47%	2	3.39%	8	13.56%	59
<b>Total</b>	<b>17</b>	<b>5.54%</b>	<b>8</b>	<b>2.61%</b>	<b>203</b>	<b>66.12%</b>	<b>14</b>	<b>4.56%</b>	<b>14</b>	<b>4.56%</b>	<b>2</b>	<b>0.65%</b>	<b>49</b>	<b>15.96%</b>	<b>307</b>

# Hogback Special Planning Zone

## Description:

This special planning zone is defined by a large geographical feature at the base of the Rocky Mountains. The ‘Hogback’ is essentially the first ridge as the plains transition into the mountains. This special planning zone is generally bordered by C-470 to the east and residential neighborhoods or District boundary to the west. The special planning zone covers portions of the Station 11, 13, and 14 Planning Zones. It spans the open space areas bordering the Ken Caryl Valley, Willow Springs, Willowbrook, White Deer Valley, and Trailmark subdivisions. It also surrounds the Lockheed Martin Deer Creek Facility. This zone was established to characterize the risks associated with the Hogback Special Planning Zone.



## Risk Analysis:

### Wildfire:

The District’s CWPP community risk rating is both moderate and very high in this zone. Natural vegetation borders many homes adjacent to this zone, increasing the risk of fire spread in the

event of a vegetation fire. Fuel models include grasses, oak brush, and limited timber stands. Vehicle incidents on C-470, which frames the east side of this zone, have caused a number of fires in this area. The zone has experienced multiple large fires that have required multiple operational periods to extinguish. The most recent fire, the Oak Fire, burned 153 acres in December of 2021. This fire was human caused.

Outdoor recreation:

The planning zone includes both public and private trail systems. The trail systems are frequented by hikers, walkers, runners, equestrians, and mountain bikers. Willow Springs and Ken Caryl operate equestrian facilities, which allow for increased access to trails for equestrians. Ken Caryl also allows for limited camping at specified locations within the planning zone. Vehicle access to this area is very limited and most of the trails are single-track only.

**Response History:**

Hogback															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2019	0	0.00%	6	19.35%	20	64.52%	1	3.23%	0	0.00%	0	0.00%	4	12.90%	31
2020	0	0.00%	1	2.44%	24	58.54%	2	4.88%	2	4.88%	0	0.00%	12	29.27%	41
2021	2	5.88%	1	2.94%	20	58.82%	1	2.94%	0	0.00%	2	5.88%	8	23.53%	34
2022	0	0.00%	3	8.33%	22	61.11%	0	0.00%	1	2.78%	1	2.78%	9	25.00%	36
2023	3	6.67%	2	4.44%	20	44.44%	0	0.00%	2	4.44%	0	0.00%	18	40.00%	45
<b>Total</b>	<b>5</b>	<b>2.67%</b>	<b>13</b>	<b>6.95%</b>	<b>106</b>	<b>56.68%</b>	<b>4</b>	<b>2.14%</b>	<b>5</b>	<b>2.67%</b>	<b>3</b>	<b>1.60%</b>	<b>51</b>	<b>27.27%</b>	<b>187</b>



West Metro Fire Protection District

Risk Assessment Signature Page

Adopted this 16<sup>th</sup> day of July 2024.



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Don Lombardi, Fire Chief